

GLENORCHY PLANNING AUTHORITY

ATTACHMENTS

WEDNESDAY, 23 OCTOBER 2019



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PLANNING

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1. WILKINSONS POINT SPECIFIC AREA PLAN

1.1 Purpose of Specific Area Plan

1.1.1 The purpose of the Specific Area Plan is to:

- a) To provide for a state NBL team training and performance facility, supported by a range of active recreation, hotel accommodation, sports retail, and food services whilst retaining public access for passive recreation and community events.
- b) To cultivate a vibrant and engaging district that prioritises pedestrian movement and activity through designed landscaped areas, integrated infrastructure, and connectivity within the site.
- c) To promote sustainable transport options through:
 - i. Reducing potential for pedestrian/ vehicle conflict and enhancing the pedestrian environment;
 - ii. The development of a park and ride facility;
 - iii. Providing infrastructure to support the use of bicycles, walking, and other sustainable transport modes.
- d) To ensure that sports focused retail outlets enhance and support recreational and entertainment activities on the site, without undermining the activity centre hierarchy.

1.2 Application of Specific Area Plan

1.2.1 The provisions of this specific area plan override the following provisions of the Interim Planning Scheme:

- i. Recreation Zone:
 - a) clause 18.2 Use Table;
 - b) clause 18.3 Use Standards;
 - c) clause 18.4 Development Standards for Buildings and Works.
- ii. Open Space Zone:
 - a) clause 19.2 Use Table;
 - b) clause 19.3 Use Standards;
 - c) clause 19.4 Development Standards for Buildings and Works.
- iii. Signs code
 - a) clause E17.6.1 A1
 - b) clause E17.6.1 A2

- 1.2.2 This specific area plan applies to the area of land designated as the Wilkinsons Point Specific Area Plan on the overlay maps and in Figure 1.
- 1.2.3 Insofar as there are any inconsistencies with any other provisions of this planning scheme, the provisions of the Wilkinsons Point Specific Area Plan prevail.

1.3 Definitions

Term	Definition
DEC	means Derwent Entertainment Centre.
GASPI	means Glenorchy Art and Sculpture Park.
Natural values	means biodiversity, environmental flows, natural streambank stability and stream bed condition, riparian vegetation, littoral vegetation, water quality, wetlands, river condition and waterway and/or coastal values.
Activity Centre Hierarchy	As defined in the <i>Southern Tasmanian Regional Land Use Strategy</i> .
Pedestrian-friendly features	Elements such as: transparent or decorative windows, public entrances, murals, landscaping, bulletin boards, display windows, seating, architectural elements or street displays.
Big Box Sports Retail	Means a Sports Retail business with a floor area greater than 500m ² .
Park and Ride	An integrated parking and public transport facility, providing vehicular parking for commuters, to transfer to alternate means of transport such as ferry, bus or bicycle.
Specialty Sports Retail	Means a Sports Retail business with a floor area less than 500m ² .
Sports Retail	Means a business that provides the sale or hire of sports equipment and accessories (such as balls, gym equipment, shoes, supplements and protective gear), outdoor supplies (such as tents, fishing or camping gear), sporting or fitness apparel, or similar sports-related souvenirs or items.
Temporary use	A use that does not occur for greater than 1 consecutive week on one occasion in a calendar year, or, does not occur for greater than 48 hours each calendar month.
Temporary development	means: a) outdoor non-habitable art installations; b) the erection of structures to facilitate occasional events (for the duration of that event); Temporary developments are to be demountable; not require any vegetation removal, excavation, or soil disturbance, or have structural requirements that disturb the land/coast/riverbed.

1.4 Operation of precincts

- 1.4.1 The special area plan is divided into precincts in respect of which the primary controls for the use and development of land are set out.
- 1.4.2 The Precincts are:
- a) Precinct A - Sports and Entertainment Precinct;
 - b) Precinct B - Highway Precinct;

- c) Precinct C - Derwent Entertainment Centre Precinct;
- d) Precinct D - Landscape Precinct; and
- e) Precinct E - Elwick Bay Public Open Space Precinct.

1.4.3 The area of each precinct is shown in Figure 2 Wilkinsons Point Precinct Map.

1.5 Local Area Objectives

1.5.1 Local Area Objectives

Reference Number	Area Description	Local Area Objectives
Precinct A	Sports and Entertainment Precinct	The local area objectives for Precinct A are to: a) Provide a state of the art facility for NBL training and performance. b) Provide a broad range of public recreation activities, supported by entertainment and food services; c) Provide for a variety of short stay accommodation; d) Create an engaging and vibrant environment for all users of the site, both within and between buildings, and moving around the site; e) Modulate the scale of built form with landscaping between buildings; f) Facilitate the establishment and operation of a park and ride facility; g) Provide connectivity within the precinct through pedestrian and cycling infrastructure;
Precinct B	Highway Precinct	The local area objectives for Precinct B are to: a) Facilitate a sporting retail facility supported by a variety of food outlets. b) Provide a high quality architectural response to the highway frontage, as gateway to the city and the site. c) Provide a broad range of recreation activities; d) Allow for signage which facilitates the site, building and use identification and sharing of information about uses on the site, and upcoming events and attractions, whilst ensuring that the architectural integrity and landscape qualities of the site are not compromised.
Precinct C	Derwent Entertainment Centre Precinct	The Local Area Objectives for the Derwent Entertainment Centre Precinct are to: a) To enhance the role and function of the DEC as a major entertainment, sporting, events, cultural and conference facility for the City, region and State; b) Provide buildings that support recreational use of the land;

		c) Allow for development that will not unreasonably impact the views of the DEC from Elwick Bay.
Precinct D	Landscape Precinct	The local area objectives for Precinct D are to: a) Provide connectivity within the precinct through pedestrian and cycling linkages and infrastructure; b) Provide a landscape buffer predominantly free from buildings, between the Elwick Bay Public Open Space Precinct, and the remainder of the site. c) Provide a combination of soft and hard landscaping that positively contributes to the site; d) Notwithstanding (b), provisions be made for a pavilion at the south western end of the precinct, to provide for café, restaurant or kiosk, as well as services catering to the recreational use of the foreshore and GASPI trail.
Precinct E	Elwick Bay Public Open Space Precinct	The Local Area Objectives for the Elwick Bay Public Open Space Precinct are to: a) Preserve the public access to the foreshore of Elwick Bay; b) Preserve and enhance the GASPI trail; and c) Provide for a ferry terminal in the precinct to improve sustainable transport options to the site.

1.6 Use or Development Exempt from this Code

- 1.6.1 The placement or erection of 'Temporary Development' as defined within this Specific Area plan.

1.7 All Precincts

1.7.1 Landscaping

Objective: To ensure landscaping treatment enhances the appearance of the site, encourages and fosters movement throughout the site, and maintains the character of buildings in parkland.	
Acceptable Solution	Performance Criteria
A1 Development in accordance with an approved landscape masterplan for the site.	P1 Landscaping must: a) Where possible retain and enhance the tree canopy across the site; b) Preserve and enhance public access along the public open space precinct, and throughout the site; c) Ensure that the GASPI architecture and public space experiences are protected and enhanced through public art and pedestrian connections;

	d) Preserve and enhance the experience of enclosure and exposure between buildings on the site, and provide protection from the weather; e) Maintain a character of buildings in parkland, by retaining and enhancing the tree canopy at the entrance to the site, along shared boundaries, and where possible, between buildings; f) New vegetation planting should complement the predominantly indigenous character.
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1.7.2 Building Design

Objective: To ensure new buildings maintain a high standard of design and minimise opportunities for crime and antisocial behaviour.

Acceptable Solution	Performance Criteria
A1 No Acceptable Solution	P1 New buildings must: a) Be freestanding in appearance and design in a landscape setting (allowing for glazed linkages); b) Provide a quality landscape setting between buildings for sheltered pedestrian movement; c) Where possible, screen infrastructure, service plants and lift structures within the design of the building; d) Provide a formal frontage to the Brooker Highway; e) Provide a high quality presentation to the foreshore.
A2 No Acceptable Solution	P2 Buildings must satisfy all of the following: (a) Be designed and sited to provide natural surveillance of pedestrian routes and car parks; b) Be free of concealment and entrapment spots; (c) Be lit to a level that is adequate to ensure a reasonable level of security; (d) Have access and egress points that are clearly visible from the public domain.

1.7.3 Access to State road

Objective: To restrict development of new accesses to the Brooker Highway to protect the safety and efficiency of the State road network.

Acceptable Solution	Performance Criteria
A1	P1

Access or egress must only be by way of existing access points to the Brooker Highway.	Additional or amended access or egress from the Brooker Highway must not to be created without the prior approval of the State road authority.
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1.7.4 Maximum floor space

The maximum allowable floor space for Retail and Food Services to comply with prescribed Acceptable Solutions, are as outlined in Table 1 as follows:

Table 1

Use Class Category	Cumulative Gross Floor Area (m ²) maximum per period	
	Years 2024	Years 2029
Big Box Sports Retail	2,700	5,820
Specialty Sports Retail	1,392	3,000
Take-away premises	1,000	2,658
Other Food & Beverage Services	3,480	6,975

Application of Table 1

Table 1 applies to Sub Precincts A2, A3, B1 and B2 only.

1.7.5 Signage

Objective: To allow for the upgrade or replacement of existing signage.	
Acceptable Solution	Performance Criteria
A1 A pole/pylon sign is permitted if: a) There are no more than two pole/pylon sign on the Brooker Highway frontage, not exceeding 10m in height. b) It is located elsewhere on the site such that the message on the sign is not readily legible from outside the SAP area.	P1 Signage must satisfy all of the following: a) be of appropriate dimensions so as not to dominate the site on which it is located; b) be constructed of high quality weather resistant materials which are able to be maintained at all times; c) not result in loss of amenity to neighbouring properties; d) not involve the repetition of messages or information on the same street frontage/ direction; e) not cause a safety hazard.
A2 In Precinct C, a Naming Rights Building Identification Sign is permitted if it does not exceed a vertical dimension of 5m.	P2 A building sign must be of appropriate building location and dimensions to ensure protection of the architectural character and integrity of the building, whilst of sufficient scale to allow the building to be identified from beyond the SAP boundaries.

A3 A sign associated with the sale of goods or services must: a) relate directly to the use of the building or site to which it is affixed;	P3 A sign may be associated with the sale of goods or services not directly related to the site providing that: a) The sign does not detract from the architectural or landscape character of the precinct.
A4 A sign associated with events must: a) relate directly to the use of the building or site to which it is affixed;	P4 A sign may be associated with events not directly related to the site providing that: a) The sign does not detract from the architectural or landscape character of the precinct.

1.8 Precinct A - Sports and Entertainment Precinct

1.8.1 Use Table

Use Class	Qualification
No Permit Required	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
Permitted	
Business and Professional Services	Only if supporting a permitted use on the site
Community meeting and entertainment	
Food Services	Except if a take-away premises with a drive through facility
Hotel Industry	
Resource Development	If for kitchen or community garden
Sports and Recreation	
Transport Depot and Distribution	Only if for commuter transit services in Sub-Precinct A2
Vehicle Parking	
Visitor Accommodation	Only if for a hotel or serviced apartments and located in Sub-Precinct A1
Discretionary	
Educational and Occasional Care	Only if for a childcare centre located in Sub-Precinct A1 or A2
Food Services	Except if permitted
General retail and hire	
Residential	Only if for student accommodation and located in Sub-Precinct A1

Resource Processing	Only if for brewery, winery or distillery associated with a food services use
Tourist Operations	
Utilities	Except if no permit required
Visitor Accommodation	Except if Permitted; and Only if located in Sub-Precinct A1
Prohibited	
All other uses	

Use Standards

1.8.2 Discretionary Use Standard

Objective: To ensure that the economic, social and environmental impact of food services and retail use and is consistent with the Plan Purpose.	
Acceptable Solution	Performance Criteria
A1 The total (excluding sub-precinct A1) floor areas used for Food Services must not exceed the nett trading floor area for the relative time period as specified in Table 1 (excluding areas such as kitchens, toilets and circulation).	P1 Food Services uses exceeding the floor areas specified in Table 1 must be supported by a retail impact assessment demonstrating that the proposed scale of use will not have unreasonable impacts on the viability of the activity centre hierarchy.
A2 No acceptable solution	P2 Uses within General Retail and Hire are to be of a scale which provides support facilities to existing users of the site only.

Development Standards for Buildings and Works

1.8.3 Building Height and Density

Objective: To ensure that building height and scale contributes positively to the streetscape and is appropriate for its location.	
Acceptable Solution	Performance Criteria
A1 Building height must be no more than: a) If in Sub-Precinct A1, 40 m; b) If in Sub-Precinct A2, 18m; c) If in Sub-Precinct A3, 10m; and d) up to 5 m for rooftop plant and equipment for up to 60% roof coverage.	P1 Building height must satisfy all of the following: a) be consistent with the Local Area Objectives provided for the area; b) be compatible with the scale of surrounding landscape and nearby buildings; c) not unreasonably overshadow adjacent public space. d) Plant and equipment to be appropriately screened or integrated into building design

A2 Site coverage (excluding enclosed walkways and building links) is not to exceed: a) If in Sub-Precinct A1, 6,500m²; b) If in Sub-Precinct A2, 19,000m²; c) If in Sub-Precinct A3, 5,500m².	P2 Building density and scale must satisfy all of the following: a) be consistent with the Local Area Objectives and Plan Purpose; b) be compatible with the scale of surrounding landscape and nearby buildings; c) not unreasonably overshadow adjacent public space.
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1.9 Precinct B - Highway Precinct

1.9.1 Use Table

Use Class	Qualification
No Permit Required	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
Permitted	
Community meeting and entertainment	
Food Services	Except if a take-away premises with a drive through facility
General retail and hire	Only if a shop
Sports and Recreation	
Discretionary	
Educational and Occasional Care	Only if for childcare centre
Food Services	Except if permitted
General retail and hire	Except if permitted
Transport Depot and Distribution	Only if in relation to commuter transit services.
Utilities	Except if no permit required.
Prohibited	
All other uses	

Use Standards

1.9.2 Discretionary Use Standards

Objective: To ensure that the economic, social and environmental impact of significant new retail use and development is consistent with the activity centre hierarchy.	
Acceptable Solution	Performance Criteria
A1 The area of the precinct used for Food Services and General Retail and Hire use must not exceed the nett trading floor area for the relative time period as specified in Table 1 (excluding areas such as kitchens, toilets and circulation)	P1 Food Services and General Hire uses exceeding the floor areas specified in Table 1 must be supported by a retail impact assessment demonstrating that the proposed scale of use will not have unreasonable impacts on the viability of the activity centre hierarchy.
P2 A use defined as General Retail and Hire within this planning scheme must satisfy the definition of 'Sports Retail' as defined within this Specific Area Plan.	P1 A use that does not comply with the Acceptable Solution A1 must: (a) complement or support permitted uses on the site; and (b) be consistent with the plan purpose statements at Clause 1.1.1; Or c) be supported by a retail impact assessment demonstrating that the proposed scale of use will not have unreasonable impacts on the viability of the activity centre hierarchy.

Development Standards for Buildings and Works

1.9.3 Building Height

Objective: To ensure that building height contributes positively to the precinct and is appropriate for its location.	
Acceptable Solution	Performance Criteria
A1 Building height must be no more than: a) If in Sub-Precinct B1, 22m; b) If in Sub-Precinct B2, 10 m; and c) up to 5 m for rooftop plant and equipment for up to 60% roof coverage.	P1 Building height must satisfy all of the following: a) be consistent with the Local Area Objectives provided for the area; b) be compatible with the scale of the landscape and nearby buildings; c) not unreasonably overshadow adjacent public space. d) Plant and equipment to be appropriately screened or integrated into building design.

A2 Site coverage (excluding enclosed walkways and building links) is not to exceed: a) If in Sub-Precinct B1, 8,500m²; b) If in Sub-Precinct B2, 3,500m²;	P2 Building density and scale must satisfy all of the following: a) be consistent with the Local Area Objectives and Plan Purpose b) be compatible with the scale of surrounding landscape and nearby buildings; c) not unreasonably overshadow adjacent public space.
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1.9.4 Setback

Objective: To allow for signage appropriate for the scale, location and function of the site.	
Acceptable Solution	Performance Criteria
A1 In Sub-precinct B2, building setback from the Brooker Highway frontage must be no less than: 10 m.	P1 Building setback from frontage must satisfy all of the following: a) be consistent with any Local Area Objectives and Plan Purpose; b) maintain and enhance existing tree canopy and parkland setting; c) provide for pedestrian amenity through the provisions of well-designed walkways, and landscaping around the building;

1.9.5 Building Design

Objective: To ensure that building facades contribute positively to the streetscape.	
Acceptable Solution	Performance Criteria
A1 No Acceptable solution	P1 Building design must have regard to all of the following: a) be consistent with the Local Area Objectives and Plan Purpose; b) blank walls have been treated with high quality architectural expression such as vertical landscaping, art or architectural elements; c) the provision of seating, covered walkways or other pedestrian friendly features;

1.10 Precinct C - Derwent Entertainment Centre Precinct

1.10.1 Use Table

Use Class	Qualification
No Permit Required	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
Permitted	
Community meeting and entertainment	
Food Services	Except if for a take-away premises; or ancillary to permitted uses on the site
General retail and hire	Only if for a Market
Resource Development	Only if for kitchen or community garden
Sports and Recreation	
Discretionary	
Business and Professional Services	Only to support permitted uses on the site
Food Services	Except if permitted
General retail and hire	Except if permitted
Utilities	Except if no permit required
Prohibited	
All other uses	

Development Standards for Buildings and Works

1.10.2 Building Height

Objective: To ensure that building height contributes positively to the streetscape and does not result in unreasonable impact on residential amenity of land in a residential zone.	
Acceptable Solution	Performance Criteria
A1 Building height must be no more than: 12m.	P1 Building height must satisfy all of the following: a) be consistent with the Local Area Objectives provided for the area; b) be compatible with the scale of nearby buildings; c) not unreasonably overshadow adjacent public space.

1.11 Precinct D - Landscape Precinct

1.11.1 Use Table

Use Class	Qualification
No Permit Required	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
Permitted	
Community meeting and entertainment	Only if for occasional or temporary sporting, social or cultural events
Food services	
General retail and Hire	Only if for a premises associated with the sale, hire or repair of recreational equipment
Discretionary	
Utilities	Except where no permit required
Prohibited	
All other uses	

Use Standards

1.11.2 Commercial Use

Objective: To maintain public access to the foreshore in accordance with the GASPI vision.	
Acceptable Solution	Performance Criteria
A1 Uses must: a) be to support active recreation, public use, or enjoyment of the foreshore; or b) Or facilitate movement within, to and from the site.	P1 Uses must maintain public access to the foreshore and have regard to: a) the extent that the proposed use improves and broadens the public's capacity to access, visit or enjoy the site; and b) satisfy the Local Area Objectives and Plan Purpose.

Development Standards for Buildings and Works

1.11.3 Building Height and Density

Objective: To ensure that building height contributes positively to the streetscape and is appropriate for its location.	
Acceptable Solution	Performance Criteria
A1 Building height must be no more than: a) 10m; and	P1 Building height must satisfy all of the following:

b) up to 5 m for rooftop plant and equipment for up to 60% roof coverage.	a) be consistent with the Local Area Objectives provided for the area; b) provide for pedestrian amenity through the provisions of well-designed walkways and landscaping around the building; c) be compatible with the scale of nearby buildings; d) not unreasonably overshadow adjacent public space.
A2 With the exception of temporary development, the only allowable building within this precinct includes: a) a pavilion housing bike hub, restaurant, café or kiosk with a maximum footprint of 1,000m ² , located at the southern end of the precinct; b) Infrastructure to facilitate active movement.	P2 Building density and scale must satisfy all of the following: a) be consistent with the Local Area Objectives and Plan Purpose; b) be compatible with the scale of surrounding landscape and nearby buildings; and c) not unreasonably overshadow adjacent public space.

1.11.4 Building Design

Objective: To ensure that building design contribute positively to the streetscape.	
Acceptable Solution	Performance Criteria
A1 No Acceptable Solution	P1 Building design must have regard to all of the following: a) be consistent with the Local Area Objectives provided for the area; b) blank walls have been treated with vertical landscaping, art or architectural elements; c) the provision of thoughtfully designed landscaping.

1.12 Precinct E - Elwick Bay Public Open Space Precinct

1.12.1 Use Table

Use Class	Qualification
No Permit Required	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
Permitted	
Community meeting and entertainment	Only if: For occasional or temporary sporting, social or cultural events; or For GASPI activities, artwork, events or infrastructure
Food services	Only if: For occasional or temporary sporting, social or cultural events; or For GASPI activities, artwork, events or infrastructure
General retail and Hire	Only if: For occasional or temporary sporting, social or cultural events; or For GASPI Activities or events
Sports and Recreation	Only if for occasional or temporary sporting, social or cultural events
Transport Depot and Distribution	Only if for a ferry terminal
Discretionary	
Pleasure boat facility	
Port and shipping	Only if for the temporary mooring of vessels and loading or unloading of passengers
Utilities	Except where no permit required
Prohibited	
All other uses	

Use Standards

1.12.2 Commercial Use

Objective: To maintain public access to the foreshore in accordance with the GASPI vision.	
Acceptable Solution	Performance Criteria
A1 Uses must be to support public use, sustainable transport, or enjoyment of the foreshore.	P1 Uses must maintain public access to the foreshore and have regard to: a) the extent that the proposed use improves and broadens the public's capacity to access, visit or enjoy the site; and b) satisfy the Local Area Objectives and Plan Purpose.

Development Standards for Buildings and Works

1.12.3 Building Height

Objective: To ensure that building height contributes positively to the streetscape and is appropriate for its location.	
Acceptable Solution	Performance Criteria
A1 Building height must be no more than: 5m.	P1 Building height must satisfy all of the following: a) be consistent with the Local Area Objectives provided for the area; b) provide for pedestrian amenity through the provisions of well-designed, well-lit walkways and landscaping around the building; c) be compatible with the scale of nearby buildings; d) not unreasonably overshadow adjacent public space.

1.12.4 Building Design

Objective: To ensure that building facades contribute positively to the streetscape.	
Acceptable Solution	Performance Criteria
A1 No Acceptable solution	P1 Building design must have regard to all of the following: a) be consistent with the Local Area Objectives and Plan Purpose; b) blank walls have been treated with high quality finishes such as vertical landscaping, art or architectural elements; c) the provision of seating, covered walkways or other pedestrian friendly features;

Figure 1 Wilkinsons Point SAP

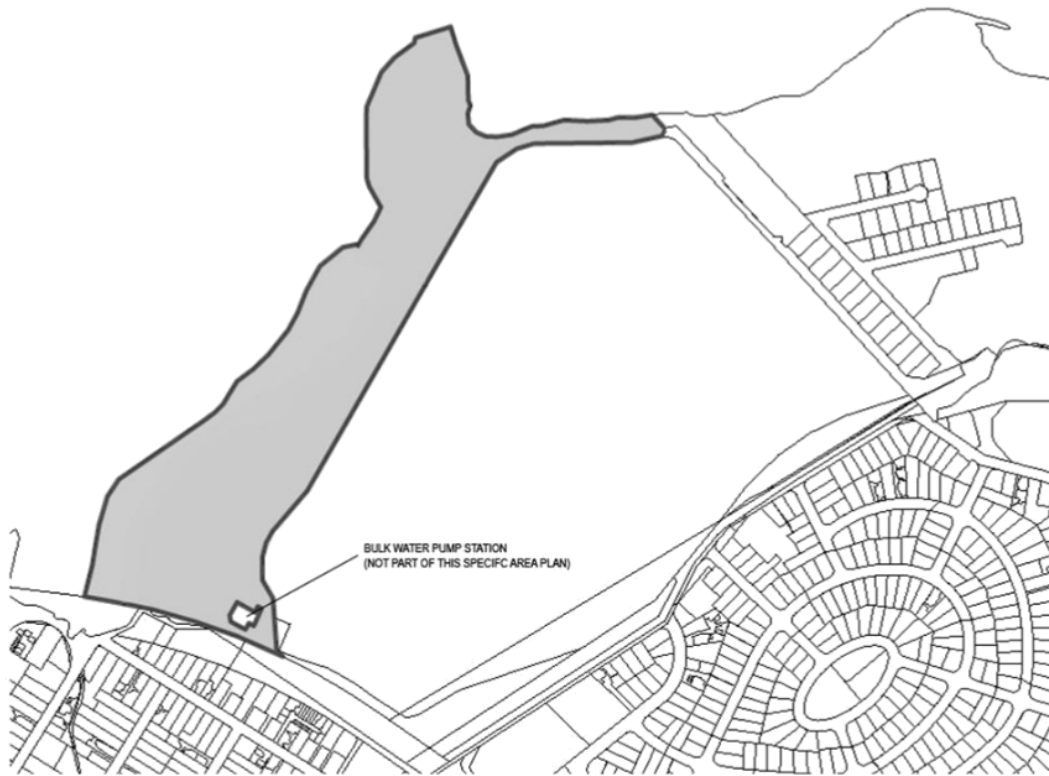
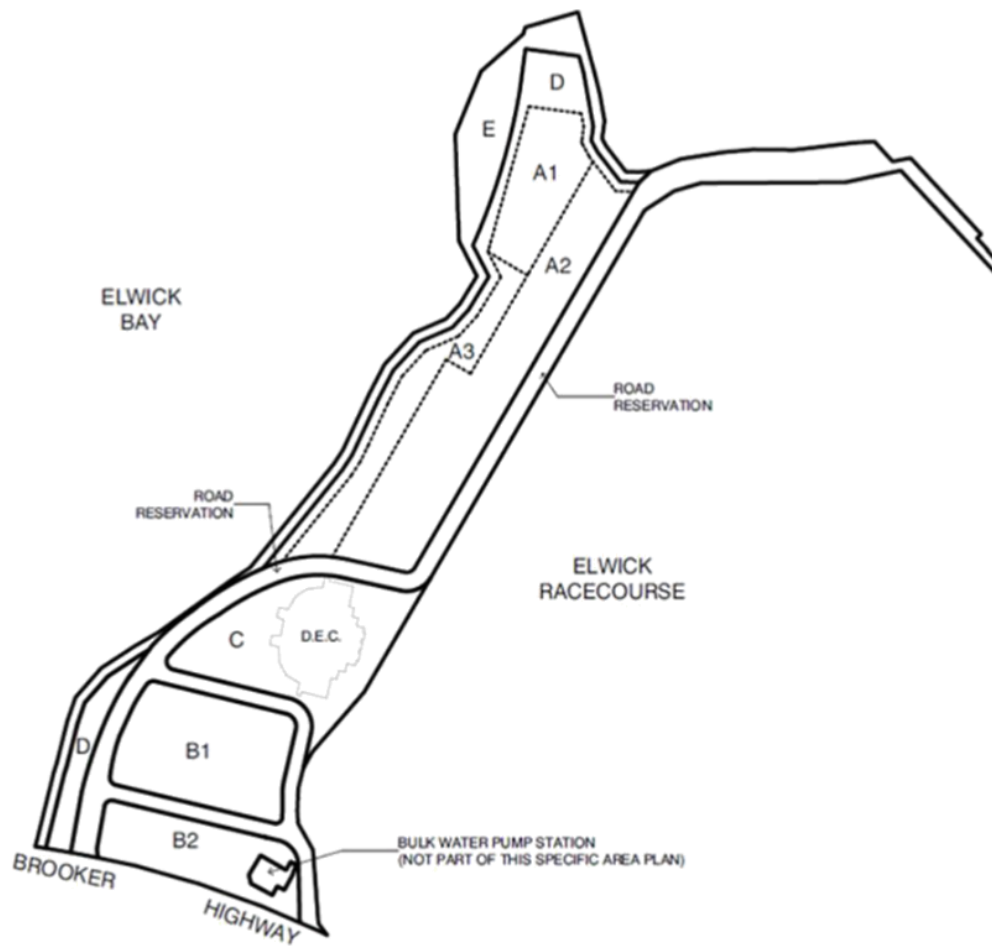


Figure 2 Wilkinsons Point Precincts



The Planning Scheme maps are amended by:

Removing the land shown in Figure F2.1 of the Glenorchy City Council Interim Scheme 2015 from the Specific Area Plan

The Planning Scheme Ordinance is amended by:

1. Delete the name of the Specific Area Plan and insert the name; 'Montrose Foreshore Community Park and Elwick Bay Specific Area Plan
2. Amend the application of the Specific Area Plan as shown on in figure xx
3. Delete Specific Area Plan Purpose (b) and (f) from clause F2.1
4. Amend (d), to remove the word "DEC" and change the word "facilities" to "facility" in clause F2.1 (d)
5. Delete clause F2.2 (b) (i) Community Purpose Zone provisions.
6. Delete the definition of DEC from clause F4.3
7. Delete provisions (b) (iii), (iv) and (v) from clause F2.4
8. Delete "Figure F2.1 Wilkinsons Point Precinct Map" from clause F2.4 (c)
9. Delete clause F2.5.2 Desired Future Character Statements
10. Delete "Wilkinsons Point" from qualification for Educational and occasional care from Use Table F2.5.3
11. Delete Clause F2.7
12. Delete Clause F2.8
13. Delete Clause F2.9
14. Delete clause F2.6.2 Desired Future Character Statements
15. Delete Use Class of 'Pleasure Boat Facility' and "Port and Shipping" from Use Table F2.6.3
16. Insert provisions 2.6.4.1 and 2.6.4.2 under clause F2.6.4

2. F2 MONTROSE FORESHORE COMMUNITY PARK AND ELWICK BAY SPECIFIC AREA PLAN

2.1 Purpose of Specific Area Plan

- a) To develop the Montrose Foreshore Community Park and Elwick Bay area as a waterfront location with quality environment and structures that complement each other, integrate well into the surroundings and contribute towards a richly vibrant area;
- b) To consider a mix of appropriate uses and development in the redevelopment of the area;
- c) To build on the foundation provided by the GASPI as a significant community facility;
- d) To support the selection of development sites and building forms that respond to the physical setting and use of the area;
- e) To protect the natural values of the foreshore and bay.
- f) To encourage all land to remain in the freehold ownership of the Glenorchy City Council.
- g) To provide comfortable and continuous foreshore open space, including the development of shared trails, along the entire length of foreshore through the area;
- h) To support and where possible, extend the recreational values of the foreshore and community facilities.
- i) To promote public health and well-being through the provision of significant amounts of open space and the promotion of linkages within the area and to the broader City.
- j) To provide for future use and development of open space and facilities within the realistic resources of the Council and community to manage, maintain and upgrade.
- k) To improve access, parking, pedestrian and cycling infrastructure to cater for future use of the area.
- l) To improve linkages to the surrounding facilities, suburbs and the Glenorchy CBD.

2.2 Application of Specific Area Plan

(a) This specific area plan applies to an area of land designated as "F02" on the planning scheme maps.

(b) The provisions of this specific area plan override the following provisions of the planning scheme:

(i) Open Space Zone:

- a) clause 19.2 Use Table;
- b) clause 19.3 Use Standards;
- c) clause 19.4 Development Standards for Buildings and Works.

2.3 Definitions

Term	Definition
------	------------

GASPI	means Glenorchy Art and Sculpture Park.
Social Enterprise	means businesses that trade to intentionally tackle social problems, improve communities, provide people access to employment and training, or help the environment.

2.4 Operation of precincts

(a) The special area plan is divided into precincts in respect of which the primary controls for the use and development of land are set out.

(b) The Precincts are:

- (i) Montrose Foreshore Community Park Precinct;
- (ii) Elwick Bay Foreshore Public Open Space Precinct.

(c) The extent of each precinct is shown in Figure F2.2 Elwick Bay Precinct Map.

2.5 Montrose Foreshore Community Park Precinct

2.5.1 Local Area Objective

Local Area Objectives	Implementation Strategy
Montrose Foreshore Community Park Precinct	
a) To strengthen the Precinct as the major hub for the GASPI initiative including social enterprise, recreational facilities and activities, display of art, interpretation and training functions and education.	a) The provisions of this specific area plan relevant to this precinct.
b) To provide for social enterprise facilities, services and activities that foster engagement, education and enjoyment with the community; including uses related to the existing sports clubs, playground facilities, picnic facilities, trails, boat launching ramp, display of art, interpretation and the opportunity for education and training functions.	b) The provisions of this specific area plan relevant to this precinct
c) To provide for commercial functions connected with recreational uses, such as a kiosk/café or an outlet for hire of recreation equipment such as bikes or kayaks.	c) The provisions of this specific area plan relevant to this precinct

2.5.2 Use Table

Use Class	Qualification
No Permit Required	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
Permitted	

Community meeting and entertainment	Only if for GASPI activities
Educational and occasional care	Only if for GASPI activities
Discretionary	
Community meeting and entertainment	Except if permitted, otherwise only for sporting, social and cultural events
Educational and Occasional Care	Except if permitted, otherwise only if education and training is undertaken within existing facilities or associated with management and maintenance of Elwick Bay
Food Services	Only if kiosk, café, restaurant or take away food premises for occasional sporting, social and cultural events
General retail and hire	Only if a recreational hire outlet providing recreational equipment to the users of the park and foreshore areas
Pleasure boat facility	Only if a recreational hire outlet providing recreational equipment to the users of the river
Sports and recreation	
Utilities	Except where no permit required
Prohibited	
All other uses	

2.5.3 Use Standards

2.5.3.1 Limit on Private Commercial Uses

Objective: To retain the bulk of the Precinct for public open space.	
Acceptable Solution	Performance Criteria
A1 Private, commercial uses in the Precinct must not, in aggregate, occupy an area greater than 5000 m ² .	P1 No performance criteria.

2.5.4 Development Standards for Buildings and Works

2.5.4.1 Limit on Buildings

Objective: To retain the predominant public open space character of the precinct and to preserve expansive views across the water plane by restricting the number and nature of buildings allowed in the Precinct.	
Acceptable Solution	Performance Criteria
A1 There must be no buildings or extensions to buildings within the Precinct, except for the following: (a) a food premises, training facility or recreational hire outlet, only in the car free area; (b) a social enterprise; (c) BBQ facilities, picnic shelter, public amenities or public art.	P1 Buildings in the Precinct must be subservient to the landscape character, be limited in number and be designed in the round.

2.5.4.2 Building Height

Objective: To maintain a scale of development in the Precinct in keeping with the foreshore location and the predominant scale of existing built form.	
Acceptable Solution	Performance Criteria
A1 Building height must not be more than 5m, or one storey, whichever is the higher.	P1 Building height must not result in any of the following: (a) domination of the public foreshore or open space in the precinct by visual bulk; (b) unreasonable overshadowing of the public foreshore or open space in the precinct; (c) obstruction of key public views or vistas.

2.5.4.3 Setback from High Water Mark

Objective: To maintain a sufficient setback from high water mark to allow for continuous and safe pedestrian access to the foreshore edge.	
Acceptable Solution	Performance Criteria
A1 The setback of buildings, other than marine structures, from high water mark must not be less than 10m.	P1 The setback of buildings, other than marine structures, from high water mark must be sufficient to allow for continuous and safe pedestrian access to the foreshore edge.

2.5.4.4 Passive Surveillance

Objective: To ensure buildings are designed and sited to minimise opportunities for crime and anti-social behaviour.	
Acceptable Solution	Performance Criteria
A1 No acceptable solution.	P1 Buildings must satisfy all of the following: a) be designed and sited to provide natural surveillance of pedestrian routes and car parks; b) be free of concealment and entrapment spots; c) be lit to a level that is adequate to ensure a reasonable level of security; d) have access and egress points that are clearly visible from the public domain; e) be constructed of materials that are hardy or easily replaceable; and resistant to vandalism.

2.5.5 Development standards for subdivision

2.5.5.1 Subdivision

Objective: To ensure that subdivision is suitable for the intended use and development and to restrict the carrying out of subdivision within the Precinct to the Council or a public authority.	
Acceptable Solution	Performance Criteria
A1 Subdivision must be by or for the Council or a public authority.	P1 No performance criteria.
A2 No acceptable solution.	P2 Each lot must have sufficient area, suitable proportions, adequate services and sufficient frontage to a road or access by right of way to satisfy its intended use or development.

2.6 Elwick Bay Foreshore Public Open Space Precinct

2.6.1 Local Area Objectives

Local Area Objectives	
Elwick Bay Foreshore Public Open Space Precinct	
a) To maintain the natural values and enhance community, cultural and recreational use of the foreshore as a linear open space link between Montrose Community Park, Wilkinsons Point and beyond.	a) The provisions of this specific area plan relevant to this precinct.
b) To ensure that the enhancement of the foreshore is in accordance with the GASP! Vision for a dynamic, inspirational and internationally resonant open space providing unique encounters with art and creating memorable experiences for all in the natural environment.	b) The provisions of this specific area plan relevant to this precinct.
c) To build on Tasmania's cultural tourism offerings.	c) The provisions of this specific area plan relevant to this precinct.
d) To increase liveability	d) The provisions of this specific area plan relevant to this precinct.
e) To enhance commercial opportunities by improving the sense of place, connectivity and vibrancy of the area.	e) The provisions of this specific area plan relevant to this precinct.
f) The whole of the area is retained primarily for public open space uses and uses that support public open space use with provision for pop-up, mobile or temporary commercial use.	f) The provisions of this specific area plan relevant to this precinct.

2.6.2 Use Table

Use Class	Qualification
No Permit Required	

Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
Permitted	
Community meeting and entertainment	Only if for occasional or temporary sporting, social or cultural events, or for GASPI activities
Food Services	Only if for occasional or temporary sporting, social or cultural events, or for GASPI activities
Discretionary	
Utilities	Except where no permit required
Prohibited	
All other uses	

2.6.3 Use Standards

2.6.3.1 Public Use Only

Objective: To restrict the use of the Precinct to predominantly public use.	
Acceptable Solution	Performance Criteria
A1 The use must be a public use or a mobile use.	P1 Use for private events and displays must be: (a) Temporary, and (b) Appropriate to the scale and environment of the Precinct.

2.6.4 Development Standards for Buildings and Works

2.6.4.1 Building Height

Objective: To maintain a scale of development in the Precinct in keeping with the foreshore location and the predominant scale of existing built form.	
Acceptable Solution	Performance Criteria
A1 Building height must not be more than 5m, or one storey, whichever is the higher.	P1 Building height must not result in any of the following: a) domination of the public foreshore or open space in the precinct by visual bulk; b) unreasonable overshadowing of the public foreshore or open space in the precinct; c) obstruction of key public views or vistas.

2.6.4.2 Setback from High Water Mark

Objective: To maintain a sufficient setback from high water mark to allow for continuous and safe pedestrian access to the foreshore edge.	
Acceptable Solution	Performance Criteria
A1 The setback of buildings, other than marine structures, from high water mark must not be less than 10m.	P1 The setback of buildings, other than marine structures, from high water mark must be

	sufficient to allow for continuous and safe pedestrian access to the foreshore edge.
--	--

2.6.5 Development standards for subdivision

2.6.5.1 Subdivision

Objective: To ensure that subdivision is suitable for the intended use and development and to restrict the carrying out of subdivision within the Precinct to the Council or a public authority.	
Acceptable Solution	Performance Criteria
A1 Subdivision must be by or for the Council or a public authority.	P1 No performance criteria.
A2 No acceptable solution.	P2 Each lot must have sufficient area, suitable proportions, adequate services and sufficient frontage to a road or access by right of way to satisfy its intended use or development.
A3 Where a subdivision creates a road, the minimum reservation width must be 20m.	P3 No performance criteria.

MASTERPLAN

Landscape Features:

1. GASP pavilion and associated landscape to be preserved
2. Proposed ferry terminal
3. Hotel garden, protected from prevailing wind by enhanced vegetative screen and built form
4. Exposed foreshore edge of low native grasses and succulents to be preserved
5. Intermediate spaces between exposed edge and enclosed courtyards to include strategic tree plantings to soften built form but preserve water views
6. Wetland planting to be preserved - run off associated with new development should be retained and treated on site where possible
7. Alfresco dining opportunities along waterfront
8. Internal garden spaces, protected from climatic conditions by the surrounding built form, provide comfortable vegetated spaces for relaxation and enjoyment.
9. Wind break planting along edge of site to be retained and enhanced with new succession planting.
10. Derwent Entertainment Centre to be preserved with surrounding landscaping to reflect existing use
11. New and existing planting along entry drive to frame water-views while also providing climatic protection
12. Existing planting along Booker Highway to be retained and enhanced
13. Opportunity for public play space associated with waterfront pavilion
14. On grade carpark to incorporate tree canopy and WSUD principles to provide cooling and passive treatment of run off
15. Maintain scale and location of existing site signage



WILKINSONS POINT
PLANNING SCHEME AMENDMENT



ireneinc
PLANNING & URBAN DESIGN

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WILKINSONS POINT

Submission to the Glenorchy City Council Planning Scheme Amendment

Last Updated - 14 September 2019

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EXECUTIVE SUMMARY

In March 2019 Glenorchy City Council determined to initiate the process of selling the Derwent Entertainment Centre (DEC), as well as the land surrounding the Centre, known as Wilkinsons Point.

Wilkinsons Point is located on the foreshore of the Derwent River, and is also the home to the Glenorchy Art & Sculpture Park (GASPI). Both the DEC and GASPI form part of Glenorchy's strategic vision and have economic, social and cultural importance for the community.

This report forms part of a request for amendment to the *Glenorchy Interim Planning Scheme 2015* (GIPS 2015) under the former Section 33 provisions of the *Land Use Planning and Approvals Act 1993*. The area of land subject to the Specific Area Plan (SAP) includes land on Wilkinsons Point and the Montrose Bay Foreshore. This amendment is made by LK Property Group Pty Ltd in order to implement the site redevelopment to accommodate facilities for a Tasmanian NBL Team.

The amendment facilitates development of the site as outlined in the proposed Wilkinsons Point Masterplan (2019). The development is strategically supported as an important opportunity for the region in the *Southern Tasmanian Regional Land Use Strategy* and is proposed in such a way that it will not negatively affect other the Activity Centre Hierarchy of the Region.

Existing provisions within the planning scheme for the Wilkinsons Point and Elwick Bay Specific Area Plan have become outdated and are no longer responsive to the use and development that is anticipated with this new proposal.

This assessment undertakes a review of the relevant strategic documentation at a state and regional. The review also looks at a variety of other aspects of strategic planning that substantial redevelopment of Wilkinsons Point would influence, including community infrastructure, the built environment, and the establishment of a sustainable transport strategy.

Detailed site analysis has been undertaken to specifically identify the land that is the subject of master planning, and consolidates the understanding of features, constraints and opportunities, and to determine the potential impacts of development concepts to the surrounding land. The strategic assessment and site analysis have then been considered in respect of the existing planning scheme and the State-wide planning scheme to inform the proposed amendment to the subject land.

The proposed SAP responds to the long-term strategic aspirations of the community and the range of complexities, including the constraints and opportunities of the site. The Wilkinsons Point Sporting District Specific Area Plan includes detailed standards for the land for the purpose of delivering outcomes to the effect of the following:

- To provide for a state NBL team training and performance facility, supported by a range of active recreation, hotel accommodation, sports retail, and food services whilst retaining public access for passive recreation and community events.

- To cultivate a vibrant and engaging district that prioritises pedestrian movement and activity through designed landscaped areas, integrated infrastructure, and connectivity within the site.
- To promote sustainable transport options through:
 - Reducing potential for pedestrian/ vehicle conflict and enhancing the pedestrian environment;
 - The development of a park and ride facility;
 - Providing infrastructure to support the use of bicycles, walking, and other sustainable transport modes.
- To ensure that sports focused retail outlets enhance and support recreational and entertainment activities on the site, without undermining the activity centre hierarchy.

In preparing this submission, the provisions of the *Glenorchy Interim Planning Scheme 2015*, the relevant state policies, the State Planning Provisions, the regional land use strategies and objectives of *Land Use Planning and Approvals Act 1993* have been considered.

1. OVERVIEW

1.1 INTRODUCTION

Ireneinc planning has been engaged by LK Property Group PTY LTD to prepare an amendment to the *Glenorchy Interim Planning Scheme 2015* (GIPS) for the land at Wilkinsons Point, Glenorchy. In accordance with S87C of the *Land Use Planning and Approvals Act 1993* and the Savings and Transitional Provisions of Schedule 6, a request for amendment to the Scheme is made under the *Land Use Planning and Approval Act 1993* in accordance with the former Section 33 provisions.

This report has been prepared with reference to the *Southern Tasmanian Regional Land Use Strategy*, the provisions of the *Glenorchy Interim Planning Scheme 2015*, the *Tasmanian Planning Scheme: State Planning Provisions*, and other applicable provisions of state, regional and local policies.



Figure 1: Locality plan (source: The LIST)

Wilkinsons Point is located on the foreshore of the Derwent River and is described in Council's vision as an *'iconic waterfront location with quality environments and structures that complement each other, integrate well into the surrounds and contribute towards a richly vibrant waterfront precinct'*¹.

Wilkinsons Point was first identified by Glenorchy City Council as having great opportunities for the development of high-quality mixed use, tourism and recreation, in 2006. Business sectors which the council is targeting for the site include *food services, general retail and hire, hotel*

¹ Glenorchy City Council 2017, Wilkinsons Point Master Plan, accessed 06/08/19 <https://www.gcc.tas.gov.au/businesses/wilkinsons-point-master-plan.aspx> p.31

industry, residential, tourist operation, accommodation, sport and recreation - all areas that are showing significant job growth in the City of Glenorchy².

On 25 March 2019 Glenorchy City Council voted unanimously to start the process of selling Wilkinsons Point, including the Derwent Entertainment Centre (the DEC)³.

The LK Property Group have entered into an agreement with the Glenorchy City Council to purchase the DEC and Wilkinsons Point site. LK Group chairman Larry Kestelman is owner of Australia's National Basketball League (NBL) and hopes to establish an NBL team in Tasmania⁴. To support the establishment of the team, Kestelman intends to undertake upgrades to the DEC facility, and establish supporting infrastructure on the site for the expansion of NBL in Tasmania.

Glenorchy City Council have made previous attempts to attract development to the site, including a call for development proposals for the site in 2010⁵. In 2011 two development proposals were received for the Brooker Highway frontage of the site but were not progressed.

The LK Group vision for the site is for a sports precinct which will include a refurbished stadium, an 11 storey hotel and accommodation; a gym; NBL facilities including basketball courts, amenities and offices; riverside food and beverage outlets; indoor recreation facilities such as indoor skiing, bowling, gymnastics; carparking; associated sports retail; a 'bike kitchen'; commuter services including a ferry terminal and scope for a park and ride facility.

Proposed land ownership is indicated in Figure 2, with orange representing developable space, owned by LK Group, green also owned by LK but retained as a no build zone (with the exception of the pavilion at the southern end of this precinct). Roads marked in pink will be handed to Glenorchy City Council, and the blue zone, representing the current GASP! lease will be retained by Council.

² Glenorchy City Council 2017, Wilkinsons Point Master Plan, accessed 06/08/19 <<https://www.gcc.tas.gov.au/businesses/wilkinsons-point-master-plan.aspx>>

³ <https://www.themercury.com.au/news/politics/glenorchy-council-poised-to-lure-investors-with-dec-and-land-package/news-story/e846132b10b48d4cf9a351a6f9473c3e> (accessed 28/08/19)

⁴ <https://www.abc.net.au/news/2019-06-18/purchase-of-the-dec-to-get-tasmanian-nbl-team/11222566> (accessed 28/08/19)

⁵ Inspiring Place and Leigh Woolley, Wilkinsons Point and Elwick Bay Precinct Master Plan,



Figure 2: Proposed land ownership (source FKA)

1.2 GUIDING DOCUMENTS

The following documents have been considered in preparation of the proposed amendment, to inform and guide decisions regarding the redevelopment, some of which include previous Masterplans for the precinct. Abbreviated names are included in brackets.

- *Southern Tasmania Regional Land Use Strategy 2010 - 2035*, 9 May 2018 (STRLUS)
- (DRAFT) *Wilkinson Point and Elwick Bay Precinct Master Plan*, Inspiring Place Pty Ltd and Leigh Woolley, September 2012
- *Glenorchy City Council Strategic Plan 2016-25*, 19 December 2016
- *City of Glenorchy Community Plan 2015-2040*, The Regional Development Company, January 2015
- *Glenorchy City Council Interim Land Use Planning Strategy*, 10 September 2010

The following strategic documents have also been considered:

- *Background Report No 11: Activity Centre Analysis*, SGS Economics & Planning, May 2011, Prepared for the Southern Tasmanian Regional Land Use Strategy
- *Glenorchy Healthy Communities Plan 2014-2023*, Leisure Planners, September 2014
- *Glenorchy Open Space Strategy 2015*, Leisure Planners, 2014
- *Glenorchy to Hobart CBD Transit Corridor, Transit Corridor Assessment Report - Stage One, Walking and Cycling*, Department of Infrastructure, Energy and Resources, July 2012

- *Glenorchy to Hobart Public Transport Corridor Study*, Glenorchy City Council & Hobart City Council Joint Steering Committee, GHD, October 2016
- *T21: The Tasmanian Visitor Economy Strategy 2015-2020*, Tourism Industry Council Tasmania and State of Tasmania, November 2015

1.3 PROJECT TEAM AND REPORTS

This project has been informed and guided by the outcomes of a number of investigations undertaken by a range of specialist consultants with the following documentation prepared:

- *Architectural Drawings*, Fender Katsalidis Architects, September 2019
- *Wilkinsons Point Masterplan*, Fender Katsalidis Architects, September 2019
- *Wilkinsons Point Landscape Report*, Oculus Landscape Architecture and Urban Design, September 2019
- *Wilkinsons Point Aboriginal Heritage Assessment Report Final Report Version 2*, Stuart Huys and Rocky Sainty, Cultural Heritage Management Australia, 10 September 2019
- *Wilkinsons Point Traffic Impact Assessment and Sustainable Transport Strategy*, Howarth Fisher and Associates, 16 September 2019
- *Wilkinsons Point Proposed Rezoning Infrastructure Report*, JSA Consulting Engineers, 19 August 2019
- *Retail and Economic Impact Assessment, and Community Benefit Appraisal Wilkinsons Point*, SGS Economic & Planning, September 2019

2. DETAILED ANALYSIS

2.1 SITE ANALYSIS

The following is an assessment of the qualities of the site that are relevant in relation to the proposed amendment.

2.1.1 Land Titles

Title	Address	Tenure
CT 110871/1	'DERWENT ENTERTAINMENT CENTRE' - 601 BROOKER HWY GLENORCHY TAS 7010	Local Government Authority
CT 157350/1	601B BROOKER HWY GLENORCHY TAS 7010	Local Government Authority
CT 157350/2	601A BROOKER HWY GLENORCHY TAS 7010	Local Government Authority

The subject land is located at 601, 601A and 601B Brooker Highway, Glenorchy. The land includes titles CT110871/1, CT157350/1 and CT157350/2. The total land area proposed as part of the amendment is approximately 15.5ha. The land does not include CT110871/2 which is a 980m² area owned by TasWater. The site is bordered by the River Derwent which is Crown Land.



Figure 3: Wilkinsons Point, shown shaded orange, and surrounds. (Source: The List)

2.1.2 Existing Use and Development

Access to the site is from the western side directly from the Brooker Highway. The site is home to the Derwent Entertainment Centre, GASPI Pavilion and sculpture trail and an area of public foreshore open space. The site is otherwise undeveloped and underutilised.

The site is bordered by the Elwick Racecourse to the east, and the River Derwent to the north and west. It is afforded vistas of MONA and the eastern shore. The site also has a secondary access from Lloyd Road. There is a TasWater water pump station within the site which resides on a separate Title.

There is an expanse of hardstand parking on the site, both in front and behind the DEC building. The small amount of landscaping on the site is concentrated along the western boundary and amongst the carparking areas. The foreshore area is largely barren and unvegetated.

The GASPI Walking trail extends from the boardwalk across Elwick Bay, along to the pavilion at the tip of the point. This area is accessed by the public largely for recreational walking and bike riding.

Included in stage one of GASPI Development was a ferry jetty, built to the same specifications as the MONA jetty, and stage two included the creation of a public space adjacent to the jetty, designed by architects Room 11.

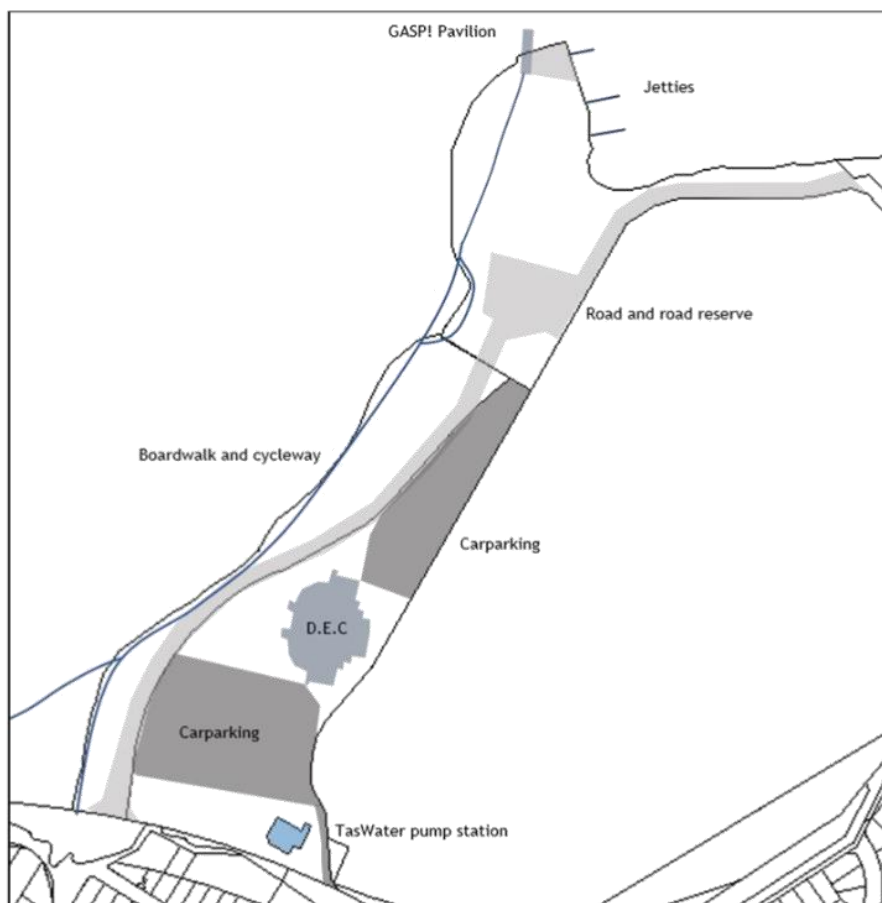


Figure 4: Existing site development. (Source: adaption from The List)

2.2 ADJOINING DEVELOPMENT AND LAND USE

That part of the site that is within the River Derwent, as well as the jetties, is managed by the Crown. Within the site is a separate Title area which is owned by TasWater and contains a pump station. To the east of the site the Elwick Racecourse which is under Private Tenure. To the northeast is the Derwent Barracks, owned by the Commonwealth. The remaining surrounding land is otherwise privately owned.

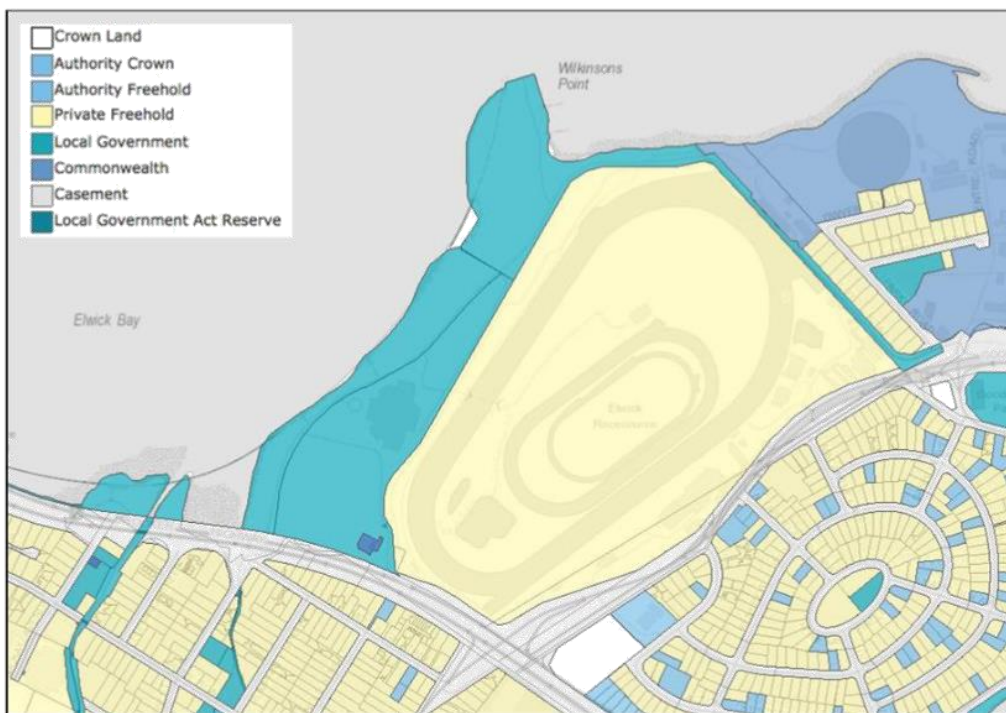


Figure 5: Land Tenure (Source: The List)

On the opposite side of the Brooker Highway from Wilkinsons Point is private residential property. The north easternmost boundary of the site adjoins the Dowsing Point Barracks, owned by the Commonwealth.

Plantings as part of the Boardwalk development have been situated on the boundary to provide additional separation. While the surrounds are largely private tenure, there is little residential zoned land within 200m of the site.



Figure 6: General Residential Zone (red) and Inner Residential Zone (maroon) surrounding the subject site. (Source: The L1st)

2.3 TOPOGRAPHY AND VISUAL LANDSCAPE

The site is situated in Elwick Bay adjacent to the River Derwent.

A detailed plan of the site accompanies this application. The site is situated part of the wider area of Dowsing Point. To the southwest is Glenorchy, and to the southeast is Goodwood. The highest part of the Wilkinsons Point site is approximately 10m AHD.

The site gently falls away in the northern corner, this part of the site is home to the GASPI Pavilion.

The geology of the site is a mixture of dolerite alluvial terrace and transitional olivine basalt. There is also a section of the site that was created by reclamation works and is therefore man-made deposits.

The DEC is a prominent feature of the landscape. To a lesser extent, the GASPI Pavilion and the vegetation on site add to the visual landscape. The front of the site is dominated by hardstand car parking area, with some landscaping provided to soften the appearance. It is thought that the double row of non-native, deciduous trees that run through the centre of the existing carpark hold some landscape value, and as such should be retained if possible.

Due to the location of Wilkinsons Point within the river valley on a prominent peninsula it is able to be seen from the surrounding areas. As can be seen in the following figure, the peninsula is able to visually connect with a number of the surrounding areas. To the east are outlooks towards Mount Direction, to the south west the Wellington Range, and westerly Mount Faulkner. The point can be seen from various aspects around the river, including the higher suburbs of Chigwell, Berriedale and Rosetta. There are also opportunities to see the site on the river's edge around Claremont, Otago Bay and Berridale Bay.

Due to the low topography of the site, the articulation of building heights will require a detailed plan to ensure the character of the site and landscape values are preserved.

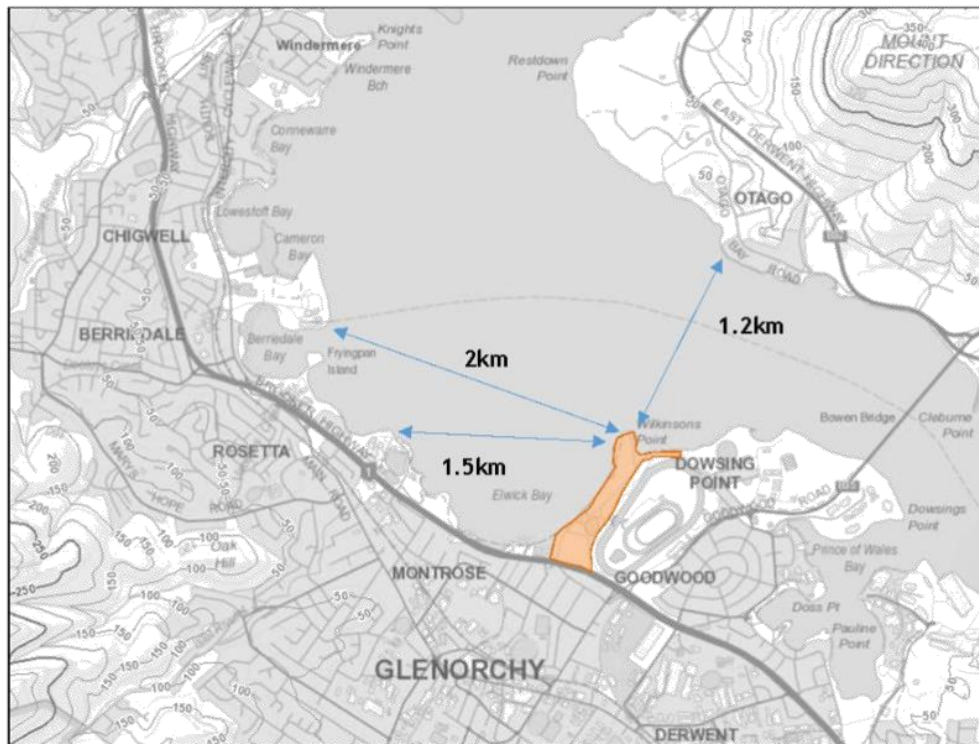


Figure 7: Surrounding topography - 10m Contours. (Source: The List)

While the topography and waterfront vistas contribute to the assets of the DEC site, the distance from the surrounding urban areas diminishes the impact of the development on the site respective to the broader landscape qualities.

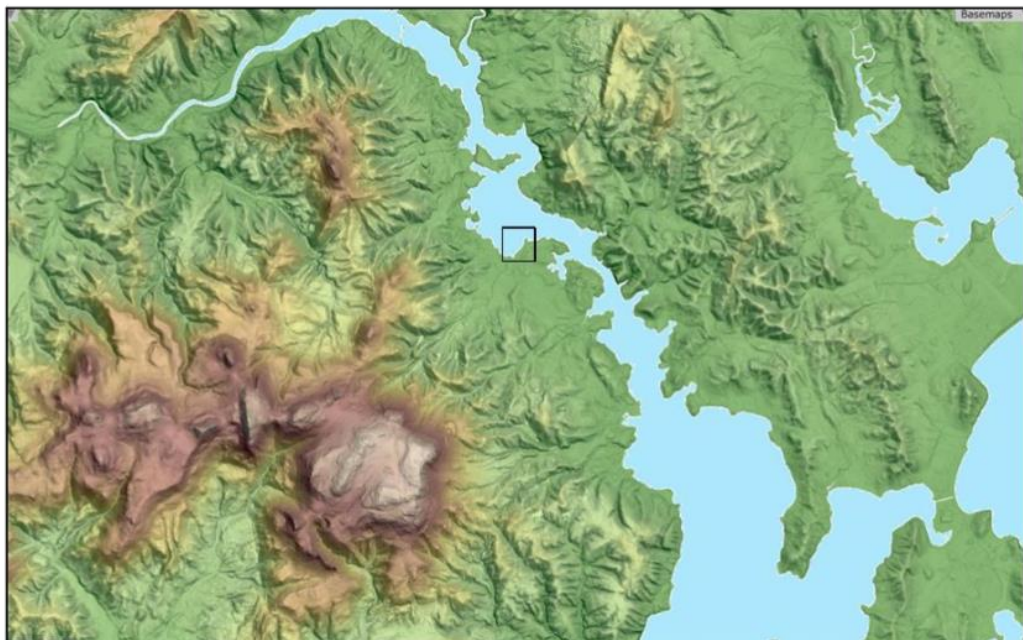


Figure 8: The topography of the surrounding area identified by colour gradation. (Source: The List)

2.4 HERITAGE

2.4.1 European Heritage

There is no listed European Heritage on the site. The adjacent Elwick Recourse does have two buildings listed as having heritage values.

The site contains relics of the previous termination point of the Bowen Bridge before it was established down river at Dowsing Point.

2.4.2 Aboriginal Heritage

The land that is the subject of this amendment is identified as potentially including Aboriginal Heritage sites. Investigations have been undertaken to assess the sites values and to prepare a management plan for approval by Aboriginal Heritage Tasmania in accordance with the requirements of the *Aboriginal Relics Act*.

The Aboriginal Heritage Assessment Report was prepared by Cultural Heritage Management Australia, in conjunction with an Aboriginal Heritage Officer. No Aboriginal heritage sites, suspected features, or areas of elevated archaeological potential were identified during this survey.

The Aboriginal Heritage Register (AHR) contains 4 registered sites within 50m of the site boundary, these are identified as AH1026, AH10466, AH10476 and AH10477.

AH1026 is identified as a shell midden, located on the northern boundary of the site. The site is located on a steep embankment, which has been fortified with boulders and rubble. The site was likely disturbed after the original recording of the site in the 1980s, and as such has now been covered by introduced debris.

AH10466 is classified as “not a site” on the AHR. Originally recorded as a midden in 2007 by Maynard, the site was later reclassified as ‘not a site’ by Jones from AHT after a subsequent investigation. This site was visited by the field-team and it was noted that the site is massively disturbed with fill debris greater than 1m in depth. The report concludes that Jones was correct in his assessment of AH10466 being ‘not a site’.

AH10476 and AH10477 are classified as being a shell midden and an isolated artefact. These sites are both located just beyond the Wilkinsons Point Title area, residing on land that is part of the Elwick Racecourse.

The consultant report provided 5 Management Recommendations for the site;

1. *Site AH1026 (a shell midden) is reported to be situated on the northern boundary of the study area. The site could not be relocated during the current survey, and it appears that the site has been destroyed or covered with fill material. As specified in section 9.1 of this report, all Aboriginal relics are protected under the Aboriginal Heritage Act 1975 (The Act). It is illegal to destroy, damage, deface, conceal or otherwise interfere with a relic, unless in accordance with the terms of a permit granted by the Minister. However, AHT has advised that if a site could not be relocated, providing that an extensive search has been undertaken, then works may proceed at the recorded site location, then no Permit is required. It is recommended that any future works in this area should proceed in strict guidance of the Unanticipated Discovery;*
2. *Sites AH10476 and AH10477 are confirmed as being located outside the study area boundaries, within the Elwick Racecourse grounds. It is advised that there are no further requirements for these sites;*

3. No other Aboriginal sites were identified in the study area, and this area has been assessed as being of low archaeological sensitivity. This is based on the absence of identified Aboriginal sites, the very high levels of historic disturbances, and the low potential for undetected Aboriginal sites to be present. On this basis it is recommended that there are no further archaeological requirements for the project;
4. If previously undetected archaeological sites or objects are located during the course of development works, the processes outlined in the Unanticipated Discovery Plan should be followed (see Appendix 1). A copy of the Unanticipated Discovery Plan should be kept on site during all ground disturbance and construction work, and construction personnel to be made aware of the Unanticipated Discovery Plan and their obligations under the Aboriginal Heritage Act 1975 (the Act); and
5. Copies of this report should be submitted to AHT for review and comment.

It is concluded that Aboriginal Heritage Sites do not present any restrictions to the development of a Specific Area Plan for Wilkinsons Point.

Any development or works undertaken on the site as part of an approved development Permit should be in accordance with the processes outlined in the Unanticipated Discovery Plan

2.5 NATURAL VALUES

2.5.1 Maritime

A study of the estuary found colonies of sea grass (*Heterozostera tasmanica* and *Zostera muelleri*). Seagrass colonies have conservation significance, performing a number of ecosystem services in the estuarine environment. Any proposed development with potential to impact upon the estuary environment would require a detailed environmental impact assessment with mitigation measures should there be any potential impacts.

Western Australian salmon have conservation significance and has been noted in the nearby area of the Derwent.

2.5.2 Flora and Fauna

The Caspian tern has been noted as present in the area. This may warrant a Fauna study to be required at the Development Application stage due to the terns' conservation status.

There are a few small copses of vegetation on the site, the larger of which is concentrated around the TasWater pump station. The vegetation is predominantly eucalypt with associated understory. The site has been classified as FUM (extra-Urban Miscellaneous) and FUR (Urban Areas) TASVeg Communities.

The row of conifers along the boundary between the subject site and Elwick Racecourse act as wind buffers. Due to their size the trees are considered to be visually important in the landscape. Due to their age, these trees are gradually being lopped or removed as a safety measure. These trees are located on the land owned by the Elwick Racecourse.

No threatened Flora or Fauna has been listed as present on the Wilkinsons Point area of the site; however, some threatened flora species have been identified on the Grove Reserve area, and a Threatened Community (wetland) is identified at the mouth of Humphreys Rivulet. The flora species identified on 'The Grove Reserve' are; sea rush, beaded glasswort, slender sea-celery, creeping brookweed, chaffy sawsedge, coast speargrass, shiny swampmat, and southern reed.

As demonstrated by the Master Plan for the subject site, there will not be any development proposed at the location of threatened flora or threatened communities. If any development in these identified areas were proposed a detailed Fauna study would be required.

There are no known biosecurity risks within 1000m of the subject site.



Figure 9: Threatened Flora points identified as green triangle. Threatened Communities identified by yellow number. (Source: The Lst)

2.5.1 Weeds

The site has had extensive disturbance over its history. As a result, there are a number of weeds present. Among the identified weeds on the site are; African boxthorn, African lovegrass, blackberry, boneseed, Chilean needlegrass, English broom, fennel, and wild teasel.

Any development application would require a weed management plan to ensure the control of the identified weeds, and to prevent the introduction or spread of weeds or pathogens due to machinery hygiene.

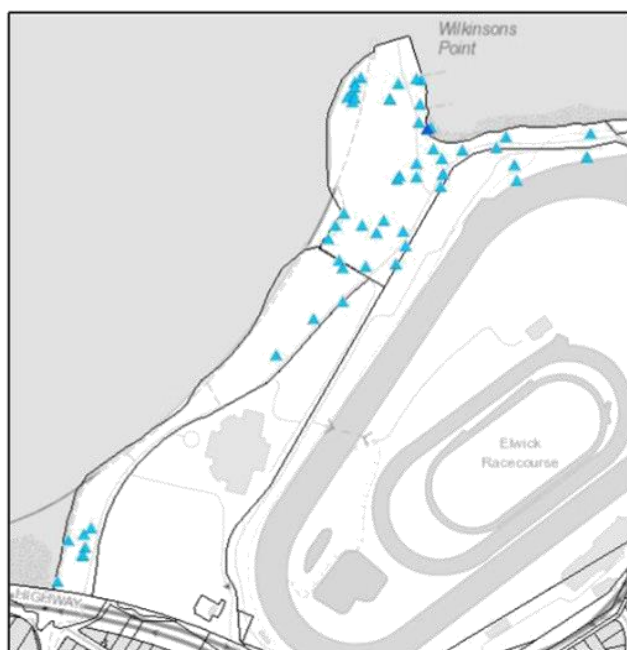


Figure 10: Weed identification points on the subject site. (Source: The List)

2.5.2 Environmental Management

Relevant to the strategic use of land on the edge of the River Derwent are STRLUS policies for management of environmental values, including those for; Biodiversity and Geodiversity, Water Resources, The Coast, and, Managing Risks and Hazards for Sea Level Rise and Storm Surge. These values have been discussed further in this report in relation to the *State Coastal Policy 1996*, and the *State Policy on Water Quality Management* as a statutory requirement of an amendment application.

WR 2 - Manage wetlands and waterways for their water quality, scenic, biodiversity, tourism and recreational values.

Natural values have been further discussed within this report. An extensive natural values assessment was undertaken as part of the 2012 Masterplan process, and information is widely available as part of the Natural Values Atlas.

Wilkinson's Point has been substantially cleared and disturbed across much of the site and there are many declared weeds present on the site. No development is proposed along the riverbank, and riverbank and GASP walkway will remain zoned as Open Space and development is intended to be restricted within this precinct of the SAP.

2.6 INFRASTRUCTURE

A reticulated water mains connection is located in the north west corner of the site.

Due to the site's proximity to the River Derwent, there are 6 stormwater drains that discharge directly into the river. Due to the significant increase in impervious areas proposed, the

infrastructure report⁶, compiled by JSA Engineers, has recommended that ran gardens be incorporated into the landscaping of the site, as well as engineered stormwater pits for any open carparking areas. The report also concludes that the stormwater infrastructure currently serving the DEC would require relocation, as it cannot be built over.

The site contains a Taswater pump station which is on a separate Title. The pump station is benefitted by a right of way over the subject site. A stormwater main is located along the entirety of the eastern boundary of the site.

The site is connected to a reticulated sewerage system part way along the northern boundary with pump stations connecting it to the Prince of Wales Bay Sewerage Treatment Plant. The public toilets adjacent the GASPI Pavilion are serviced by an enviro cycle which will be contained within Council owned land. The consultant report concludes that the sewerage infrastructure on the site will require significant upgrades to meet the projected capacity needs for the proposed development outlay. This will include the addition of a new pump station at the northern end of the site, and the upgrade of the two existing pump stations, as well as associated infrastructure.

There is an overhead power supply to the site from the north, and an underground power supply from the south. Initial investigations indicate that there is capacity for the current substation to supply the power required for the proposed layout of development on the site, however a detail report is recommended to be undertaken and the development application stage.

Currently there are no formalised easements for the Taswater stormwater or sewerage infrastructure on the site due to it being Council owned. Upon the transfer of land to private tenure, these easements will need to be created to ensure rights of access are maintained.

2.7 MOVEMENT

The STRLUS strongly emphasises the importance of alternative transportation types. Policy statements from the STRLUS are structured around the following:

Develop and maintain an integrated transport and land use planning system that supports economic growth, accessibility and modal choice in an efficient, safe and sustainable manner

While there is no existing rail service that uses the South Line corridor, there is ongoing exploration of the ability for the former heavy rail corridor to be used for a passenger service. The options for reuse have been consolidated with the Glenorchy to Hobart Public Transport Corridor Project that has been endorsed by Hobart City Council, which seeks to intensify urban development at key site along the Corridor.

⁶ Wilkinsons Point Proposed Rezoning Infrastructure Report, JSA Consulting Engineers, 19 August 2019

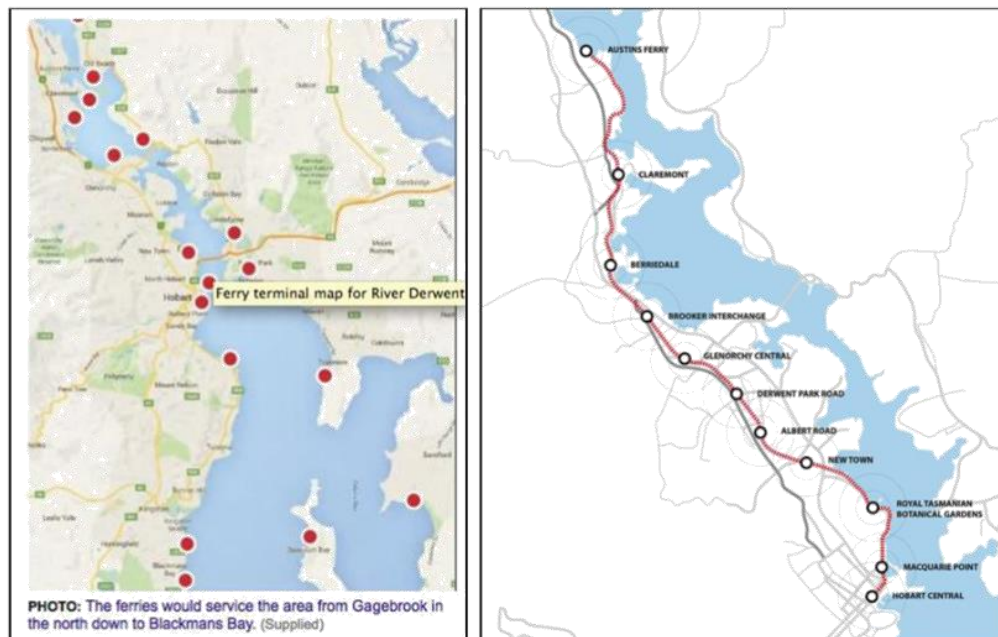


Figure 11: Ferry service concept (Source: ABC News), and concept passenger rail route (Source: GHD⁷).

The Intercity cycleway is accessible from Wilkinsons Point, at the pedestrian crossing on the Brooker Highway and along Constance Ave to the cycleway.

Expansion of activities on the site will improve the feasibility of options for alternative transportation types that will assist in servicing not only MONA but also a variety of other sites in the region.

⁷ GHD, Report for Hobart City Council and Glenorchy City Council - *Glenorchy to Hobart Public Transport Corridor*, p21



Figure 12: Excerpt from Glenorchy to Hobart DBC Transit Corridor Cycle Network map, showing existing and proposed bicycle network (Source: DIER⁸)

The following is an outline of the various means of transportation modes for the site that have been considered.

2.7.1 Pedestrian

Pedestrian access to the site is from the Brooker Highway or Boardwalk that spans the Elwick Bay foreshore. Access is also able to be obtained by walking along Lloyd Road from Goodwood. The site is the termination point for the shared walking cycle track that connects to the GASPI Trail. The site is surrounded by a large residential catchment, with the site already attracting residents from the local area to utilise the open space.

2.7.2 Bicycles

The site is located with access to the Intercity Cycleway, which is situated in the former rail corridor, and runs from Claremont to Hobart. The GASPI Walkway and cycleway run through the site, along the extent of the foreshore.

The site currently has approximately 4 bicycle parking spaces in a single instalment of infrastructure available for users. With the development of the site, the bicycle parking infrastructure would be increased significantly to include approximately 300 bicycle parking spaces. The precise number required is to be determined at the development application stage. This will significantly boost the options for multimodal transport given the sites proximity to the intercity cycleway, and the possibility of bikes being taken on ferries. Additionally, investigation

⁸ Department of Infrastructure Energy and Resources, *Glenorchy to Hobart CBD Transit Corridor, Transit Corridor Assessment Report - Stage One, Walking and Cycling*, p.12

has also been undertaken for the hire of bicycles on the site, for users to ride to MONA or to the Glenorchy CBD.

2.7.3 Bus

There are public bus stops located on Goodwood Road (450m) to the east of the site and McGough Street (350m) to the south.

These stops are serviced by Metro Tas numbers X11, X22, and X30.

The site is currently not serviced by Metro Tas, however with the future development of the site there would be opportunity for the addition of a public bus stop to serve commuters to and from the site. Metro is seeking to increase its patronage and services along the Brooker transport corridor. Metro has indicated it can divert services to include a bus stop within the site to service a park and ride once patronage numbers are confirmed for the initial stage. For events, metro have also indicated a keenness for establishing a charter service, similar to the arrangement for large sporting events at Bellerive oval.

The Department of State Growth has advised that it would consider the implementation of a bus service through the subject site, as well as the opportunity for chartering arrangements for events⁹.

2.7.4 Ferry

There are three jetties on that site that have the potential for future use with a ferry service. These are all subject to crown leases. While currently not being used, the site could be part of a future commuter ferry service. The jetty located on the site has been utilised by the ferries servicing MONA on occasion for GASP! Events.

There is an established ferry route along the River Derwent taking passengers between MONA and the Hobart waterfront. The MONA ROMA ferry service (Navigators) is interested in forming a relationship with Wilkinsons Point to include a ferry stop at the existing pontoon on Wilkinsons Point for the park and ride. The MONA ferry currently services the museum at capacity generally during the morning on outbound trips, and the inverse in the afternoon. As the commuter travel flow would be the opposite direction to the current passenger visitation, there is opportunity for previously empty ferries to be used as commuter travel with an established fleet and route. The provision of any ferry service to Wilkinsons Point would be the subject of a development application. The provision of a ferry service to Wilkinsons point would increase the overall ferry capacity to 1470 passengers per hour.

2.7.5 Uber and Taxi

Designated taxi, Uber and Uber pool pick up and drop off points are also proposed to be sited at convenient locations throughout the site.

2.7.6 Train

The site is situated within 80m of the Southline rail corridor that is currently unused for trains since heavy rail was diverted and managed at the Brighton Transport Hub. While there is currently no firm government agenda to support the reuse of the rail line further urban intensification along the corridor would be likely to result in improved feasibility to explore various options that would likely have broader benefits to the local community.

⁹ *Wilkinsons Point Traffic Impact Assessment and Sustainable Transport Strategy*, Howarth Fisher and Associates, 16 September 2019

2.7.7 Cars and Park and Ride

The site frontage and is accessed from the Brooker Highway where the capacity of local roads is substantial. There is also a secondary, unsealed access to the site from Lloyd Road.

The section of the Brooker Highway adjacent to Wilkinsons Point typically has a volume of 43,000 vehicles per day. The peak flows, and thus peak congestion times, are typically between 7.20am-8.20am and 4pm-5.30pm on weekdays. It is anticipated that the park and ride will enable 300 vehicles, equivalent of 450 people, being removed from the peak traffic flow. The multiple uses on the site will result in the distribution of the flow of this traffic exiting the site across a wider time window, easing the demand in peak time.

Transport by private vehicle is encouraged to the site with a 'park and ride' scheme incorporated in the masterplan. There are approximately 900 car spaces existing on the site, with the future development of designated all day carparking creating further opportunity to encourage multimodal commutes for residents. The site will have approximately 1818 car parking spaces at the completion of the redevelopment. The park and ride portion of the site would encompass approximately 300 car parking spaces. This would be serviced by bus in the initial stages, with expansion to also include a ferry service as an option.

Based on the assumption of 1.5 people per car utilising the park and ride, there would be 450 people arriving and exiting the site in the morning and afternoon times. Given the variation in patronage and peak times for the different uses on the site, the visitation will be staggered across the day. The park and ride facility is proposed to operate between 7am-9am and 4pm-6pm, the hours of operation would be the subject of a development application.

Due to the site having the high likelihood of multipurpose trips, i.e. a user of the park and ride may go to the gym afterwork and then collect a takeaway meal as they leave the site, the number of car parking spaces required for the business and retail uses is proposed to be reduced by 25% to account for multipurpose trips. The estimate of this percentage reduction was calculated at a conservative rate, with the number of multiple use users expected to be much greater than 25%. The site will still have 1842 car parking spaces provided. The expected car occupancy to the site is expected to be at a rate of 2.2 people per vehicle.

The proposed park and ride facility is consistent with the objectives of the *Glenorchy Parking Strategy 2017-2027*, which identifies the development of a Park and Ride facility within a commercial precinct as a key action of the plan.

Accessible parking will be provided consistent with the mandatory requirement in the Building Code of Australia.

2.7.8 Commercial Vehicles

The operation of the site requires a variety of commercial vehicles to be able to access the site to service the activities of the DEC. The master plan for the development has a pedestrian focus to prioritise safety and circulation around the site.

It is anticipated that the majority of uses on the site will be adequately serviced by medium rigid vehicles with the possibility of a 19m semi-trailer being required for the occasional large event. All turning circles and circulation networks on the site will be in accordance with the Australian Standards and assessed at the development application stage.

2.7.9 Events

It is expected that at peak times, the time of an NBL major event, there will be approximately 5000 people on the site.

A Traffic Management Plan is recommended to be drafted as part of a development application for the site to ensure safe and efficient circulation is achieved.

2.7.10 TIA recommendations

The following conclusions and recommendations for the site were made:

Brooker Highway / Wilkinsons Point Access Road

- *A continuous left turn through lane into the site, from the Brooker Highway (northern approach) which forms its own lane within the site;*
- *Two right turn lanes into the site forming their own lanes from the southern approach;*
- *The maintenance of the short northbound through lane for the northbound through traffic movement on the Brooker Highway;*
- *The maintenance and connection of the internal local development service roads into the existing left turn out slip lane;*
- *During the interpeak period and evening periods there will be increased phasing capacity for turning movements into the site. The DSG will override the existing signal phases during major events (which will occur outside the peak periods) to minimise delay to the Wilkinsons Point traffic;*

Goodwood Road / Centre Road / Loyd Road

- *It is proposed to extend the length of the right turn slip lane to increase capacity for storage of right turning vehicles at the site from Goodwood Road (eastern approach);*
- *It is proposed to construct a new left turn slip lane from the western approach of Goodwood Road directly into Loyd Road. This would remove the requirement for left turning vehicles being delayed at the existing traffic signal-controlled intersection and remove the issues involved in accommodating the swept path of the left turn movement from Centre Road into Loyd Road. The swept path of larger truck and buses cannot be accommodated without encroaching on the outbound Loyd Road leg of the intersection;*
- *A direct entry from Goodwood Road would minimise delay and improve the capacity for vehicles wanting to enter the site from the south and the west of the Wilkinsons Point site given the limitations (especially at peak times of the right turn storage capacity of the Wilkinsons Point Access Road and the Brooker Highway;*
- *It is proposed that vehicles are directed through signage, marketing strategies from the south and west to the use of the Goodwood Road access for potential users of the site;*
- *Signal Phase and timing changes to three phase arrangements allowing each leg of the intersection to operate separately clear may also improve the operation of the intersection especially for the Loyd Road/Centre Road leg;*
- *Notwithstanding the above, there is spare capacity at this intersection. The intersection can accommodate the proposed additional 300 trips in the morning peak hour and 450 trips in the evening peak hour with the assumed 1.5% growth on Goodwood Road;*

Sustainable Transport Strategy

- *New ferry services working on the Brooke Street - Mona route (potentially via Wilkinsons Point) will increase the overall ferry capacity to 1470 people per hour. The ferry provides a fast, frequent and reliable potential mode of transport to the site, which is not*

impacted by traffic congestion, which is common within the City of Hobart and along the Brooker Highway especially at peak times;

- It is envisaged a park and ride car parking facility (providing 300 spaces) will be provided. This will provide commuters/ visitors with the option to leave their vehicle and take a ferry service into Hobart or visitors onto Mona;
- This would reduce the demand for travel on the State Highway network which is currently operating at or near capacity particularly in the morning peak periods. Average car journey times between the Wilkinson Point site and Hobart / Salamanca are currently ~ 40 minutes. Commuters then must park their vehicle in the City which has another time component. This journey time could be halved if people took the ferry from Wilkinsons Point, providing a significant time advantage, and a more attractive travel experience for those commuters working in walking distance from the Brooke Street pier;
- Uber, Uber pool and taxi pick up and drop off points will also be sited in the Wilkinson Point site at strategic locations. These provide alternative options for local people living near the site, especially those travelling to the site as a group; and
- An event traffic management plan will be undertaken. The developer will be responsible for working with all key stakeholders and transport providers to develop an event traffic management plan for the site. This will be an ongoing process and will be reviewed periodically to incorporate refinements and additional provision as and when necessary.

2.8 2012 WILKINSONS POINT AND ELWICK BAY MASTERPLAN

The Wilkinson Point and Elwick Bay Precinct Master Plan report was revised in 2012 by Inspiring Place and Leigh Wooley to reflect the changes to the Wilkinsons Point-Elwick Bay Foreshore area.

In 2011 Council sought development proposals for 601 Brooker Highway and two submissions were received, but it was decided to delay the release of the site to consider the development of the GASP! Project and Wilkinsons Point are concepts (p. 3).

The 2012 Masterplan considers the option of public development on the site and the resultant Specific Area Plan (SAP) includes some provisions for retail, food and beverage, hotel services and visitor accommodation.

The 2012 Masterplan identified a number of key themes through a review of strategic documents relevant at the time, which align with the intended future use and development of Wilkinsons Point:

- upgrading Elwick Bay and Wilkinsons Point is consistent with Council's vision and community plans for achieving its social, economic, infrastructure and environment objectives;
- the importance of GASP! in inspiring future access, use and experience of the foreshore and community culture;
- recognition of vehicle access and parking issues involved with a major event at DEC, maintaining the operational efficiency of the Brooker Highway and achieving safe access to the Montrose Community Park;
- that Wilkinsons Point is under-utilised and has potential for a range of future commercial and residential development opportunities that benefit from its river setting, existing and surrounding facilities (especially entertainment and events), GASP! and proximity to the national highway and Glenorchy CBD;

- the potential for future water access to the site using ferries linked with other foreshore visitor attractions.

The masterplan study identified the opportunity on the site for the development of:

a new accommodation, restaurant and riverside attractions area that can leverage off the existing regional attractions within and surrounding the study area and provide synergistic benefits to the City, its residents and businesses. There is potential to develop tourism attractions, facilities and services that could be an extension of MONA or could compliment MONA given the capacity to be linked by ferry, bus, private vehicle and a shared pathway (p 28-29).

The report identified that the site attracts large numbers of visitors for events at the DEC, as well as surrounding facilities such as the racecourse and the showgrounds, as well as MONA beyond. A lack of food and drink, and accommodation options on the site mean that visitors do not have a reason to stay on the site outside of event times.

It was also identified that there was an opportunity for visitors to access the site by ferry and to link the ferry service with other nearby attractions including MONA.

This masterplan report informed the writing of the current Wilkinsons Point and Elwick Bay Specific Area Plan (SAP) which forms part of the *Glenorchy Interim Planning Scheme 2015* and overrides many of the Zone and Code provisions for the site. The SAP relies heavily on the findings of the 2012 Masterplan report, and the SAP mapping reflects closely the proposed use and development of the Masterplan as shown in Figure 13.



Figure 13: 2012 Wilkinsons Point and Elwick Bay Masterplan (Source: Inspiring Place)

2.9 BENEFITS, AND LOCAL AND REGIONAL LAND USE STRATEGIES

The following is an assessment of the benefits of appropriate development on Wilkinsons Point with respect to relevant strategic documents including the *Southern Tasmanian Regional Land Use Strategy 2010-2035*

The following is an assessment of the economic and community benefits of a range of development within the Wilkinsons Point site, with respect to the relevant land use strategies, both regional as well as a range of local government strategies.

The most recent planning strategy applicable to the region that has been referenced is the *Southern Tasmanian Regional Land Use Strategy 2010-2035* (as amended 9 May 2018), which has been used to establish the purpose and objectives included within the *Glenorchy Interim Planning Scheme 2015*.

2.9.1 Activity Centres

Activity Centres form one of the regional policies of the STRLUS, providing the “focus for services, employment and social interaction in cities and towns”. Under the STRLUS Central Glenorchy is defined as a Principal Activity Centre. The role of a Primary Activity Centre is to:

provide a wide range of services and facilities (including offices for business and government) to serve the surrounding sub-region, with a strong focus on the retail and commercial sector.

Where Activity Centres are defined as follows:

Activity Centres - Are mixed use areas that provide a focus for services, employment, retail and commercial activity and social interaction in cities and towns. They also include community meeting places, community and government services, education facilities, settings for recreation, leisure and entertainment and may include in larger activity centre residential development in mixed land use settings.

Within the hierarchy of Activity Centres, Primary Activity Centres include a range of use and development at a sub-regional level including employment; shopping facilities such as major supermarkets, department stores and a range of speciality shops; secondary location for government services and community infrastructure; residential development at higher densities; entertainment including night-time activities and sporting clubs/facilities as well as a bus interchange.

The STRLUS strongly emphasises the importance of consolidating existing Activity Centres as a focal point in its policies. In particular, the policy below, where Hobart is defined as a Primary Activity Centre and Central Glenorchy is a Principal Activity Centre.

AC 2 Reinforce the role and function of the Primary and Principal Activity Centres as providing for the key employment, shopping, entertainment, cultural and political needs for Southern Tasmania

The definition of the Primary Activity Centre includes that entertainment should incorporate night-time activities and major cultural facilities of the region. While it is intended that Wilkinsons Point will include some of the functions of the Primary Activity Centre including retail and entertainment it is not intended to detract from the function of the Glenorchy Primary Activity Centre. Given the specialist nature of the proposed retail and entertainment it is expected that patrons will travel from across the region to access specialist sporting retail and entertainment and will have a wider reach than just the Glenorchy municipality.

Unlike a Primary Activity Centre Wilkinsons Point does not propose to offer services to support residential development and will provide for specific retail and commercial uses associated with sport and recreation and visitor accommodation.

Along with NBL games and entertainment which will attract patrons from across the region, Tasmania and interstate, recreation activities such as axe throwing, and indoor skiing will be unique to the region.

Background Report No: 11 Activity Centre Analysis by SGS Economics and Planning prepared for the SRLUS acknowledges that some out-of-centre development may be appropriate *'that perform a specific retail... role that do not necessarily have all the attributes of an activity centre'* (P. 139).

Despite this, the scale of development proposed at Wilkinsons Point is such that it is more suited to being classified as a Specialist Activity Centre. It is not intended that the retail proposed will duplicate or complete with existing Large Format Retail within the Glenorchy Municipality, but to provide a different product to the area in the form of retail which supports the use of the site, primarily for sports and recreation purposes.

In line with the description of Specialist Activity Centre within the SRLUS it is anticipated that the catchment area for Wilkinsons Point would have a regional focus as it is offering a different product to the market. Along with NBL games and entertainment which will attract patrons from across the region, Tasmania and interstate to recreation activities such as axe throwing, and indoor skiing will be unique to the region.

It is acknowledged that there is an existing Specialist Activity Centre to the north of Wilkinsons Point at Derwent Park approximately 1km to the south west of Wilkinsons Point. Derwent Park predominately provides for Bulky Goods Sales in hardware, building supplies and specialist trade equipment.

SPECIALIST CENTRE		
Role	To provide for activity of a specialist nature as defined through specific local area or structure plans.	
Employment	Dependent upon specialist characteristics.	
Commercial including retail	Retail should reflect specific centre's purpose or defined character. Broader retailing (take-aways, cafes etc.) should be limited to serving employment in the centre, unless identified as part of its defined purpose or character. Office space should be limited to focussed clusters of employment affiliated with the centre's predefined purpose or character.	Cambridge Park Derwent Park
Government Services & Community infrastructure	None, unless predefined purpose or character details a specific need.	(Others may be identified of a local nature. An example of a local Specialist Centre is a highway services precinct)
Residential	Generally none, but may have specialised accommodation nearby relating to centre's focus (i.e. student accommodation).	
Entertainment	None.	
Access	Ideally located at or adjacent to public transport corridor, between existing activity centres.	
Catchment	Regional or Local, Dependent upon specialisation.	

It is not intended that the retail proposed will duplicate or compete with existing Large Format Retail within the Glenorchy Municipality, but to provide a different product to the area in the form of retail which supports the use of the site, primarily for sports and recreation purposes.

A new Hobart Showground Specific Area Plan has also been inserted into the *Glenorchy Interim Planning Scheme 2015* which will facilitate limited Large Format Retail/Bulky Goods Sales, with a prescribed minimum floor area of 500m² for a single tenancy.

The inclusion of a 'Park and Ride' on the site supports the use of the site after hours and will mostly attract users of the Park and Ride to the site before and after 'working hours' to use the facilities.

As demonstrated in Figure 14 none of the activity centres within the wider proximity of the site are within a 400m walking distance, with the exception of the Showgrounds site, which is intended to be developed for big box retail, but is not classified as an activity centre within the STRLUS. The Glenorchy Primary Activity Centre is located approximately 900 m from the site while the Derwent Park Specialist Activity Centre is located approximately 1000 m from the site.

AC 3 Evolve Activity Centres focussing on people and their amenity and giving the highest priority to creation of pedestrian orientated environments.

The development of the Wilkinsons Point Specialist Activity Centre within a parkland setting gives the opportunity for good urban design principles which encourages buildings within a park setting that offer high quality pedestrian-oriented environments, which are not dependent on street frontage, in accordance with policy AC 3.

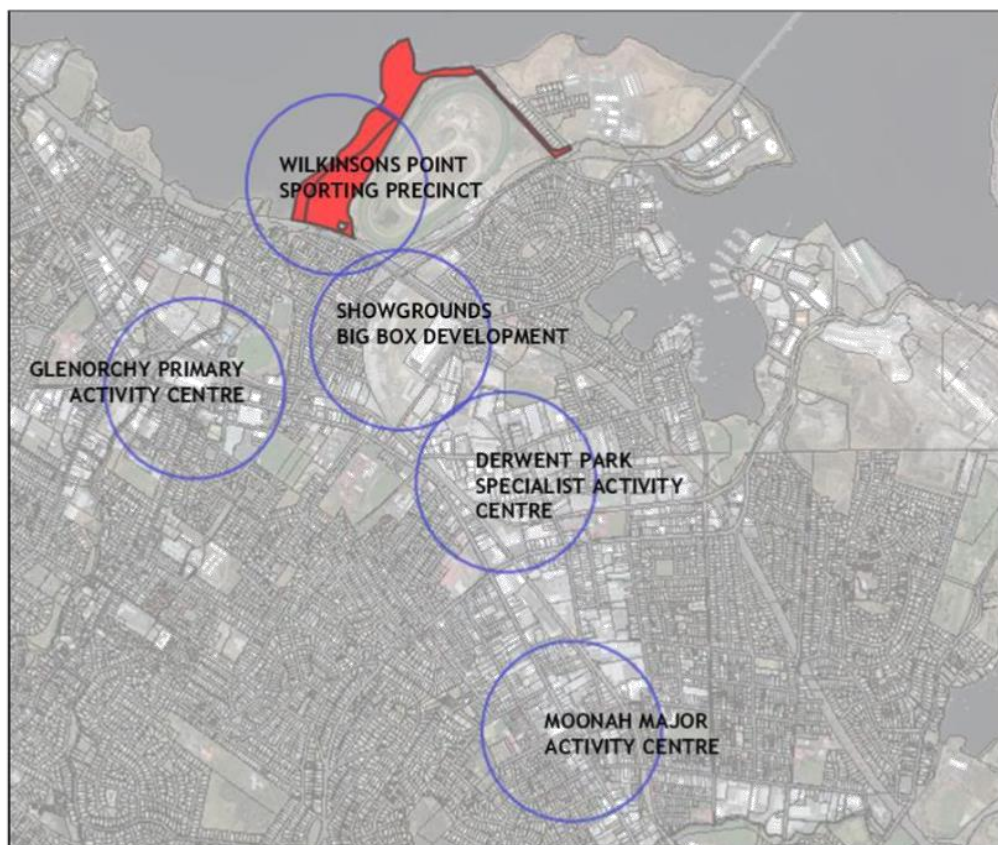


Figure 14: Activity Centres within proximity of Wilkinsons Point, showing 400m walking distances (Source: The List; alterations by Ireneinc)

2.9.2 Economic Retail Impact

A Retail and Economic Impact Assessment for the new Wilkinsons Point masterplan has been undertaken by SGS Economics and Planning. The report finds that the gross floor area (GFA) for

retail and food and beverage outlets on the site, would be supportable at a 9-year horizon, to 2034.

Demand growth driven by increase in population and expenditure per capita were found create sufficient demand over time to sustain the retail on this site. It was found that the retail offering proposed for the site, being of a specialised nature focusing on sports retail and branded apparel, would not necessarily reflect the range of retail offered within other activity centres.

Given the specialised nature of the retail, the catchment for the site would be greater than the Glenorchy local government area. It is anticipated that the catchment area for the site would include 'Greater Hobart'.

SGS recommend a staging of the retail floor space in order to not negatively impact the existing competing retail, as shown in Figure 16 and 16.

TABLE 5: IMPACT OF PROPOSED RETAIL DEVELOPMENT – STAGED APPROACH

Retail category		2024	2029	2034
Big Box Sport and Specialty Sport Retail (Greater Hobart)	Additional p.a. expenditure in catchment	\$13,040,015	\$27,917,124	\$44,643,185
	Proposed floorspace at DEC (full)	4,092	8,820	8,820
	Expected turnover at redeveloped DEC	\$12,916,833	\$27,842,951	\$27,842,951
	Impact on existing retail centres in the catchment	No impact	No impact	No impact
Food and beverage hospitality (Greater Hobart)	Additional p.a. expenditure in catchment	\$22,747,082	\$35,724,718	\$62,898,214
	Proposed floorspace at DEC (full)	3,480	6,975	6,975
	Expected turnover at redeveloped DEC	\$18,874,528	\$37,830,413	\$37,830,413
	Impact on existing retail centres in the catchment	No impact	No impact	No impact
Fast food hospitality (Glenorchy only)	Additional p.a. expenditure in catchment	\$4,376,045	\$9,502,014	\$15,358,236
	Proposed floorspace at DEC (full)	1,000	2,500	2,658
	Expected turnover at redeveloped DEC	\$3,862,585	\$9,656,462	\$10,266,750
	Impact on existing retail centres in the catchment	No impact	No impact	No impact

Figure 15 Impacts upon other retail centres for staging of the development (Source: SGS)

TABLE 6: SUPPORTABLE FLOOR SPACE AT DEC SITE

Precinct	Use	GFA supportable		
		2024	2029	2034
Highway	Big Box Sport Retail	2,700	5,820	5,820
Highway	Specialty Sports Retail	1,392	3,000	3,000
Highway	Fast food	1,000	2,658	2,658
Highway	F&B	730	730	730
Sports	F&B	2,750	6,245	6,245

Figure 16: Supportable retail floor space as proposed by SGS Economics & Planning (Source: SGS)

2.9.3 Tourism and Economic Development

Sports and Recreation has been identified as a driver for visitation to Tasmania, within the State Government T21 Strategy¹⁰. Wilkinsons Point is home to GASP and the DEC and forms part of a larger network of cultural and entertainment facilities within the City of Glenorchy.

The STRLUS recognises the region as 'a place of arts, culture and recreation'. MONA is specifically given as an example of this and the positioning of MONA on the shores of the Derwent within the Glenorchy municipality forms part of Glenorchy's wider strategic vision as 'a city of arts' (Glenorchy Strategic Plan p. 8).

The masterplan proposal for Wilkinsons Point intends to create a place for visitors to engage in arts, culture and sport. The previous masterplan for the site also proposed attracting a range of tourism opportunities to the site.

The state government has subsequently identified in its T21 strategy of 2015 that it has the ambitious target of increasing this to 1.5 million visitors in 2020, with an expenditure of \$2.5 Billion. Priorities set out within the T21 Strategy include the following:

- *Generate more demand for travel to Tasmania; including through marketing, reasons for visiting, and infrastructure.*
- *Invest in quality visitor infrastructure; including water-based tourism, innovative visitor products, experiences and infrastructure, and development of new experiences that complement Tasmania's competitive strengths.*
- *Building capability, capacity and community; encourage a culture of excellence, attract and train hospitality and events workers, foster innovation.*

The STRLUS identified that state visitor numbers were at 932,700, contributing \$1.4 Billion to the economy. Tourism Tasmania's *Tourism Snapshot* for the year ending March 2019 shows that since then Tasmania's visitor numbers have risen to 1.32 Million, spending \$2.49 Billion in the state.

The refurbishment of the DEC, development of high-quality visitor accommodation and the establishment of unique recreation facilities will support the growth of the tourism in Glenorchy and more broadly across Tasmania. GASPI is identified under the category of tourism as '*bringing new life to the nearby Elwick Bay foreshore*' within Glenorchy's Strategic Plan.

The SGS Economic Impact Assessment found that Wilkinsons Point would '*improve the economic outcomes of Glenorchy and greater Hobart due to the construction of the various elements and the redevelopment of the DEC*' (p. 12). One operational the development will generate additional expenditure which will benefit the Greater Hobart Region. SGS found that Wilkinsons Point will add an estimated \$54 million per annum to the GPR of Greater Hobart. The findings of the Economic Impacts are summarised in the below table.

TABLE 12: TOTAL PER ANNUM ECONOMIC IMPACTS – ALL INDUSTRIES

Source of Stimulus	Output	Value-added to GRP	Employment (FTE)
Direct	\$115,840,000	\$51,150,000	809
Flow-on impacts	\$92,200,000	\$46,650,000	336
Total	\$208,050,000	\$97,800,000	1,145

Figure 17: Table showing per annum economic impacts for all industries at Wilkinsons Point (Source: SGS)

¹⁰ T21, State of Tasmania, November 2015, *The Tasmanian Visitor Economy Strategy 2015-2020*.

2.10 COMMUNITY BENEFITS

Development of the Wilkinsons Point site will offer a range of community benefits in addition to the economic benefits on offer. Wilkinsons Point is the home of the Derwent Entertainment Centre (the DEC) and the Glenorchy Art & Sculpture Park (GASPI). Both the DEC and GASPI form part of Glenorchy's strategic vision and have economic, social and cultural importance for the community.

Residents value MONA, GASPI, Derwent Entertainment Centre, as well as open spaces (Glenorchy Community Plan p.6)

The Cost Benefit Analysis undertaken by SGS found that the proposed Wilkinsons Point development would contribute a range of social benefits, the principal one of which is the sports and recreation benefits of the site. SGS estimates that the physical activity benefits of Wilkinsons Point would result in a ten percent reduction in physical activity, which would result in \$1.819 million in benefits to Greater Hobart (in 2019 dollars) (p 20).

Health and leisure benefits of the proposed Wilkinsons Point development are further discussed in the following sections of the report.

2.10.1 Arts and Culture

Glenorchy place as a significant amount of importance on arts. GASPI forms part of Glenorchy's strategic vision as a 'city of arts' and represents a significant part of Glenorchy's Community Plan. Amongst the priorities outlined in the *City of Glenorchy Community Plan 2015-2040* include:

Becoming the hub for arts and culture in Tasmania and forging a national and international reputation as a leading destination for arts tourism (p.7)

The City of Glenorchy have a suite of strategic documents which inform the future direction of Glenorchy many of which identify the DEC and GASPI as significant to the future of the city and the site.

While MONA has been attributed to a cultural shift within Greater Hobart academic research suggests that the same effect has not been felt as widely within the local areas adjacent to the MONA site. The Wilkinsons Point, as the home of GASPI hopes to offer a range of cultural activities which are distinct, but complimentary to those offered by MONA.

The importance of the arts to the economic and social fabric of our urban environments is well established.

Artists contribute most to the city's economic and social fabric by:

- *building community,*
- *bolstering neighbourhood identity,*
- *spurring innovation and economic development¹¹*

With the ongoing growth of MONA and the culture which has followed it, future iterations it is anticipated that arts and culture would play a greater role in any future and subsequent strategic planning in Tasmania.

¹¹ "Neighbourhood diversity, economic health, and the role of the arts" Foster, N. Grodach, C. Murdoch, J. Journal of Urban Affairs, 2016

2.10.2 Open Space and Recreation

The *Glenorchy Open Space Strategy 2015* provides a high-level strategy for open space within the municipality. It identifies the importance of open space to Glenorchy socially and economically. Open Space in Glenorchy can:

- contribute significantly to visitor experiences, both for tourism and visiting friends and family; and
- supports industries that generate billions of dollars in economic activity annually; these include sport, fitness, tourism and a range of infrastructure and landscape related businesses¹².

Glenorchy's foreshore reverses are identified as opportunities within the Open Space Strategy as places to *enjoy and connect with for a range of recreation, relaxation, social / family activities and community gatherings and events*.¹³

It is acknowledged that securing public access to the foreshore is important to the community and that development needs to be planned and controlled using designated nodes, but if properly managed the foreshore can *continue to provide both environmental, recreation and sustainable tourism and commercial opportunities that can benefit both residents and visitors*¹⁴.

At Wilkinson Point it has been identified that GASPI and the foreshore are important to the community and that the Open Space Strategy will be addressed through maintaining the GASPI infrastructure and continuing to provide public access along the foreshore of the site. The proposed private development of the site will also provide a number of recreational activities which can be enjoyed by the community.

2.11 HEALTHY PLACES AGENDA

2.11.1 Planning for Health

The Wilkinsons Point development can make a strong contribution to health and wellbeing, with proposals integrating a range of features to help create opportunities for people to lead active lifestyles that can contribute to better health outcomes. Proposals seek to increase opportunities for activity and healthy community lifestyles in an approach that is consistent with aspiration of the *Glenorchy Healthy Communities Plan (2014-2023)*, a key plan that guides Glenorchy Council

*"in its pursuit of: Improved health & wellbeing of the people of Glenorchy through increased awareness of, and participation in, physical and wellness activities"*¹⁵.

2.11.2 Healthy Active by Design

Wilkinsons Point, has the potential to be an area defined by opportunities for sport and recreation and provides a good opportunity to seek to integrate Healthy Active by Design features throughout elements of the scheme design including the master planning, architecture / building design, landscape architecture, public open space and movement networks.

The Heart Foundation have developed an initiative called Healthy Active by Design: *Healthy Active by Design is a practical guide to address the need to build health into the design of our built environment to support and promote healthy and active living*.¹⁶

¹² Leisure Planners *Glenorchy Open Space Strategy* p. 6

¹³ Leisure Planners *Glenorchy Open Space Strategy* p. 25

¹⁴ Leisure Planners *Glenorchy Open Space Strategy* p. 25

¹⁵ *Glenorchy Healthy Communities Plan (2014-2023)*, Glenorchy City Council

¹⁶ <https://www.heartfoundation.org.au/programs/healthy-active-by-design>

Healthy Active by Design provides design guidance and evidence for creating healthy neighbourhoods and places, using eight design features. The eight design features of *Healthy Active by Design* are presented in Figure 18, from the *Healthy Active by Design* website [healthyactivebydesign.com.au](http://www.healthyactivebydesign.com.au). The eight design features of *Healthy Active by Design* can be considered as a framework to assist the planning of a healthy, active development at Wilkinsons Point.

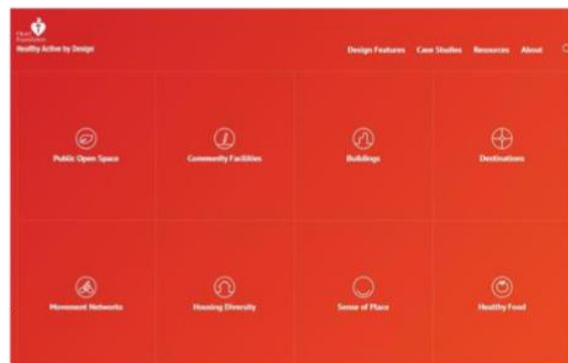


Figure 18: Eight Design Features of the Heart Foundation initiative *Healthy Active by Design* (source: <http://www.healthyactivebydesign.com/>)

2.11.3 Healthy Places Design Concepts

Features of the proposals that can contribute to health and wellbeing include the following points, as illustrated in Figure 19:

- **Play:** *opportunities to be active in sport and recreation*
- **Move:** *opportunities for active travel and public transport*
- **Watch:** *inspiration to be more active with the opportunity to watch top-level spectator sport (National Basketball League, NBL)*



Figure 19: Concept Diagram, illustrating integration of opportunities for activity for health including sport, active recreation and active travel.

2.11.4 PLAY: opportunities to be active in sport and recreation

The proposal includes a variety of opportunities for the community to participate in sport and active recreation, these opportunities include:

FORMAL SPORTS AND RECREATION ACTIVITY: *participation in team sports and events including:*

- **NBL indoor courts:** indoor basketball courts to designed to a high-performance level for use by NBL level teams for training and practice with the potential for community use and hire.

- **Indoor sports courts:** in addition to basketball other indoor sports will be accommodated for in a range of indoor courts and sports halls that can accommodate multiple indoor sports with inclusion of design details including different floor markings for different sport codes and a range of associated equipment (goals, posts nets etc.), including for example basketball, indoor soccer, badminton etc. Example of indoor sports courts with integration of facilities for multiple sports illustrated in Figure 20, Gold Coast Sports and Leisure Centre, Gold Coast, QLD.
- **Outdoor sports courts:** outdoor sports courts to be included as part of the detailed design proposals, including outdoor basketball court(s) and a basketball hoops and backboards for informal play.
- **Indoor skiing:** provision of an indoor ski facility as part of the sports precinct.
- **Gym:** inclusion of gym as part of the hotel complex in the northern precinct.
- **Rock climbing:** integration of a rock-climbing facility as part of the sports precinct.
- **Bowling:** opportunity for ten-pin bowling within retail precinct at on the southern boundary of the site, with frontage to the Brooker Highway.

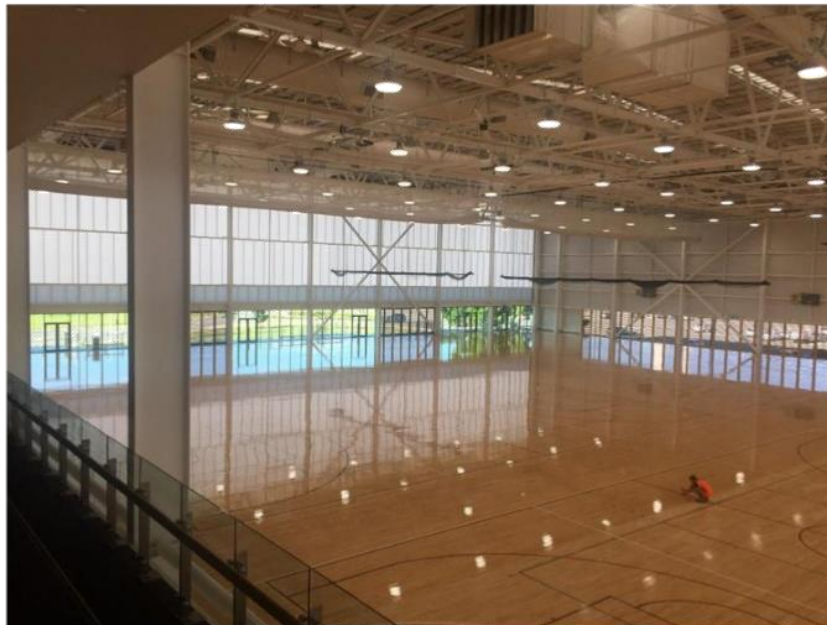


Figure 20: Multi-purpose indoor sports courts, Gold Coast Sports and Leisure Centre, Gold Coast, QLD.

INFORMAL ACTIVITY: *participation in informal recreation including:*

- **Walking:** the site design includes a network of footpaths that provide access for pedestrians through and across the whole site. The new footpaths provide connections to existing walking paths including those integrated into the GASP art foreshore trail. Footpaths allow pedestrians to move through the site through open spaces, linking different buildings, facilities and service areas (including public transport and car parking).

- **Cycling:** paths are provided through the open space on site to accommodate both pedestrians and bike riders. Paths will be designed to be of sufficient width to accommodate both pedestrians and people riding bikes.
- **Fitness trails:** opportunity to integrate fitness trails within the network of open space and paths. 'Trim-trails' provide outdoor exercise equipment for use by the general public, set within areas of public open space and linked by footpaths.
- **Play:** opportunity to integrate play facilities in the landscape design framework for the site. Play areas can be integrated into public spaces providing opportunities for children and young people to be active within the landscape setting for the site. Play facilities can also be integrated into walkways and concourse areas in public space, as illustrated in the example of play facilities in linear parks next to the new Western Sydney Stadium in Parramatta, NSW, see Figure 21.



Figure 21: Play facilities in linear parks next to the new Western Sydney Stadium in Parramatta, NSW (source: infrastructure.nsw.gov.au)

2.11.5 MOVE: opportunities for active travel and public transport

The proposals include a variety of opportunities for the activity in movement via active transport and public transport.

ACTIVE TRAVEL: can be defined as movement for travel (and recreation) that involves physical activity including walking and cycling.

- **Walking:** opportunities for walking throughout the site, with footpaths and leisure routes running through areas of landscape, public open spaces, adjacent to streets and vehicular carriageways.
- **Cycling:** opportunities for bike riding are integrated into the scheme proposals with paths of sufficient width to accommodate pedestrians and bike riders, cycle paths through the whole site and linking to existing networks. Provision for bike riding is also facilitated with end-of-trip facilities including:
 - Secure, sheltered bike parking at DA stage;
 - Lockers and changing facilities within sports buildings.
- **Links between existing and proposed footpaths and bike-paths:** Footpaths and bike paths will provide connections to and between proposed buildings and associated service areas (including public transport stops, parking for bikes and cars) throughout the proposed development. Footpaths and bike-paths also provide connections to existing infrastructure including:
 - GASP, foreshore trail route (see Figure 22);
 - Footpaths and associated pedestrian crossings, improving the pedestrian hierarchy within the site;
 - Opportunity to create stronger connections to the Intercity Cycleway, a key piece of infrastructure that provides a segregated cycle path along the route of the former railway line track, from the Northern Suburbs (including Glenorchy) to Hobart waterfront and city centre.



Figure 22: Existing foot/bike path infrastructure, GASP, foreshore route for walking and bike riding.

Public Transport: public transport services can provide opportunities for activity through linked trips, primarily people walking or cycling to and from public transport stops and one, or both ends of the public transport journey. The Heart Foundation's Healthy Active by Design website includes design guidance for Movement Networks including evidence supporting the provision of public transport and active travel to support active lifestyles:

"29% of public transport users achieve ≥ 30 minutes of daily physical activity solely by walking to and from public transport"¹⁷

Public transport opportunities within the site include:

- **Ferry:** passenger ferry services accessed via new ferry terminal at the northern end of the site, on the peninsular of *Wilkinsons Point*. The public ferry services have opportunity to integrate with a wider network of public ferry infrastructure in the Greater Hobart region, see Figure 11 for an illustration of potential ferry services and stops along the length of the River Derwent, with the opportunity to connect communities on both the Eastern and Western shores of the river. The success of the popular ferry service between MONA and Hobart City Centre has demonstrated the potential for ferry services linking between central Hobart and outlying areas such as Berriedale and Glenorchy. Opportunities exist to create ferry connections at a local level, between Wilkinsons Point and MONA, and within the context of Greater Hobart with onward services to Hobart City Centre.
- **Park and ride / bus services:** provision of Park and Ride bus services provide opportunities to reduce private car travel, address parking, congestion and enhance opportunities for active travel by providing bus services to supplement walking and cycling at one or both ends of the journey. Parking facilities for bikes and vehicles will allow people to park their bike or car safely and securely and walk to bus stops to catch bus services for onward journeys, to Hobart City Centre.



Figure 23: Existing jetty piers at Wilkinsons Point with access to ferry services.

2.11.6 WATCH: inspiration to be more active with the opportunity to watch top spectator sport

Sport has the power to inspire people, with elite sport offering a strong source of inspiration to the watching public. Spectators, drawn to watch their local and visiting teams, can take inspiration from seeing elite level sports men and women perform, in turn this may help to motivate

¹⁷ <http://healthyactivebydesign.com.au/design-features/movement-networks> Source: Besser LM, et al. (2005). Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations. American Journal of Preventive Medicine, 29(4): 273-280.

individuals to undertake activity of their own. Sport Australia published the National Sports Plan - Sport 2030, this document states:

“We know sport and recreation activities have the ability to bring people and communities together and provide opportunities for inclusion, as they have the ability to inspire and motivate individuals while also fostering community pride.”¹⁸

The proposals for Wilkinsons Point include opportunities for the public to watch top level sport in the form of National Basketball League (NBL), as illustrated in Figure 24.

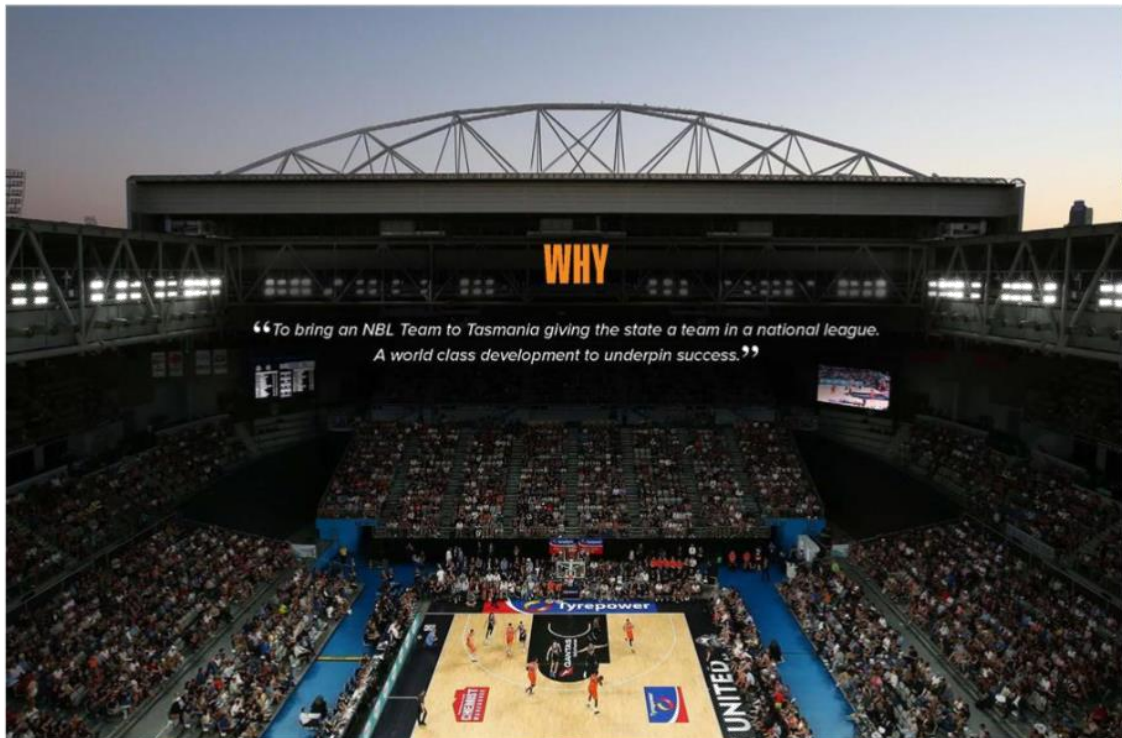


Figure 24: NBL spectator sport image (source: LK Group, proposals for Wilkinsons Point, including NBL)

2.11.7 Sports Precinct Typologies

Wilkinsons Point has the opportunity to accommodate a range of land uses including sports precinct and associated complimentary mixed uses. To help inform consideration of design principles and values for mixed use sports precincts a range of precedent studies are presented in Appendix C.

These studies present an overview of recent design proposals, some now partially constructed for sports precincts, including opportunities for integration with other mixed uses and transport connections. The precedent studies include:

- The Gabba Stadium Masterplan, Brisbane, QLD - proposed mixed use development

¹⁸ Sport 2030, Sport Australia, published 2018. ISBN: 978-1-76007-373-2, Online ISBN: 978-1-76007-374-9, Publications Number: 12186 Copyright © 2018 Commonwealth of Australia as represented by the Department of Health

- **Western Sydney Stadium, Parramatta, Western Sydney, NSW** - new sports stadium development integrated into an existing parkland setting
- **'The Link' Regeneration Scheme, Perth, WA** - a basketball arena as a focal point destination within the context of a wider strategy for proposed mixed use development.

2.11.8 Design Values and Transferrable Lessons

Study of the above listed precedent schemes has identified several design values with transferrable lessons of value to consider in the context of the proposed sports and mixed-use development at Wilkinsons Point. These design values and transferrable lessons include the following features from each:

- **The Gabba Stadium Masterplan** - Built form of larger scale and massing can be accommodated in a generous parkland setting and creates opportunities for new mixed-use buildings to be placed within landscape framework.

High quality public realm design for becomes important in the form of soft landscape (parks, reserves, including opportunity to integrate existing trees); and hard landscape (plazas, public squares, circulation areas around buildings including arena).

Large scale of public open spaces such as wide plazas and linear parks/routes are sufficient scale to accommodate many people.

The design includes direct line of sight from street to destination (arena), for legibility, orientation & placemaking.

- **Western Sydney Stadium** - Public transport and active travel connections are prominent and easily accessible. walking & cycling routes link stadium precinct to urban centre via other parks & spaces; and river ferry, rail and bus services within walking distance.

The *'watch and play'* stadium typology caters for spectators to watch top level sport; and opportunities to participate in sport provided in public space around the stadium, including play equipment & fitness areas and level grassed areas for informal sport & recreation, see Figure 25.

Like the GABBA, the design includes a variety of high-quality spaces that encompass soft and hard landscaping.

- **'The Link' Regeneration Scheme** - Here a larger scale building is accommodated in an urban context, in close proximity to the basketball arena. This creates opportunities for new mixed-use buildings to be placed within master plan framework next to arena.

Importance is placed on high quality public realm design for plazas, public squares, circulation areas around buildings including arena. Streetscape improvements have been made with the integration street trees.

Integration of transport options have been integrated with the sports arena and related mixed-use development opportunities.

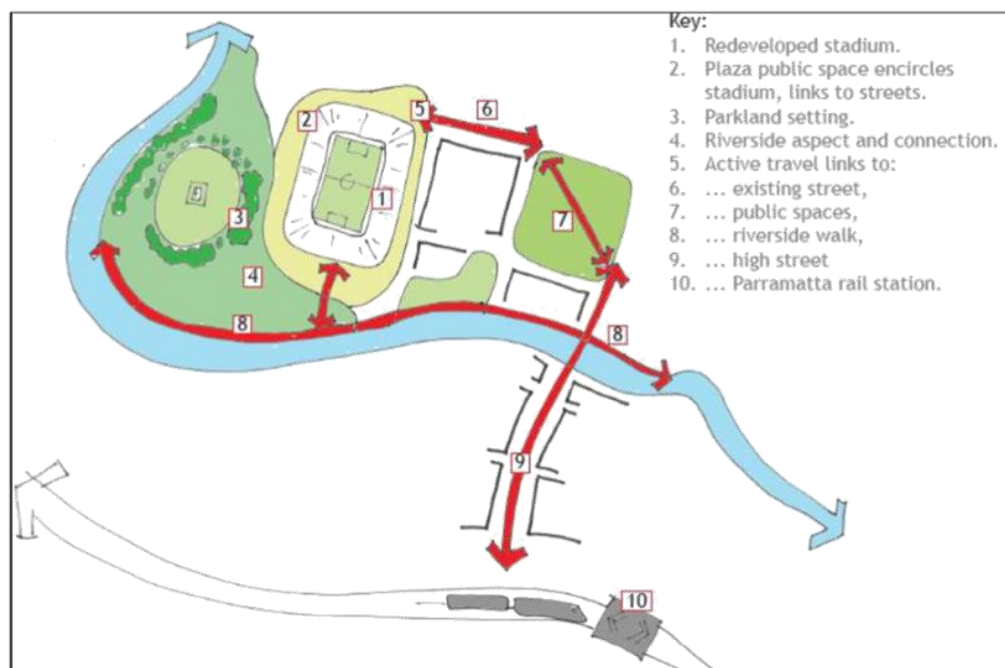


Figure 25: Diagram showing concepts of public realm and connections within the Western Sydney Stadium Masterplan (Source: Ireneinc)

2.12 MASTERPLAN DEVELOPMENT

The site at Wilkinsons Point provides the largescale landscape setting which can readily accommodate large scale buildings. As a result of the analysis of strategic and site opportunities, the master planning team (FKA, Oculus and Ireneinc) has developed a response to the site opportunities and values, from which the proposed masterplan has emerged. The masterplan is not embedded into the planning scheme amendment; however, the amendment has been designed to be responsive to the scale and nature of development which emerged from this exercise.

The Landscape Analysis undertaken by Oculus found that the relatively flat, 15-hectare site is characterised by a long estuarine frontage, with long views to the Derwent River and foothills. The site offers openness along with exposure to the prevailing winds and weather. The resultant building form response designed by FKA provided a series of buildings to accommodate the range of uses on the site, separated to reduce mass and increase landscaping opportunities, but also providing connectedness through indoor/outdoor spaces, protected walkways and outdoor spaces to encourage movement and circulation both within buildings and between, thus maintaining permeability and pedestrian comfort throughout the site.

The massing analysis responded to the commercial floor yields required for feasible viability for the proponent, limited by the economic analysis to ensure no negative impact ensued on surrounding retail areas, in a form which responds to the scale of the existing and proposed landscape and the scale of the space. The following massing diagrams, shown as sections through the site, demonstrate that the proposed scale of building is proportionate to the space and surrounding buildings. Whilst figures 25 - 27 show the building forms nestled comfortably within the landscape, figure 28 illustrates the larger form representing the proposed hotel and accommodation on the promontory, commanding a more prominent position securing the headland with a "hero" building which will function as a marker or reference point for the site.

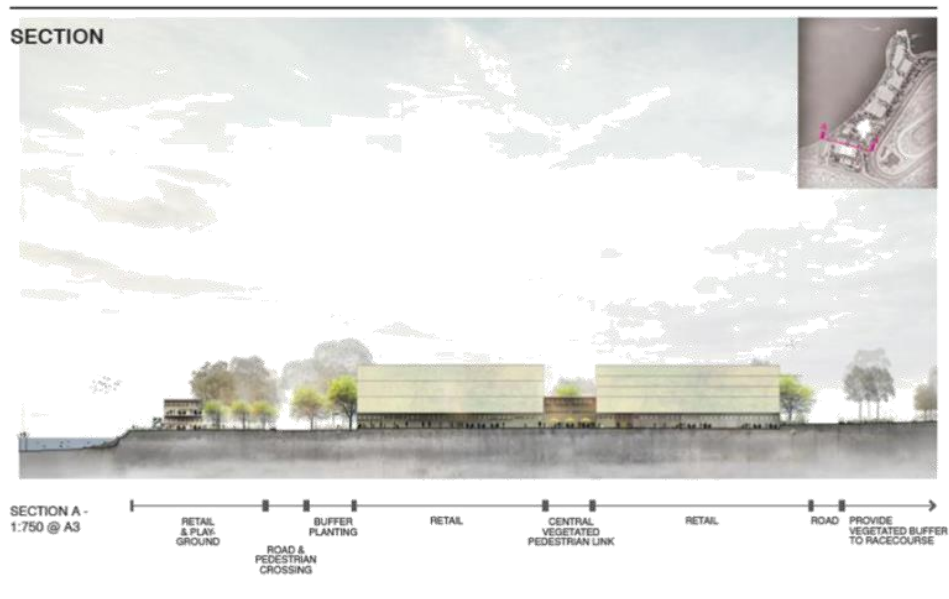


Figure 26 Massing model, sections (source Oculus)

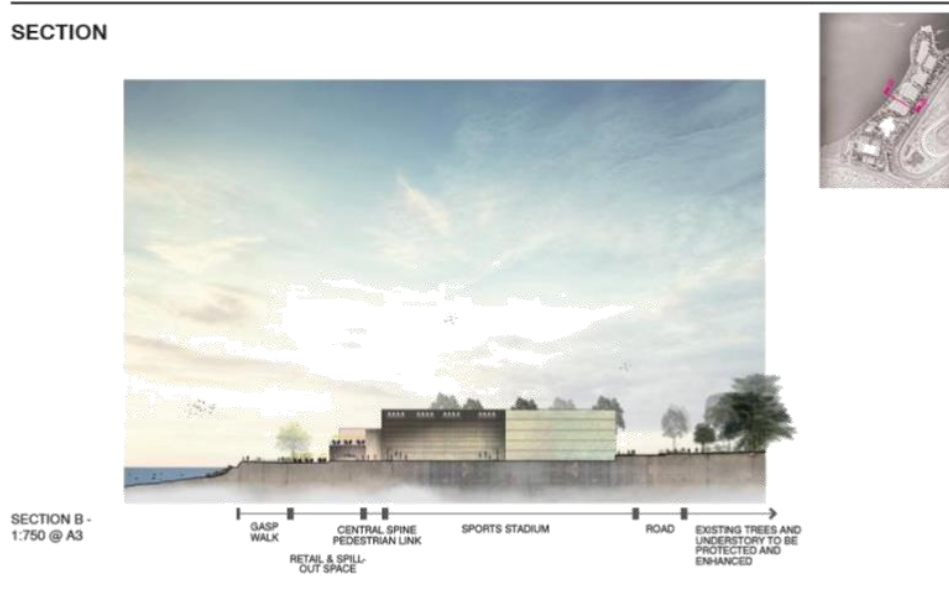


Figure 27 Massing model, sections (source Oculus)

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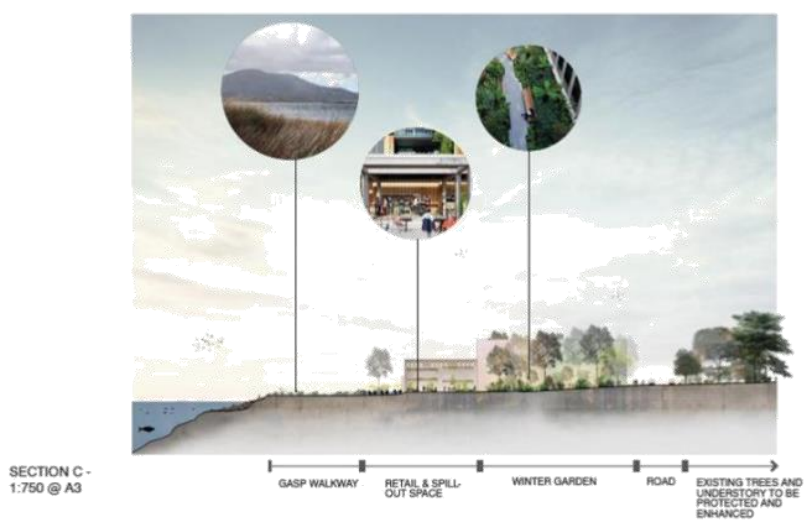


Figure 28 Massing model, sections (source Oculus)

SECTION



Figure 29 Massing model, sections (source Oculus)

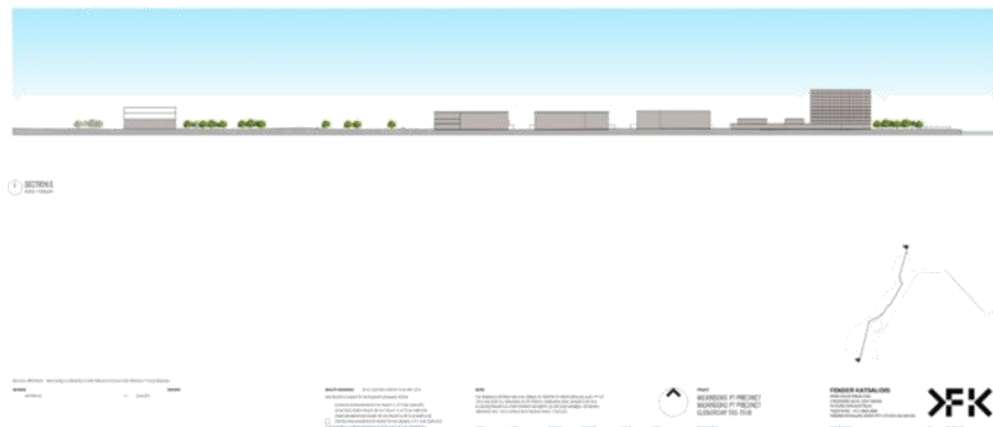


Figure 30 Long section of proposed massing model, viewing west (source FKA)

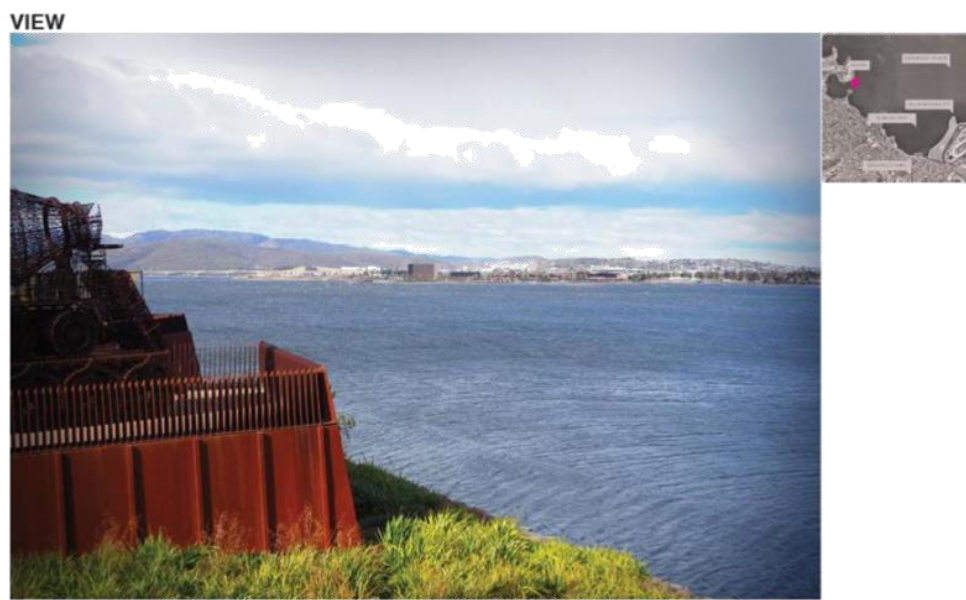


Figure 31 Photomontage of massing model, viewing east (source Oculus)



Figure 32 Proposed site masterplan (source Oculus/ FKA)



Figure 33 Indicative render of landscaping buffer transition to proposed precinct A3 (source: FKA)



Figure 34 Indicative render of sporting facilities (right) and cafes (left) (source: FKA)

3. STATUTORY PLANNING ANALYSIS

3.1 RELEVANT SPECIFIC AREA PLANS

The recommendations for the proposed changes to the SAP have been based on other key decisions by the TPC for SAPs that use similar mechanisms as those proposed. The current Specific Area Plans that were referenced in the drafting of this revision were the;

- Devonport Regional Homemaker Centre Specific Area Plan (*Devonport Interim Planning Scheme 2013*)
- Launceston Plaza Retail Specific Area Plan (*Launceston Interim Planning Scheme 2015*)
- Hobart Showground Specific Area Plan (*Glenorchy Interim Planning Scheme 2015*)

Each of these specific area plans demonstrate the use of provisions or elements that can be used to effectively regulate the staging of development and the type of development permitted on the site.

3.2 GLENORCHY INTERIM PLANNING SCHEME 2015

The amendment is subject to the *Glenorchy Interim Planning Scheme 2015* (GIPS 2015). The relevant provisions of the Scheme are assessed in the following section. Comments have been included with respect to the State Planning Provisions, however there is still some uncertainty as to the Local Planning Provisions that will be included when the State-wide Planning Scheme is declared.

3.3 ZONING

Wilkinsons Point is within the Community Purpose zone and Open Space zone with development to be located within both zones. Surrounding land includes development in the General Residential, Local Business, Utilities, Open Space, Recreation and Environmental Management Zone.



Figure 35: Zoning (source: The List)

3.4 USE

A Comparative Use Table has been included in Appendix B which demonstrates the existing and future uses of the site, including the status (permitted, discretionary, prohibited) for GIPS 2015.

As can be seen in the Table, the majority of uses as defined in the Scheme are either discretionary with the qualification of “*only if for occasional sporting, social and cultural events*” or the use is otherwise prohibited.

As discussed in relation to the planning reforms, the proposed changes to use status are consistent with those that would have been possible under the previous planning scheme.

3.4.1 Use Categories

Use of the jetties on the site could be incorporated in to the proposed ‘park and ride’. This could allow for a linkage with the MONA ferry services, using the return trips for commuters to the city. There is scope with the development and any future commuter ferry services that the jetties will serve as an important community transportation function. There is potential for additional private and commercial services, and in addition, the provision of a variety of vessels. While the use of existing and future jetties may well be seen as ancillary to other use and development, there is potential that defining the associated use will become challenging, and this may constrain flexibility for future expansion of transportation options to the site.

Issues with the defined use classes of the Scheme could be resolved with further definition appropriate to the future plan for Wilkinsons Point, however this may not provide sufficient discretion at a later stage when unanticipated activities are proposed. Where uses are proposed

that are integrated with the sporting and hotel activities there is required a greater scope for discretion in the Use Table, which would prevent potential prohibition where definitions of uses are insufficient.

3.5 COMMUNITY PURPOSE ZONE

The area being assessed for an amendment is primarily located within the Community Purpose Zone. While the Zone Purpose and uses somewhat align with the proposed Wilkinsons Point Masterplan the continued zoning of the land as Community Purpose is considered not to reflect the future private ownership of the site and proposed commercial uses on the site.

3.5.1 Zone Purpose

17.1.1.1 To provide for key community facilities and services where those facilities and services are not appropriate for inclusion as an associated activity within another zone.

17.1.1.2 To ensure land required for future public use is protected from inappropriate use or development.

17.1.1.3 To encourage multi-purpose, flexible and adaptable social infrastructure to respond to changing and emerging community

The size and location of the site are a unique opportunity for the provision of facilities and services that would otherwise not be possible to deliver to the Glenorchy area. The site lends itself to larger scale development, with a focus on delivering a hub for the community that can be linked with attractions and services in the area to create better pedestrian engagement and activate an otherwise underused site.

While the Wilkinsons Point Masterplan proposes a range of facilities which will be for the use of the public they will be under private ownership and do not best fit the Community Purpose Zone.

3.5.2 Desired Future Character Statement

The SPPs do not include Desired Future Character Statements, but there is uncertainty as to whether Local Planning Provisions will include Local Area Objectives that are likewise contrary to the Zone Purpose.

3.5.3 Use Standards

17.3.1 Hours of Operation

Objective: *To ensure that hours of operation near a residential zone do not result in unreasonable adverse impact on residential amenity.*

Acceptable Solution	Performance Criteria
A1 <i>Hours of operation of a use within 50 m of a residential zone must be within:</i> <i>(a) 8.00 am to 8.00 pm Mondays to Fridays inclusive;</i> <i>(b) 9.00 am to 6.00 pm Saturdays;</i> <i>(c) 10.00 am to 5.00 pm Sundays and Public Holidays;</i> <i>except for office and administrative tasks</i>	P1 <i>Hours of operation of a use within 50 m of a residential zone must not have an unreasonable impact upon the residential amenity of land in a residential zone through commercial vehicle movements, noise or other emissions that are unreasonable in their timing, duration or extent.</i>

Hours of operation were not deemed to be required for the SAP given the distances from a residential zone and the proposed uses on the site.

17.3.2 Noise

Objective: To ensure that noise emissions near a residential zone do not result in unreasonable adverse impact on residential amenity.	
Acceptable Solution	Performance Criteria
A1 Noise emissions measured at the boundary of a residential zone must not exceed the following: (a) 55dB(A) (LAeq) between the hours of 7.00 am to 7.00 pm; (b) 5dB(A) above the background (LA90) level or 40dB(A) (LAeq), whichever is the lower, between the hours of 7.00 pm to 7.00 am; (c) 65dB(A) (L_{Amax}) at any time. Measurement of noise levels must be in accordance with the methods in the Tasmanian Noise Measurement Procedures Manual, issued by the Director of Environmental Management, including adjustment of noise levels for tonality and impulsiveness. Noise levels are to be averaged over a 15 minute time interval.	P1 Noise emissions measured at the boundary of a residential zone must not cause or be likely to cause environmental harm within the residential zone.
A2 External amplified loudspeakers or music must not be used within 50 m of a residential zone, except if a school system used for school announcements.	P2 Noise emissions measured at the boundary of a residential zone must not cause environmental harm within the residential zone.

Controls for prevention of noise are dealt with through noise regulations, and the SPP no longer include standards related to noise. This clause is not considered required to be controlled separately through the SAP.

17.3.3 External Lighting

Objective: To ensure that external lighting does not have unreasonable impact on residential amenity on land within a residential zone.	
Acceptable Solution	Performance Criteria
A1 External lighting, other than flood lighting of sport and recreation facilities, within 50 m of a residential zone must comply with all of the following: (a) be turned off between 9:00 pm and 6:00 am, except for security lighting; (b) security lighting must be baffled to ensure they do not cause emission of light outside the zone.	P1 External lighting, other than flood lighting of sport and recreation facilities, within 50 m of a residential zone must not adversely affect the amenity of adjoining residential areas, having regard to all of the following: (a) level of illumination and duration of lighting; (b) distance to habitable rooms in an adjacent dwelling.
A2 Flood lighting of sport and recreation facilities within 200 m of a residential zone must not subject nearby residential lots to obtrusive light, as defined in AS 4282-1997-1.4.7.	P2 Flood lighting of sport and recreation facilities within 200 m of a residential zone must satisfy all of the following: (a) be necessary for sport or recreational use;

	(b) not operate after 9.00 pm unless spill light does not unreasonably impact residential amenity of nearby land.
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The provisions for lighting in the SPP clause 27.3.1 are generally consistent with those above and is not required to be controlled separately through the SAP.

17.3.4 Commercial Vehicle Movements

Objective: To ensure that commercial vehicle movements not have unreasonable impact on residential amenity on land within a residential zone.	
Acceptable Solution	Performance Criteria
A1 Commercial vehicle movements, (including loading and unloading and garbage removal) to or from a site within 50 m of a residential zone must be within the hours of: (a) 7.00 am to 6.00 pm Mondays to Fridays inclusive; (b) 9.00 am to 5 pm Saturdays; (c) 10.00 am to 12 noon Sundays and Public Holidays.	P1 Commercial vehicle movements, (including loading and unloading and garbage removal) to or from a site within 50 m of a residential zone must not result in unreasonable adverse impact upon residential amenity having regard to all of the following: (a) the time and duration of commercial vehicle movements; (b) the number and frequency of commercial vehicle movements; (c) the size of commercial vehicles involved; (d) the ability of the site to accommodate commercial vehicle turning movements, including the amount of reversing (including associated warning noise); (e) noise reducing structures between vehicle movement areas and dwellings; (f) the level of traffic on the road; (g) the potential for conflicts with other traffic.

The provisions for commercial vehicle movements in the SPP clause 27.3.1 are generally consistent with those above. In addition, the SPP includes further use standards for commercial vehicle movements within 50m of a Residential Zone. A negligible portion of the site under the SAP is within 50m of a residential area.

17.3.5 Discretionary Use

Objective: To avoid the commercialisation and privatisation of public land intended for community use.	
Acceptable Solution	Performance Criteria
A1 No Acceptable Solution	P1 Discretionary use must complement and enhance the use of the land for community purposes by providing for facilities and services that augment and support Permitted use or No Permit Required use.

The SPP does not include provisions related to discretionary use and it is not considered necessary to include in the Wilkinsons Point SAP.

3.5.4 Development Standards

17.4.1 Building Height

Objective: To ensure that building height contributes positively to the streetscape and does not result in unreasonable impact on residential amenity of land in a residential zone.

Acceptable Solution	Performance Criteria
A1 Building height must be no more than: 10 m.	P1 Building height must satisfy all of the following: (a) be consistent with any Desired Future Character Statements provided for the area; (b) be compatible with the scale of nearby buildings; (c) not unreasonably overshadow adjacent public space; (d) provide for a transition in height between adjoining buildings; (e) be no more than 12 m.
A2 Building height within 10 m of a residential zone must be no more than 8.5 m.	P2 Building height within 10 m of a residential zone must be compatible with the building height of existing buildings on adjoining lots in the residential zone.

This provision is generally consistent with clause 27.4.1 of the SPP.

17.4.2 Setback

Objective: To ensure that building setback contributes positively to the streetscape and does not result in unreasonable impact on the amenity of adjoining land.

Acceptable Solution	Performance Criteria
A1 Building setback from frontage must be no less than: (a) 5m; or (b) the alignment of adjoining buildings; whichever is the lesser.	P1 Building setback from frontage must satisfy all of the following: (a) be consistent with any Desired Future Character Statements provided for the area; (b) be compatible with the setback of adjoining buildings, generally maintaining a continuous building line if evident in the streetscape; (c) enhance the characteristics of the site, adjoining lots and the streetscape; (d) provide for small variations in building alignment only where appropriate to break up long building facades, provided that no potential concealment or entrapment opportunity is created; (e) provide for large variations in building alignment only where appropriate to provide for a forecourt for space for public use, such as outdoor dining or landscaping, provided that no potential concealment or entrapment opportunity is created and the forecourt is afforded very good passive surveillance.

A2 Building setback from a residential zone must be no less than: (a) 3 m; (b) half the height of the wall, whichever is the greater.	P2 Building setback from a residential zone must be sufficient to prevent unreasonable adverse impacts on residential amenity by: (a) overshadowing and reduction of sunlight to habitable rooms and private open space on adjoining lots to less than 3 hours between 9.00 am and 5.00 pm on June 21 or further decrease sunlight hours if already less than 3 hours; (b) overlooking and loss of privacy; (c) visual impact when viewed from adjoining lots, taking into account aspect and slope.
A3 Building setback for buildings for sensitive use (including residential use and visitor accommodation) must comply with all of the following: (a) be sufficient to provide a separation distance from land zoned Rural Resource no less than 100 m; (b) be sufficient to provide a separation distance from land zoned Significant Agriculture no less than 200 m.	P3 Building setback for buildings for sensitive use must be sufficient to prevent potential for land use conflict that would fetter resource development use of adjoining land.

This provision is generally consistent with clause 27.4.2 of the SPP.

17.4.3 Design

Objective: To ensure that building design contributes positively to the streetscape, the amenity and safety of the public and adjoining land in a residential zone.

Acceptable Solution	Performance Criteria
A1 Building design must comply with all of the following: (a) provide the main pedestrian entrance to the building so that it is clearly visible from the road or publicly accessible areas on the site; (b) for new building or alterations to an existing facade provide windows and door openings at ground floor level in the front facade no less than 40% of the surface area of the ground floor level facade; (c) for new building or alterations to an existing facade ensure any single expanse of blank wall in the ground level front facade and facades facing other public spaces is not greater than 50% of the length of the facade; (d) screen mechanical plant and miscellaneous equipment such as heat pumps, air conditioning units, switchboards, hot water units or similar from view from the street and other public spaces;	P1 Building design must enhance the streetscape by satisfying all of the following: (a) provide the main access to the building in a way that addresses the street or other public space boundary; (b) provide windows in the front facade in a way that enhances the streetscape and provides for passive surveillance of public spaces; (c) treat large expanses of blank wall in the front facade and facing other public space boundaries with architectural detail or public art so as to contribute positively to the streetscape and public space; (d) ensure the visual impact of mechanical plant and miscellaneous equipment, such as heat pumps, air conditioning units, switchboards, hot water units or similar, is insignificant when viewed from the street; (e) ensure roof-top service infrastructure, including service plants and lift structures, is

(e) incorporate roof-top service infrastructure, including service plants and lift structures, within the design of the roof; (f) provide awnings over the public footpath if existing on the site or on adjoining lots; (g) not include security shutters over windows or doors with a frontage to a street or public place.	screened so as to have insignificant visual impact; (f) not provide awnings over the public footpath only if there is no benefit to the streetscape or pedestrian amenity or if not possible due to physical constraints; (g) only provide shutters where essential for the security of the premises and other alternatives for ensuring security are not feasible; (h) be consistent with any Desired Future Character Statements provided for the area.
A2 Walls of a building facing a residential zone must be coloured using colours with a light reflectance value not greater than 40 percent.	P2 No Performance Criteria.

The SPP does not include provisions related to building design and it is considered desirable to include provisions for design in the Wilkinsons Point SAP.

This will cultivate and ensure the intention for the site to be “buildings among parkland” is maintained with future development. The site is also a prominent feature in the landscape, design requirements will ensure that visual amenity is protected as well as key view corridors.

17.4.4 Passive Surveillance

Objective: To ensure that building design provides for the safety of the public.	
Acceptable Solution	Performance Criteria
A1 Buildings design must comply with all of the following: (a) provide the main pedestrian entrance to the building so that it is clearly visible from the road or publicly accessible areas on the site; (b) for new buildings or alterations to an existing facade provide windows and door openings at ground floor level in the front facade which amount to no less than 40 % of the surface area of the ground floor level facade; (c) for new buildings or alterations to an existing facade provide windows and door openings at ground floor level in the facade of any wall which faces a public space or a car park which amount to no less than 30% of the surface area of the ground floor level facade; (d) avoid creating entrapment spaces around the building site, such as concealed alcoves near public spaces; (e) provide external lighting to illuminate car parking areas and pathways; (f) provide well-lit public access at the ground floor level from any external car park.	P1 Buildings design must provide for passive surveillance of public spaces by satisfying all of the following: (a) provide the main entrance or entrances to a building so that they are clearly visible from nearby buildings and public spaces; (b) locate windows to adequately overlook the street and adjoining public spaces; (c) incorporate shop front windows and doors for ground floor shops and offices, so that pedestrians can see into the building and vice versa; (d) locate external lighting to illuminate any entrapment spaces around the building site; (e) provide external lighting to illuminate car parking areas and pathways; (f) design and locate public access to provide high visibility for users and provide clear sight lines between the entrance and adjacent properties and public spaces; (g) provide for sight lines to other buildings and public spaces.

The SPP does not include provisions related to passive surveillance in the Community Purpose zone, in some respects the inclusion of a design standard would be considered beneficial for the SAP. This would encourage active frontages within the precinct and interactions between the open space and development promoting a high level of amenity for all users. Design has been worked into several of the performance criteria for the SAP to ensure positive design outcomes.

17.4.5 Landscaping

Objective: To ensure that a safe and attractive landscaping treatment enhances the appearance of the site and if relevant provides a visual break from land in a residential zone.

Acceptable Solution	Performance Criteria
A1 <i>Landscaping must be provided along the frontage of a site (except where access is provided) unless the building has nil setback to frontage.</i>	P1 <i>Landscaping must be provided to satisfy all of the following:</i> <i>(a) enhance the appearance of the development;</i> <i>(b) provide a range of plant height and forms to create diversity, interest and amenity;</i> <i>(c) not create concealed entrapment spaces;</i> <i>(d) be consistent with any Desired Future Character Statements provided for the area.</i>
A2 <i>Along a boundary with a residential zone landscaping must be provided for a depth no less than:</i> 2 m.	P1 <i>Along a boundary with a residential zone landscaping or a building design solution must be provided to avoid unreasonable adverse impact on the visual amenity of adjoining land in a residential zone, having regard to the characteristics of the site and the characteristics of the adjoining residentially-zoned land.</i>

Landscaping will be an important component of the Wilkinsons Point site and contributes to the visitor experience. There is currently negligible landscaping on the site. Landscaping has been included in several of the standards for the SAP.

The landscaping will not only add protection to the users of the site from the elements, it will also encourage use of the site and promotion of an active lifestyle community. Landscaping provisions are seen as essential for the logical translation between the public owned open space land and the adjacent privately-owned development. Thoughtful landscaping will provide a sense of cohesion to the site and assist in create a sense of place.

The SPP do not include provisions relating to landscaping for the Community Purpose zone.

17.4. 6 Outdoor Storage Areas

Objective: To ensure that outdoor storage areas for non-residential use do not detract from the appearance of the site or the locality.

Acceptable Solution	Performance Criteria
A1 <i>Outdoor storage areas for non-residential uses must comply with all of the following:</i> <i>(a) be located behind the building line;</i>	P1 <i>Outdoor storage areas for non-residential uses must satisfy all of the following:</i>

(b) all goods and materials stored must be screened from public view;	(a) be located, treated or screened to avoid unreasonable adverse impact on the visual amenity of the locality;
(c) not encroach upon car parking areas, driveways or landscaped areas.	(b) not encroach upon car parking areas, driveways or landscaped areas.

The provision in the SPP clause 27.4.4 is generally in accordance with the provision for outdoor storage areas and this provision is not considered necessary for inclusion in the SAP.

17.4. 6 Fencing

<i>Objective: To ensure that fencing does not detract from the appearance of the site or the locality and provides for passive surveillance.</i>	
Acceptable Solution	Performance Criteria
A1 Fencing must comply with all of the following: (a) fences, walls and gates of greater height than 1.5 m must not be erected within 4.5 m of the frontage; (b) fences along a frontage must be at least 50% transparent above a height of 1.2 m; (c) height of fences along a common boundary with land in a residential zone must be no more than 2.1 m and must not contain barbed wire.	P1 Fencing must contribute positively to the streetscape and not have an unreasonable adverse impact upon the amenity of land in a residential zone which lies opposite or shares a common boundary with a site, having regard to all of the following: (a) the height of the fence; (b) the degree of transparency of the fence; (c) the location and extent of the fence; (d) the design of the fence; (e) the fence materials and construction; (f) the nature of the use; (g) the characteristics of the site, the streetscape and the locality, including fences; (h) any Desired Future Character Statements provided for the area.

Given the proposed nature of the site this provision is not considered necessary for inclusion in the SAP.

3.5.5 Subdivision Standards

17.5.1 Subdivision

<i>Objective: To limit subdivision to maintain integrated tourism use and development.</i>	
Acceptable Solution	Performance Criteria
A1 Subdivision is for the purpose of providing lots for public open space, a riparian or littoral reserve or utilities.	P1 Subdivision is for the purpose of providing a lot for an allowable use.
A2 The frontage for each lot must be no less than 15 m.	P2 The frontage of each lot must be capable of adequately serving the intended purpose.
A3 No Acceptable Solution.	P3 The arrangement of ways and public open space within a subdivision must satisfy all of the following:

	(a) connections with any adjoining ways are provided through the provision of ways to the common boundary, as appropriate; (b) connections with any neighbouring land with subdivision potential is provided through the provision of ways to the common boundary, as appropriate; (c) connections with the neighbourhood road network are provided through the provision of ways to those roads, as appropriate; (d) convenient access to local shops, community facilities, public open space and public transport routes is provided; (e) new ways are designed so that adequate passive surveillance will be provided from development on neighbouring land and public roads as appropriate; (f) provides for a legible movement network; (g) the route of new ways has regard to any pedestrian & cycle way or public open space plan adopted by the Planning Authority; (h) Public Open Space must be provided as land or cash in lieu, in accordance with the relevant Council policy. (i) new ways or extensions to existing ways must be designed to minimise opportunities for entrapment or other criminal behaviour including, but not limited to, having regard to the following: (i) the width of the way; (ii) the length of the way; (iii) landscaping within the way; (iv) lighting; (v) provision of opportunities for 'loitering'; (vi) the shape of the way (avoiding bends, corners or other opportunities for concealment).
A4 Services capable of adequately serving the intended purpose must be connected to each lot.	P4 Where reticulated services are unavailable but needed for the intended purpose, the lots must be capable of: (a) being self sufficient for potable water adequate for the intended purpose; (b) accommodating an wastewater management system adequate for the intended purpose; (c) accommodating an on-site stormwater management system adequate for the intended purpose, as the case may be.

Subdivision provisions are not proposed to be within the SAP for this zone, instead relying on the zone standards.

The SPP includes a number of further provisions related to subdivision associated with access and service connections. It is considered unlikely that further standards would be necessary for subdivision of the land, however Council's discretion in this regard would be appropriate.

3.6 ALTERNATIVE ZONING

It is considered that a Specific Area Plan (SAP) is the appropriate mechanism to manage various aspects related to land use planning for the subject land, as opposed to a PPZ. This then requires a review of the underlying zoning for the SAP and the necessity of retaining the *Community Purpose Zone* when this portion of the site will no longer continue to be public/community land, and as such this zone would no longer be appropriate as the prevailing mechanism for the land.

The rezoning of the Community Purpose zoned land to the Recreation Zone has been considered.

A review of the Zone Purpose Statements for the relevant zones suggest that the Recreation Zone could be a more appropriate zone. Especially when comparing the following statements:

17.1.1.1 To provide for key community facilities and services where those facilities and services are not appropriate for inclusion as an associated activity within another zone.

17.1.1.2 To ensure land required for future public use is protected from inappropriate use or development.

17.1.1.3 To encourage multi-purpose, flexible and adaptable social infrastructure to respond to changing and emerging community needs.

Versus:

18.1.1.1 To provide for a range of active and organised recreational use or development and complementary uses that do not impact adversely on the recreational use of the land.

18.1.1.2 To encourage open space networks that are linked through the provision of walking and cycle trails.

The recreational focus of the subject land is a scale that is of regional benefit and extends beyond what would be considered as community facilities. The purpose of the site is not centred around social infrastructure. The site would be more closely aligned with the purpose statements of the Recreation zone.

The new SAP is focused on encouraging both indoor and outdoor recreation activities. There are also accommodation, retail and food services uses to support the recreational uses on the site, and to ensure the viability and longevity of the site. The non-recreational uses on the site will be complementary to the recreational focus of the site. The site will also encourage open space networks through the preservation and maintenance of the GASP walkway and foreshore public open space. The site will also be extensively landscaped, to evoke the feel of being in open space between the buildings on the site. There is also provision for the establishment of a bicycle rental business, to encourage use of the intercity cycleway and the extension of the Gasp and Montrose Bay Foreshore cycleway right through to MONA. For these reasons, the vision for the future of the site are considered to align more accurately with the Recreation zone.

The purpose statements for both zones have similarities between the GIPS and the SPP.

3.7 OPEN SPACE ZONE

3.7.1 Zone Purpose

17.1.1.1 To provide for key community facilities and services where those facilities and services are not appropriate for inclusion as an associated activity within another zone.

17.1.1.2 To ensure land required for future public use is protected from inappropriate use or development.

17.1.1.3 To encourage multi-purpose, flexible and adaptable social infrastructure to respond to changing and emerging community

The size and location of the site are a unique opportunity for the provision of facilities and services that would otherwise not be possible to deliver to the Glenorchy area. The site lends itself to larger scale development, with a focus on delivering a hub for the community that can be linked with attractions and services in the area to create better pedestrian engagement and activate an otherwise underused site.

GASPI will retain the lease of the foreshore open space and boardwalk area, ensuring that the public infrastructure is adequately protected and preserved as space for the public to enjoy passive recreation activities.

In addition, an 'inner buffer' has been allocated as part of the Masterplan which is reserved for landscaping. This is reflected in the SAP precinct plan as precincts 'D' and 'E'. It is proposed that the boundary of the Open Space Zone is adjusted in line with these precincts which will protect these areas of the SAP from unsuitable development.

3.7.2 Desired Future Character Statement

The SPPs do not include DFCS, but there is uncertainty as to whether Local Planning Provisions will include Local Area Objectives that are likewise contrary to the Zone Purpose.

3.7.3 Use Standards

19.3.1 Hours of Operation

Objective: To ensure that hours of operation near a residential zone do not result in unreasonable adverse impact on residential amenity.	
Acceptable Solution	Performance Criteria
A1 Hours of operation of a use within 50 m of a residential zone must be within: (a) 8.00 am to 8.00 pm Mondays to Fridays inclusive; (b) 9.00 am to 6.00 pm Saturdays; (c) 10.00 am to 5.00 pm Sundays and Public Holidays; except for office and administrative tasks	P1 Hours of operation of a use within 50 m of a residential zone must not have an unreasonable impact upon the residential amenity of land in a residential zone through commercial vehicle movements, noise or other emissions that are unreasonable in their timing, duration or extent.

This provision is generally consistent with clause 29.3.1 of the SPP and this provision is not considered necessary for inclusion in the SAP.

19.3.2 Noise

Objective: To ensure that noise emissions near a residential zone do not result in unreasonable adverse impact on residential amenity.	
Acceptable Solution	Performance Criteria
A1 Noise emissions measured at the boundary of a residential zone must not exceed the following: (a) 55dB(A) (LAeq) between the hours of 7.00 am to 7.00 pm;	P1 Noise emissions measured at the boundary of a residential zone must not cause or be likely to cause environmental harm within the residential zone.

(b) 5dB(A) above the background (LA90) level or 40dB(A) (LAeq), whichever is the lower, between the hours of 7.00 pm to 7.00 am; (c) 65dB(A) (LAmax) at any time. Measurement of noise levels must be in accordance with the methods in the Tasmanian Noise Measurement Procedures Manual, issued by the Director of Environmental Management, including adjustment of noise levels for tonality and impulsiveness. Noise levels are to be averaged over a 15 minute time interval.	
A2 External amplified loud speakers or music must not be used within 50 m of a residential zone.	P2 Noise emissions measured at the boundary of a residential zone must not cause environmental harm within the residential zone.

Controls for prevention of noise are dealt with through noise regulations, and the SPP no longer include standards related to noise. It is recommended that at the introduction of the State-wide Planning Scheme, any clause related to noise is removed from the Wilkinsons Point SAP.

19.3.3 External Lighting

Objective: To ensure that external lighting does not have unreasonable impact on residential amenity on land within a residential zone.	
Acceptable Solution	Performance Criteria
A1 External lighting within 50 m of a residential zone must comply with all of the following: (a) be turned off between 6:00 pm and 8:00 am, except for security lighting; (b) security lighting must be baffled to ensure they do not cause emission of light outside the zone.	P1 External lighting, other than flood lighting of sport and recreation facilities, within 50 m of a residential zone must not adversely affect the amenity of adjoining residential areas, having regard to all of the following: (a) level of illumination and duration of lighting; (b) distance to habitable rooms in an adjacent dwelling.

The provisions for lighting in the SPP clause 27.3.1 are generally consistent with those above and this provision is not considered necessary for inclusion in the SAP.

19.3.4 Commercial Vehicle Movements

Objective: To ensure that commercial vehicle movements not have unreasonable impact on residential amenity on land within a residential zone.	
Acceptable Solution	Performance Criteria
A1 Commercial vehicle movements, (including loading and unloading and garbage removal) to or from a site within 50 m of a residential zone must be within the hours of: (a) 7.00 am to 5.00 pm Mondays to Fridays inclusive; (b) 9.00 am to 12 noon Saturdays; (c) Nil Sundays and Public Holidays.	P1 Commercial vehicle movements, (including loading and unloading and garbage removal) to or from a site within 50 m of a residential zone must not result in unreasonable adverse impact upon residential amenity having regard to all of the following: (a) the time and duration of commercial vehicle movements;

	(b) the number and frequency of commercial vehicle movements; (c) the size of commercial vehicles involved; (d) the ability of the site to accommodate commercial vehicle turning movements, including the amount of reversing (including associated warning noise); (e) noise reducing structures between vehicle movement areas and dwellings; (f) the level of traffic on the road; (g) the potential for conflicts with other traffic.
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The provisions for commercial vehicle movements are not present in the SPP and this provision is not considered necessary for inclusion in the SAP given the intended nature of the site.

17.3.5 Discretionary Use

Objective: To ensure land within the zone is used primarily for purposes consistent with Zone Purpose	
Acceptable Solution	Performance Criteria
A1 No Acceptable Solution	P1 Discretionary use must complement and enhance the use of the land for community purposes by providing for facilities and services that augment and support Permitted use or No Permit Required use.

The SPP does not include provisions related to discretionary use and this provision is not considered necessary for inclusion in the SAP. Standards have been proposed however, that will protect the Activity Centre Hierarchy and ensure appropriate levels of development on the site.

3.7.4 Development Standards

In the SPP the Development Standards generally include more restrictive Acceptable Solutions than those discussed below.

The following are the Development Standards of the Open Space Zone that would apply to future development of Wilkinsons Point.

19.4.1 Building Height

Objective: To ensure that building height contributes positively to the streetscape and does not result in unreasonable impact on residential amenity of land in a residential zone.	
Acceptable Solution	Performance Criteria
A1 Building height must be no more than: 6.5 m.	P1 Building height must satisfy all of the following: (a) be consistent with any Desired Future Character Statements provided for the area; (b) be compatible with the scale of nearby buildings; (c) not unreasonably overshadow adjacent public space.

The provision for building height, clause 29.4.1, in the SPP is more generous than the current standard, being an Acceptable Solution of 10m. It is considered important to protect the amenity

and landscaped parkland feel of the foreshore by the inclusion of a height limit that is consistent with the current SAP, being 5m.

19.4.2 Setback

<i>Objective: To ensure that building setback contributes positively to the streetscape and does not result in unreasonable impact on residential amenity of land in a residential zone.</i>	
Acceptable Solution	Performance Criteria
A1 <i>Building setback from frontage must be no less than:</i> 5 m.	P1 <i>Building setback from frontage must satisfy all of the following:</i> (a) be consistent with any Desired Future Character Statements provided for the area; (b) enhance the characteristics of the site, adjoining lots and the streetscape.
A2 <i>Building setback from a residential zone must be no less than:</i> (a) 3 m; (b) half the height of the wall, whichever is the greater.	P2 <i>Building setback from a residential zone must be sufficient to prevent unreasonable adverse impacts on residential amenity by:</i> (a) overshadowing and reduction of sunlight to habitable rooms and private open space on adjoining lots to less than 3 hours between 9.00 am and 5.00 pm on June 21 or further decrease sunlight hours if already less than 3 hours; (b) overlooking and loss of privacy; (c) visual impact when viewed from adjoining lots, taking into account aspect and slope.

The provision in the SPP clause 29.4.1 is generally in accordance with this provision.

19.4.3 Landscaping

<i>Objective: To ensure that a safe and attractive landscaping treatment enhances the appearance of the site and if relevant provides a visual break from land in a residential zone.</i>	
Acceptable Solution	Performance Criteria
A1 <i>Landscaping along the frontage of a site must be provided to a depth of no less than 2 m</i>	P1 <i>Landscaping must be provided to satisfy all of the following:</i> (a) enhance the appearance of the development; (b) provide a range of plant height and forms to create diversity, interest and amenity; (c) not create concealed entrapment spaces; (d) be consistent with any Desired Future Character Statements provided for the area.
A2 <i>Along a boundary with a residential zone landscaping must be provided for a depth no less than 2 m.</i>	P2 <i>Along a boundary with a residential zone landscaping or a building design solution must be provided to avoid unreasonable adverse impact on the visual amenity of adjoining land in a residential zone, having regard to the characteristics of the site and the</i>

	<i>characteristics of the adjoining residentially-zoned land.</i>
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Landscaping will be an important component of the Wilkinsons Point site and contributes to the visitor experience. There is currently negligible landscaping on the site. Landscaping has been included in several of the standards for the SAP.

This is considered necessary due to the staging of the development on the site. This will ensure that the plan area is designed and maintained at a high level of urban design, a feature which was identified in the Glenorchy Strategic Plan as being critically lacking in most large-scale development in the LGA. This will ensure that the parkland feel of the area is not compromised, and that the areas of public open space are not detracted from. Landscaping provisions have been removed from the SPP for this zone, however due to the size and nature of the subject site, it is considered important to maintain the requirement for landscaping on the site.

17.4. 6 Fencing

<i>Objective: To ensure that fencing does not detract from the appearance of the site or the locality and provides for passive surveillance.</i>	
Acceptable Solution	Performance Criteria
A1 <i>Fencing must comply with all of the following:</i> <i>(a) fences, walls and gates of greater height than 1.5 m must not be erected within 4.5 m of the frontage;</i> <i>(b) fences along a frontage must be at least 50% transparent above a height of 1.2 m;</i> <i>(c) height of fences along a common boundary with land in a residential zone must be no more than 2.1 m and must not contain barbed wire.</i>	P1 <i>Fencing must contribute positively to the streetscape and not have an unreasonable adverse impact upon the amenity of land in a residential zone which lies opposite or shares a common boundary with a site, having regard to all of the following:</i> <i>(a) the height of the fence;</i> <i>(b) the degree of transparency of the fence;</i> <i>(c) the location and extent of the fence;</i> <i>(d) the design of the fence;</i> <i>(e) the fence materials and construction;</i> <i>(f) the nature of the use;</i> <i>(g) the characteristics of the site, the streetscape and the locality, including fences;</i> <i>(h) any Desired Future Character Statements provided for the area.</i>

A fencing clause was not considered necessary for this zoning in the specific area due to the nature of the allowable uses and the ownership of the land by Council. The SPP has removed any requirements for fencing from this zone.

3.7.5 Subdivision Standards

19.5.1 Subdivision

<i>Objective: To provide for lots appropriate to accommodate development consistent with the Zone Purpose and any relevant Local Area Objectives or Desired Future Character Statements.</i>	
Acceptable Solution	Performance Criteria
A1 <i>Subdivision is for the purpose of providing lots for public open space, a riparian or littoral reserve or utilities.</i>	P1 <i>Subdivision is for the purpose of providing a lot for an allowable use.</i>

A2 The frontage for each lot must be no less than 15 m.	P2 The frontage of each lot must be capable of adequately serving the intended purpose.
A3 No Acceptable Solution.	P3 The arrangement of ways and public open space within a subdivision must satisfy all of the following: (a) connections with any adjoining ways are provided through the provision of ways to the common boundary, as appropriate; (b) connections with any neighbouring land with subdivision potential is provided through the provision of ways to the common boundary, as appropriate; (c) connections with the neighbourhood road network are provided through the provision of ways to those roads, as appropriate; (d) convenient access to local shops, community facilities, public open space and public transport routes is provided; (e) new ways are designed so that adequate passive surveillance will be provided from development on neighbouring land and public roads as appropriate; (f) provides for a legible movement network; (g) the route of new ways has regard to any pedestrian & cycle way or public open space plan adopted by the Planning Authority; (h) Public Open Space must be provided as land or cash in lieu, in accordance with the relevant Council policy. (i) new ways or extensions to existing ways must be designed to minimise opportunities for entrapment or other criminal behaviour including, but not limited to, having regard to the following: (i) the width of the way; (ii) the length of the way; (iii) landscaping within the way; (iv) lighting; (v) provision of opportunities for 'loitering'; (vi) the shape of the way (avoiding bends, corners or other opportunities for concealment)
A4 Services capable of adequately serving the intended purpose must be connected to each lot.	P4 Where reticulated services are unavailable but needed for the intended purpose, the lots must be capable of: (a) being self sufficient for potable water adequate for the intended purpose;

	(b) accommodating an wastewater management system adequate for the intended purpose; (c) accommodating an on-site stormwater management system adequate for the intended purpose, as the case may be.
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The subdivision standards for the land within Open Space Zone are considered to be adequate and subdivision standards have not been included in the proposed SAP.

3.7.6 Purpose of Specific Area Plan

F2.1 (a) To develop the Wilkinsons Point and Elwick Bay area as an iconic waterfront location with quality environments and structures that complement each other, integrate well into the surroundings and contribute towards a richly vibrant waterfront precinct - a place that is engaging, contemporary and culturally relevant.

F2.1 (b) To take advantage of the value of the site within the larger landscape setting.

F2.1 (c) To consider a mix of appropriate uses and development that would create the opportunity for feasible investment and partnership arrangements in the redevelopment of the area.

F2.1 (d) To build on the foundation provided by the DEC and GASP! as significant community facilities.

F2.1 (e) To support the selection of development sites and building forms that respond to the physical setting and use of the area.

F2.1 (f) To recognise the area as a major gateway opportunity to Glenorchy and Hobart.

F2.1 (g) To protect the natural values of the foreshore and bay.

F2.1 (h) To encourage all land to remain in the freehold ownership of the Glenorchy City Council.

F2.1 (i) To provide comfortable and continuous foreshore open space, including the development of shared trails, along the entire length of foreshore through the study area.

F2.1 (j) To support and where possible, extend the recreational values of the foreshore and community facilities.

F2.1 (k) To promote public health and well-being through the provision of significant amounts of open space and the promotion of linkages within the area and to the broader City.

F2.1 (l) To provide for future use and development of open space and facilities within the realistic resources of the Council and community to manage, maintain and upgrade.

F2.1 (m) To improve access, parking, pedestrian and cycling infrastructure to cater for future use of the area.

F2.1 (n) To improve linkages to the surrounding facilities, suburbs and the Glenorchy CBD.

The size and location of the site are a unique opportunity for the provision of facilities and services that would otherwise not be possible to deliver to the Glenorchy area. The site lends itself to larger scale development, with a focus on delivering a hub for the community that can be linked with attractions and services in the area to create better pedestrian engagement and activate an otherwise underused site.

Areas of the foreshore open space and boardwalk would remain in Council ownership, ensuring that public land is adequately protected and preserved as space for the community to enjoy passive recreation activities.

The Wilkinsons Point precinct plan would directly encourage multi-purpose and multi-use development. It would allow the site to be developed in such a way that benefits the community and provides services and opportunities that are not currently afforded in the area.

3.7.7 Application of the Specific Area Plan

F2.2 (a) This specific area plan applies to an area of land designated as "F02" on the planning scheme maps.

F2.2 (b) The provisions of this specific area plan override the following provisions of the planning scheme:

- (i) *Community Purpose Zone:*
 - a. *clause 17.2 Use Table;*
 - b. *clause 17.3 Use Standards;*
 - c. *clause 17.4 Development Standards for Buildings and Works;*
 - d. *clause 17.5 Development Standards for Subdivision;*
- (ii) *Open Space Zone:*
 - a. *clause 19.2 Use Table;*
 - b. *clause 19.3 Use Standards;*
 - c. *clause 19.4 Development Standards for Buildings and Works;*
 - d. *clause 19.5 Development Standards for Subdivision.*

The SPPs do not include DFCS, but there is uncertainty as to whether Local Planning Provisions will include Local Area Objectives that are likewise contrary to the Zone Purpose.

3.7.8 Definitions

DEC: means Derwent Entertainment Centre.

GASPI: means Glenorchy Art and Sculpture Park.

Social enterprise: means an organisation the primary objective of which is to create public or community benefit from the sale of goods or services.

There have been additional definitions proposed for the SAP for clarity. The definitions proposed, if not already identified elsewhere in the Scheme, have been developed from the common understanding of the word.

3.7.9 Precincts

F2.4 Operation of Precincts:

(a) The specific area plan is divided into precincts in respect of which the primary controls for the use and development of land are set out.

(b) The Precincts are:

- (i) *Montrose Foreshore Community Park Precinct;*
- (ii) *Elwick Bay Foreshore Public Open Space Precinct;*

- (iii) *Brooker Highway Frontage Precinct;*
- (iv) *Derwent Entertainment Centre Precinct; and*
- (v) *Wilkinsons Point Visitor Service Precinct.*

(c) *The extent of each precinct is shown in Figure F2.1 Wilkinsons Point Precinct Map and in Figure F2.2 Elwick Bay Precinct Map.*

The existing SAP precinct were mapped to align to the proposed 2012 masterplan. Due to the changes proposed between the 2012 masterplan and the current masterplan, it is proposed that the *Brooker Highway Frontage Precinct; Derwent Entertainment Centre Precinct; Wilkinsons Point Visitor Service Precinct* be deleted from the existing and precinct boundary of the *Elwick Bay Foreshore Public Open Space Precinct* be adjusted to remove the land within the proposed new SAP.

The proposed SAP will include precinct which are adjusted to fit the proposed development of the site. The Visitor Service Precinct, instead of having five sub-precincts: A, B, C1, C2 and C3 each with different requirements, has been separated in to three sub-precincts for clarity (A1, A2 and A3). There has also been the inclusion of a precinct that is intended to act as a landscaping buffer between the council owned land and the commercial area.

3.7.10 Montrose Foreshore Community Park Precinct

This precinct is proposed to be retained within the existing SAP.

3.7.11 Elwick Bay Precinct

This precinct is proposed to be retained within the existing SAP.

3.7.12 Brooker Highway Frontage Precinct

3.7.13 Local Area Objectives

Local Area Objectives	Implementation Strategy
<i>Brooker Highway Frontage Precinct</i>	
<i>To recognise the Precinct's role as part of an open landscape setting of Elwick Bay with the potential to create a strong visitor entry facility and services to the City while supporting the role and function of the DEC and GASPI.</i>	<i>The provisions of this specific area plan relevant to this precinct.</i>

Given the scope and scale of development proposed to be located within this precinct of the specific area it was considered appropriate to include further local area objectives to encourage the cultivation of the 'parkland' vision of the site and to support retail opportunity that does not adversely impact upon Glenorchy's activity centres.

3.7.14 Desired Future Character Statements

The SPP no longer include DFCS and they were therefore not considered necessary for inclusion in the SAP.

3.7.15 Use Table

Use Class	Qualification
<i>NO PERMIT REQUIRED</i>	

<i>Natural and Cultural Values Management</i>	
<i>Passive Recreation</i>	
<i>Utilities</i>	<i>Only if minor utilities</i>
PERMITTED	
<i>Nil</i>	<i>Nil</i>
DISCRETIONARY	
<i>Community meeting and entertainment</i>	
<i>Food services</i>	
<i>Tourist operation</i>	
<i>Utilities</i>	<i>Except where no permit required</i>
PROHIBITED	
<i>All other uses</i>	

The Use Class Table for the precinct is fairly consistent with that proposed in the revised SAP. There has been the addition of several permitted uses with qualifications for the precinct. Given the existing SAP DFCS include the precinct being envisioned for retail, food and beverage service, tourist information, and other similar uses, it was considered acceptable that there be the inclusion of permitted uses for the precinct. As part of the new masterplan, this precinct is to contain sporting themed retail and 'big-box' type development, as well as uses that support this such as food services. This is generally consistent with the existing DFCS of this precinct, with almost all the proposed uses being supported within the statements. Therefore, the introduction of some permitted uses, with strict qualifications, was considered reasonable. The remaining uses were kept at the discretion of Council, with qualifications to ensure that inappropriate uses such as a supermarket or school could not be proposed in the precinct.

3.7.16 Use Standards

F2.7.4 There are no use standards for this precinct.

Given the nature of the masterplan and proposed development on the site, it was not considered appropriate to have zero use class standards.

The site is designed to be a place of activity, leisure, and sport, with the concept of "watch, stay, play and exit through the gift shop" being the foundation principle for the site. The staging of retail and food services has been incorporated via use class standards limiting the gross floor area of these uses, over the time period recommended in the SGS report that will result in no impact upon the Glenorchy Activity Centres. The *Launceston Plaza Retail Specific Area Plan* also has a staging provision to restrict the gross floor area increase over specific time periods (Clause F9.4.1 A1). Given the recent acceptance of the revised *Hobart Showground Specific Area Plan* by GCC and the TPC, which was calculated to have impact upon surrounding activity centres of -\$16 million in the first year of trading, the staging of gross floor area for Wilkinsons Point in order to achieve a net \$0 impact on surrounding activity centres is considered to be the best approach for the municipality. This will ensure there is minimal impact upon surrounding activity centres and protect the viability of the Glenorchy CBD as well as Wilkinsons Point.

The gross floor area staging is proposed to be:

Use Class Category	Cumulative Gross Floor Area (m ²) maximum per period	
	Years 2024	Years 2029
Big Box Sports Retail	2,700	5,820
Specialty Sports Retail	1,392	3,000
Take-away premises	1,000	2,658
Other Food & Beverage Services	3480	6,975

To ensure the viability of the uses on the site, a use standard has also been provided for the minimum size of each tenancy, with performance criteria provided for council's discretion. This will also ensure the limitation on impacts of surrounding activity centres, as discussed in the Economics section of this report. Tenancy size requirements has been used in other SAP's to similar effect. The *Devonport Regional Homemaker Centre* Sap is an example where standards have been provided to require a minimum floor area per tenancy (Clause F1.7.5 A1 and A2).

As previously discussed, the specific area is proposed to be a sporting and activity hub for Glenorchy, as such a use standard is recommended to require a 'general retail and hire' use to meet the definition of a 'sports retail' use in order to comply with the acceptable solution, with Council having remaining discretion to approve other retail uses. Within the SAP, sports retail has been defined as:

Means a business that provides the sale or hire of; sports equipment and accessories (such as balls, gym equipment, shoes, supplements and protective gear), outdoor supplies (such as tents, fishing or camping gear), sporting or fitness apparel, or similar sports-related souvenirs or items.

Either the Use Table or use standards were considered methods for the control of the type of retail on the site. It was considered imperative to restrict the retail type, given the potential for the site to impact other activity centres should it not be properly managed. The current SAP uses the Use Table for precincts to very specifically control the type of uses within the specific area. As an example, in the current SAP General Retail and Hire use in one of the precincts is confined to;

Only if a recreational hire outlet providing recreational equipment to the users of the park and foreshore areas

In a different precinct of the existing SAP, the same use has the specific qualification of;

Only if a commercial art gallery

Furthermore, the recently approved Hobart Showground SAP utilises the Use Table to heavily restrict the potential uses on the site; General Retail and Hire use is only permitted on the site with the qualification:

If for:

- (a) *a clearance sales outlet which must not be in operation more than 60 days, whether consecutive or not consecutive, in any one year; or*
- (b) *a market.*

In the interest of not being overly prescriptive or discriminating against other potential uses, it is proposed that a use standard would be appropriate for this specific area, rather than an overly specific qualification in the Use Table. Therefore, the proposed qualification is;

Only if a shop;

With the acceptable solution in the use standards requiring it to be sports retail, and other qualifications being at the discretion of Council.

3.7.17 Development Standards

F2.7.5.1 Building Design

Objective: To ensure that building design contributes positively to the parkland setting and the amenity and safety of the public.

Acceptable Solution	Performance Criteria
A1 No acceptable solution.	P1 Buildings must satisfy all of the following: (a) be freestanding and designed in the round; (b) address and be accessible from both the Brooker Highway frontage and the DEC carpark; (c) provide protection from the elements around the building curtilage; (d) incorporate roof-top service infrastructure, including service plants and lift structures, within the design of the building.

This clause is fairly consistent with that proposed in the revised SAP. Standards have been provided for building design that are generally consistent with the SPP standards, these are considered to be adequate for the nature of the development in this precinct. F2.7.5.2 Building Height

Objective: To ensure that building height contributes positively to the scale of the setting and maintains the visual dominance of the DEC.

Acceptable Solution	Performance Criteria
A1 Building height must be all of the following: (a) not less than two storeys; (b) within the range of 7.2m to 10m.	P1 Building height must satisfy all of the following: (a) be consistent with any Desired Future Character Statements provided for the area; (b) be compatible with the scale of the setting; (c) not unreasonably overshadow adjacent public space; (d) allow for a transition in height to the DEC; (e) may contain an architectural element of greater height provided that such element contributes positively to the building and the parkland setting.

This clause is generally consistent with that proposed in the revised SAP, with the height for sub-precinct B2 to remain 10m. The proposed for sub-precinct B1 is 20m. this will allow for the SAP to align with the masterplan developed for the site, while creating a stepping of building mass to reduce visual impacts from the frontage.

F2.7.5.3 Setback from Frontage

Objective: To reinforce the role of the space as parkland where buildings are treated in the round while reinforcing its appearance as part of a landscaped highway frontage rather than a street edge.	
Acceptable Solution	Performance Criteria
A1 Buildings set back from a frontage must be not less than 10m.	P1 Buildings must be set back sufficiently from the Brooker Highway so that: (a) public pedestrian and bicycle access past the site is not inhibited; and (b) the development of a landscaped space between the building edge and the Highway is enabled.

The amendment does not propose a change to the Acceptable solution, however some adjustment to the performance criteria to be more consistent with the site has been suggested.

F2.7.5.4 Passive Surveillance

Objective: To ensure buildings are designed and sited to minimise opportunities for crime and anti-social behaviour.	
Acceptable Solution	Performance Criteria
A1 No acceptable solution.	P1 Buildings must satisfy all of the following: (a) be designed and sited to provide natural surveillance of pedestrian routes and car parks; (b) be free of concealment and entrapment spots; (c) be lit to a level that is adequate to ensure a reasonable level of security; (d) have access and egress points that are clearly visible from the public domain; (e) be constructed of materials that are hardy or easily replaceable and resistant to vandalism.

The SPP does not include provisions related to passive surveillance in the Community Purpose zone, in some respects the inclusion of a design standard would be considered beneficial for the SAP. This would encourage active frontages within the precinct and interactions between the open space and development promoting a high level of amenity for all users. Building design requirements have been worked into several of the performance criteria for the SAP to ensure positive design outcomes.

F 2.7.5.5 Access to State road

Objective: To restrict development of new accesses to the Brooker Highway to protect the safety and efficiency of the State road network.	
Acceptable Solution	Performance Criteria
A1 Access or egress must only be by way of existing access points to the Brooker Highway.	P1 A second access from the Brooker Highway adjacent to the existing easternmost exit must not to be created without the prior approval of the State road authority.

The masterplan does not include any variation to the current arrangement to access or egress points that service the site. The performance criteria for this clause is proposed to be altered slightly for the revised SAP. The proposed performance criteria require Sate Growth approval for any new or amended access/egress point.

F 2.7.5.6 Parking Location

Objective: To ensure parking required to serve a building is provided within the existing DEC carpark to prevent further erosion of the Precinct's landscaped character.

Acceptable Solution	Performance Criteria
A1 Parking must be provided only within the existing DEC car parking area.	P1 No performance criteria.

This provision is no longer relevant or appropriate for the site given the new masterplan and outlay of development. It is recommended to remove this standard and to introduce a parking standard in addition to the requirements of the parking code.

F 2.7.5.7 Landscaping

Objective: To ensure publicly accessible spaces between buildings are landscaped to a high standard and integrate with other public open spaces.

Acceptable Solution	Performance Criteria
A1 No acceptable solution.	P1 A landscaping plan, prepared by a suitably qualified landscape architect must demonstrate to the satisfaction of the planning authority that publicly accessible spaces between and around buildings are landscaped to a high standard and integrate with other public open spaces, with a shared palette of urban detail such as paving materials, street furniture and lighting throughout the Precinct.

Landscaping will be an important component of the Wilkinsons Point site and contributes to the visitor experience. There is currently negligible landscaping on the site. Landscaping has been included in several of the standards for the SAP.

The landscaping will not only add protection to the users of the site from the elements, it will also encourage use of the site and promotion of an active lifestyle community. Landscaping provisions are seen as essential for the logical translation between the public owned open space land and the adjacent privately-owned development. Thoughtful landscaping will provide a sense of cohesion to the site and assist in create a sense of place.

The SPP do not include provisions relating to landscaping for the Community Purpose zone.

3.7.18 Development Standards for Subdivision

F2.7.6.1 Subdivision

Objective: To ensure that subdivision is suitable for the intended use and development and to restrict the carrying out of subdivision within the Precinct to the Council or a public authority.

Acceptable Solution	Performance Criteria
A1 Subdivision must be by or for the Council or a public authority.	P1 No performance criteria.

A2 No acceptable solution.	P2 Each lot must have sufficient area, suitable proportions, adequate services and sufficient frontage to a road or access by right of way to satisfy its intended use or development.
A3 Where a subdivision creates a road, the minimum reservation width must be 20m.	P3 No performance criteria.

This clause is generally consistent with that in the SPP and therefore not considered necessary for inclusion in the SAP.

3.7.19 Derwent Entertainment Precinct

3.7.20 Local Area Objectives

Local Area Objectives	Implementation Strategy
Derwent Entertainment Centre Precinct	
To enhance the role and function of the DEC as a major entertainment, events and conference facility for the City, region and State.	The provisions of this specific area plan relevant to this precinct.

The proposed LAO retain the current object, given the scope and scale of development proposed to be located within the specific area it was considered appropriate to include further local area objectives to encourage the cultivation of the 'parkland' vision of the site and to support development opportunity that does not adversely impact upon Glenorchy's activity centres.

3.7.21 Desired Future Character Statements

The SPP no longer include DFCS and they were therefore not considered necessary for inclusion in the SAP.

3.7.22 Use Table

Use Class	Qualification
NO PERMIT REQUIRED	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
PERMITTED	
Community meeting and entertainment	Only if at the DEC or associated with a function centre (e.g. food and wine pavilion) or for occasional sporting, social and cultural events
Food services	Only if at the DEC or associated with a function centre (e.g. food and wine pavilion) or for occasional sporting, social and cultural events
Sports and recreation	Only if at the DEC or associated with a function centre (e.g. food and wine pavilion)
DISCRETIONARY	

Community meeting and entertainment	Except where permitted
Food services	Except where permitted
Sports and recreation	Except where permitted
Tourist operation	
Utilities	Except where no permit required
PROHIBITED	
All other uses	

The Use Class Table for the precinct is generally consistent with that proposed in the revised SAP. There has been the adaption of some qualifications for the precinct. The change includes the introduction of general retail and hire, only if it is for a market, and resource development, only if a kitchen or community garden. Additionally, tourist operation has become a prohibited use due to being better suited to a location elsewhere on the site. This has been in attempt to limit development that would impact upon the DEC, so as to protect the visual contribution of the DEC to the site and surrounds.

3.7.23 Use Standards

F2.8.4.1 Relationship with DEC

Objective: To ensure that any use in the Precinct supports the operation of the DEC as a major events, entertainment and conferencing venue.

Acceptable Solution	Performance Criteria
A1 No acceptable solution.	P1 All uses must support the operation of the DEC as a regional events, entertainment and conference venue.

The restriction of the development to be solely for the support of the DEC is no longer appropriate for the site given it will be under private ownership.

The SPP provides for use standards which relate to commercial vehicle operation, lighting etc. It was not considered appropriate to include these use standards in the revised SAP due to the vision for development on the site.

3.7.24 Development Standards

F2.8.5.1 Building Design

Objective: To ensure that building design contributes positively to the parkland setting and the amenity and safety of the public.

Acceptable Solution	Performance Criteria
A1 No acceptable solution.	P1 Buildings must satisfy all of the following: (a) be freestanding and designed in the round; (b) must not read as an extension to the DEC; (c) provide protection from the elements around the building curtilage; (d) incorporate roof-top service infrastructure, including service plants and lift structures, within the design of the building.

This clause is fairly consistent with that proposed in the revised SAP. Standards have been provided for building design that are generally consistent with the SPP standards, these are considered to be adequate for the nature of the development in this precinct.

F2.8.5.2 Building Height

Objective: To ensure buildings are of low profile in keeping with the Wilkinsons Point landform and the visual dominance of the DEC.	
Acceptable Solution	Performance Criteria
A1 Building height must not be more than 8m.	P1 Building height must not be more than 8 metres, except for an architectural element which may be of greater height provided that such element: (a) contributes positively to the architectural quality of the building; (b) does not clash visually with the Wilkinsons Point landform; (c) does not obstruct views from the main entry level of the DEC, and (d) does not compromise the visual dominance of the DEC.

This clause is generally consistent with that proposed in the revised SAP, with the acceptable solution revised to a 5m, the performance criteria is proposed to differ in order to align with the proposed master plan. The new acceptable solution would require any variation in height to be at the discretion of Council, having regard to the plan purpose, the pattern of surrounding development and the possibility of unreasonable impacts on the DEC.

F2.8.5.3 Passive Surveillance

Objective: To ensure buildings are designed and sited to minimise opportunities for crime and anti-social behaviour.	
Acceptable Solution	Performance Criteria
A1 No acceptable solution.	P1 Buildings must satisfy all of the following: (a) be designed and sited to provide natural surveillance of pedestrian routes and car parks; (b) be free of concealment and entrapment spots; (c) be lit to a level that is adequate to ensure a reasonable level of security; (d) have access and egress points that are clearly visible from the public domain; (e) be constructed of materials that are hardy or easily replaceable and resistant to vandalism.

The SPP does not include provisions related to passive surveillance in the Community Purpose zone, in some respects the inclusion of a design standard would be considered beneficial for the SAP. This would encourage active frontages within the precinct and interactions between the open space and development promoting a high level of amenity for all users. Design has been worked into several of the performance criteria for the SAP to ensure positive design outcomes.

F2.8.5.4 Landscaping

Objective: To ensure publicly accessible spaces between buildings are landscaped to a high standard and integrate with other public open spaces.	
Acceptable Solution	Performance Criteria
A1 No acceptable solution.	P1

The current SAP has no acceptable solution and does not provide any performance criteria. This is not considered adequate as the current clause implies that any landscaping would satisfy the performance criteria, no matter what is proposed.

Landscaping has been included in the design standards for buildings to ensure that both hard and soft landscaping is provided. This is to maintain the intended 'parkland' vision for the site.

3.7.25 Development Standards for Subdivision

F2.8.6.1 Subdivision

Objective: To ensure that subdivision is suitable for the intended use and development and to restrict the carrying out of subdivision within the Precinct to the Council or a public authority.	
Acceptable Solution	Performance Criteria
A1 Subdivision must be by or for the Council or a public authority.	P1 No performance criteria.
A2 No acceptable solution.	P2 Each lot must have sufficient area, suitable proportions, adequate services and sufficient frontage to a road or access by right of way to satisfy its intended use or development.
A3 Where a subdivision creates a road, the minimum reservation width must be 20m.	P3 No performance criteria.

The subdivision standards within the zone are considered adequate for the specific area and unnecessary for inclusion in the SAP. The standards are generally consistent with the requirements under clause 27.5.1 of the SPP.

3.7.26 Table F2.1 Building height in the Wilkinsons Point Visitor Service Precinct

Sub-precinct	Location of control	Minimum building height of predominant building elements	Minimum wall height	Maximum building height
A	N/A	6m	4.5m	Two storeys or 1 storey plus mezzanine to a maximum height of 7.2m.
B	Less than 3.5m from a frontage:	6m	4.5m	Two storeys or 1 storey plus mezzanine to a maximum height of 7.2m.
	Between 3.5m and 15m of a frontage:	8.4m	7.2m	9m
	More than 15m from a frontage:	14m	12.8m	17.5 m

C1	N/A	6m	4.5m	Two storeys or 1 storey plus mezzanine to a maximum height of 7.2m.
C2	N/A	10m	N/A	12.5m
C3	N/A	14m	N/A	20m

3.7.27 Wilkinsons Point Visitor Service Precinct

3.7.28 Local Area Objectives

Local Area Objectives	Implementation Strategy
F2.9.1 Wilkinsons Point Visitor Service Precinct	
To create a vibrant public open space with provision for future development opportunities that will allow Wilkinsons Point to become a major waterfront destination, attracting visitors and residents	The provisions of this specific area plan relevant to this precinct.

The current objective is no longer appropriate for this precinct given it centres around the precinct being for public open space. the development proposed to be located within the newly defined visitors precinct is specific area it was considered appropriate to include further local area objectives to encourage the cultivation of the 'parkland' vision of the site and to support development opportunity that does not adversely impact upon Glenorchy's activity centres.

3.7.29 Desired Future Character Statements

The SPP no longer include DFCS and they were therefore not considered necessary for inclusion in the SAP.

3.7.30 Use Table

Use Class	Qualification
NO PERMIT REQUIRED	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	Only if minor utilities
PERMITTED	
Nil	Nil
DISCRETIONARY	
Community meeting and entertainment	Only if an art and craft centre, public art gallery, museum or occasional, social and cultural events
Food services	Only if: (a) a café or restaurant, or (b) a takeaway food premises if for occasional sporting, social and cultural events
General retail and hire	Only if a commercial art gallery

<i>Hotel industry</i>	<i>Only for apartments that are located on the southern side of the primary access road to Wilkinsons Point.</i>
<i>Sports and recreation</i>	
<i>Tourist operation</i>	
<i>Utilities</i>	<i>Except where no permit required</i>
<i>Visitor accommodation</i>	<i>Only if a motel or serviced apartments</i>
PROHIBITED	
<i>All other uses</i>	

The proposed use table is fairly consistent with the current SAP. There has been the introduction of permitted use classes, which is appropriate given the transition of ownership of the land to private tenure. While there has been a number of uses included in the use table, the qualifications proposed heavily limits the scope of appropriate use in the precinct.

The uses in the proposed SAP are considered reasonable for consistency with the new Masterplan for the site, as well as the projected intensification of the site. The proposed permitted uses have been controlled by the use of strict qualifications to ensure that only reasonable development types are permitted on the site, with the remaining uses either prohibited or at the discretion of Council.

3.7.31 Use Standards

F2.9.4 There are no use standards for this precinct.

Given the nature of the masterplan and proposed development on the site, it was considered appropriate to include a standard for the staging and regulation of floor area in the sub-precinct. This is to ensure that the activity centre hierarchy is not adversely impacted by the development of Wilkinsons Point. The floor areas proposed for the Acceptable Solutions are discussed in-depth in the Economics section of this report.

3.7.32 Development Standards

F2.9.5.1 Building Design

Objective: *To ensure that building design contributes positively to the streetscape or linear pedestrian space (as appropriate) within the broader parkland setting and to the amenity and safety of the public.*

Acceptable Solution	Performance Criteria
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A1 No acceptable solution.	P1 In sub-precinct A, building design must satisfy the following: (a) be consistent with all relevant desired future character statements for the precinct; (b) provide an active frontage; (c) be freestanding pavilion forms; (d) be designed in the round; (e) breaks between buildings must be small enough to ensure effective definition of the public street space and to provide a level of protection from northerly winds, while at the same time being large enough to allow for view corridors and pedestrian passage without being detrimental to a sense of continuous street edge; (f) provide protection from the elements around the building curtilage; (g) incorporate roof-top service infrastructure, including service plants and lift structures, within the design of the building.
A2 No acceptable solution.	P2 In sub-Precinct B, building design must satisfy the following: (a) be consistent with all relevant desired future character statements for the precinct; (b) provide an active frontage; (c) building form addresses and aligns with the frontage; (d) building form is stepped back to reduce its apparent mass; (e) provide a designed roofscape for lower buildings elements as they will be in the view field of higher building elements to their rear; (f) provide protection from the elements around the building curtilage; (g) incorporate roof-top service infrastructure, including service plants and lift structures, within the design of the building.

A3 No acceptable solution.	P3 In sub-precincts C1, C2 and C3, building design must satisfy all of the following, where relevant: (a) in all parts of the sub-precinct: (i) be consistent with all applicable desired future character statements for the precinct; (ii) provide an active frontage; (iii) provide a designed roofscape for lower buildings elements as they will be in the view field of higher building elements to their rear; (iv) provide protection from the elements around the building curtilage; (v) incorporate roof-top service infrastructure, including service plants and lift structures, within the design of the building; (b) in sub-precinct C1: (i) freestanding pavilion forms; (ii) designed in the round; (iii) breaks between buildings must be small enough to ensure effective definition of the linear pedestrian space and to provide a level of protection from northerly winds, while at the same time being large enough to allow for view corridors and pedestrian passage; (c) in sub-precincts C2 & C3: (i) a building or buildings in space; (ii) designed in the round; (iii) building massing is oriented inland and not towards the end of the Point.
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The revised SAP contains reworded standards for building design. The current clause no longer aligns with the Masterplan for the site as the sub-precincts have been consolidated and renamed. Therefore, newly drafted standards were required. The new standards would be at the discretion of Council, with performance criteria that takes in to account architectural details, positive contribution to the streetscape, and landscaping. The propose standards are consistent with clause 28.4.1 of the SPP.

F2.9.5.2 Building Height

Objective: To ensure buildings are of a scale and profile in keeping with the Wilkinsons Point landform.	
Acceptable Solution	Performance Criteria
A1 Building height must be in accordance with Table F2.9.5.2.	P1 Building height must be consistent with all applicable desired character statements for the precinct in F2.9.2.

The current SAP does not contain a Table F2.9.5.2, however it is assumed that Table F2.1 is the correct reference. The heights specified as acceptable solutions for this precinct range from 6m to 14m with performance criteria heights ranging from 7.2m to 20m. Given that the tallest height allowances are located within sub-precinct C3, it is clear that the intention was for a feature building to be located on the promontory with subservient scale development surrounding.

The proposed clause sets an acceptable height limit of 40m for the promontory precinct (A1), 16m for sub-precinct A2 and 10m for sub-precinct A3 which is the closest to the foreshore. The height

has been increased to align with the development Masterplan for the site and is considered to be an acceptable increase due to not unreasonably impacting on the visual landscape. Any proposal beyond the acceptable solution would be at the discretion of Council, requiring the applicant to demonstrate that the variation in height is consistent with the plan purpose, is compatible with nearby scale of development, and would not unreasonably overshadow public open space. This would provide a more user-friendly SAP, with the current clause containing seven different acceptable heights across five different sub-precincts.

F2.9.5.3 Siting

Objective: To ensure buildings are sited in accordance with the requirements of the particular sub-precinct in order to provide for spatial definition for streets or linear public space.	
Acceptable Solution	Performance Criteria
A1 In sub-precincts A and B, buildings must have a setback from frontage of 0m.	P1 Building setback from frontage must comply with all applicable desired future character statements in F2.9.2.
A2 In sub-precinct C3, buildings must have a setback from frontage no less than 10m.	P2 In sub-precinct C3, building setback from frontage must comply with all applicable desired future character statements in F2.9.2.
A3 In sub-precincts C1, C2 and C3, buildings must provide for, align with and address a central and public pedestrian space, 20m wide, that extends the curved alignment of the road reservation through the southern part of the Precinct to the Point and its shelter and wharf.	P3 In sub-precinct C, buildings must provide for, align with and address a central and public pedestrian space, no less than 15m wide, that extends the curved alignment of the road reservation through the southern part of the Precinct. The pedestrian space must be of sufficient width to accommodate emergency vehicle access, pedestrian passage, landscaping and urban detail, including lighting and seating.

The current clause no longer aligns with the Masterplan for the site as the sub-precincts have been consolidated and renamed. Therefore, newly drafted standards were required. The proposed standards provide for gross floor area limits to align with the new pattern of development. The newly proposed layout of precincts within the SAP provides the Elwick Bay Public Open Space Precinct and Precinct C which both act as buffers to prevent unreasonable impacts on the privately-owned portion of the site.

F2.9.5.4 Passive Surveillance

Objective: To ensure buildings are designed and sited to minimise opportunities for crime and anti-social behaviour.	
Acceptable Solution	Performance Criteria

<i>A1 No acceptable solution.</i>	<i>P1 Buildings must satisfy all of the following:</i> <i>(a) be designed and sited to provide natural surveillance of pedestrian routes and car parks;</i> <i>(b) be free of concealment and entrapment spots;</i> <i>(c) be lit to a level that is adequate to ensure a reasonable level of security;</i> <i>(d) have access and egress points that are clearly visible from the public domain;</i> <i>(e) be constructed of materials that are hardy or easily replaceable; and resistant to vandalism.</i>
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The SPP does not include provisions related to passive surveillance in the Community Purpose zone, in some respects the inclusion of a design standard would be considered beneficial for the SAP. This would encourage active frontages within the precinct and interactions between the open space and development promoting a high level of amenity for all users. Building design requirements have been worked into several of the performance criteria for the SAP to ensure positive design outcomes.

F2.9.5.5 Landscaping

Objective: <i>To ensure publicly accessible spaces between buildings are landscaped to a high standard and integrate with other public open spaces.</i>	
Acceptable Solution	Performance Criteria
<i>A1</i> <i>No acceptable solution.</i>	<i>P1</i> <i>A landscaping plan, prepared by a suitably qualified landscape architect demonstrates to the satisfaction of the planning authority that publicly accessible spaces between buildings are landscaped to a high standard and integrate with other public open spaces, with a shared palette of paving materials, street furniture, lighting, etc. throughout the Precinct.</i>

Landscaping will be an important component of the Wilkinsons Point site and contributes to the visitor experience. There is currently negligible landscaping on the site. Landscaping has been included in several of the standards for the SAP.

The landscaping will not only add protection to the users of the site from the elements, it will also encourage use of the site and promotion of an active lifestyle community. Landscaping provisions are seen as essential for the logical translation between the public owned open space land and the adjacent privately-owned development. Thoughtful landscaping will provide a sense of cohesion to the site and assist in create a sense of place.

F2.9.5.6 Limit on Parking

Objective: <i>To limit the proportion of the Precinct which is devoted to car parking.</i>	
Acceptable Solution	Performance Criteria

A1 Additional uncovered car parking spaces must not be provided in the Precinct.	P1 Additional parking spaces may be provided within the building envelope of a building which predominantly serves a non-parking related purpose, provided such provision does not prevent the building meeting the applicable desired future character statements in F2.9.2.
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Given the updated Masterplan and proposed pattern of development, including designated parking areas, this clause is no longer deemed necessary for inclusion in the SAP. Additionally, the acceptable solution for this clause is not consistent with the precinct DFCS that states:

Opportunities for a mix of outdoor and covered car parking are identified within the Precinct.

It is therefore considered unreasonable to enforce an acceptable solution whereby any uncovered parking is not permissible, yet the DFCS identifies that the precinct should have a mixture of both undercover and open parking areas.

F2.9.5.7 Private Open Space

Objective: To ensure that dwellings and serviced apartments are provided with sufficient private open space to meet the recreational needs of residents or occupants.	
Acceptable Solution	Performance Criteria
A1 Each dwelling or serviced apartment above ground floor level must have a balcony which must have the following characteristics: (a) directly accessible from and adjacent to a habitable room (other than a bedroom); (b) an area no less than 12 m ² ; (c) a width of not less than 2m.	P1 Each dwelling or serviced apartment above ground floor level must have sufficient private open space to meet the reasonable recreation needs of residents or occupants, having regard to either of the following: (a) provision of private open space, other than balconies; (b) the availability of communal open space or recreation facilities.

This clause is no longer deemed appropriate for the SAP given that residential uses are prohibited on the site.

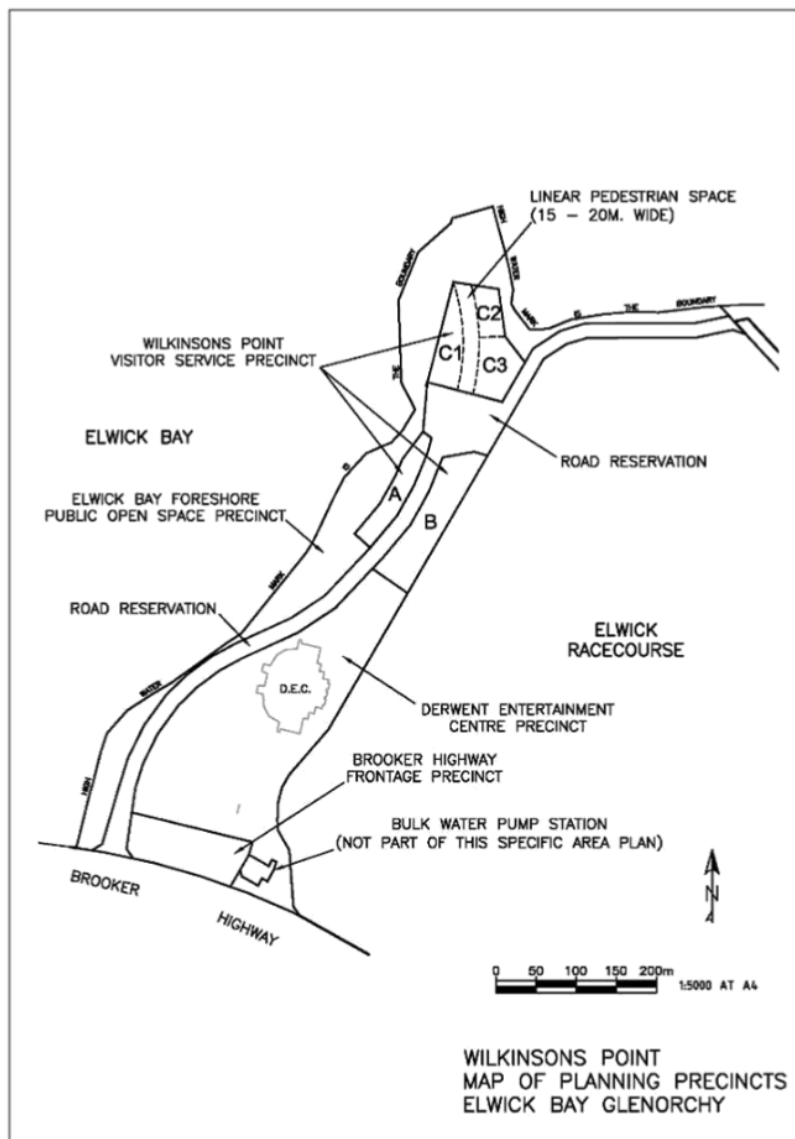
3.7.33 Development Standards for Subdivision

F2.9.6.1 Subdivision

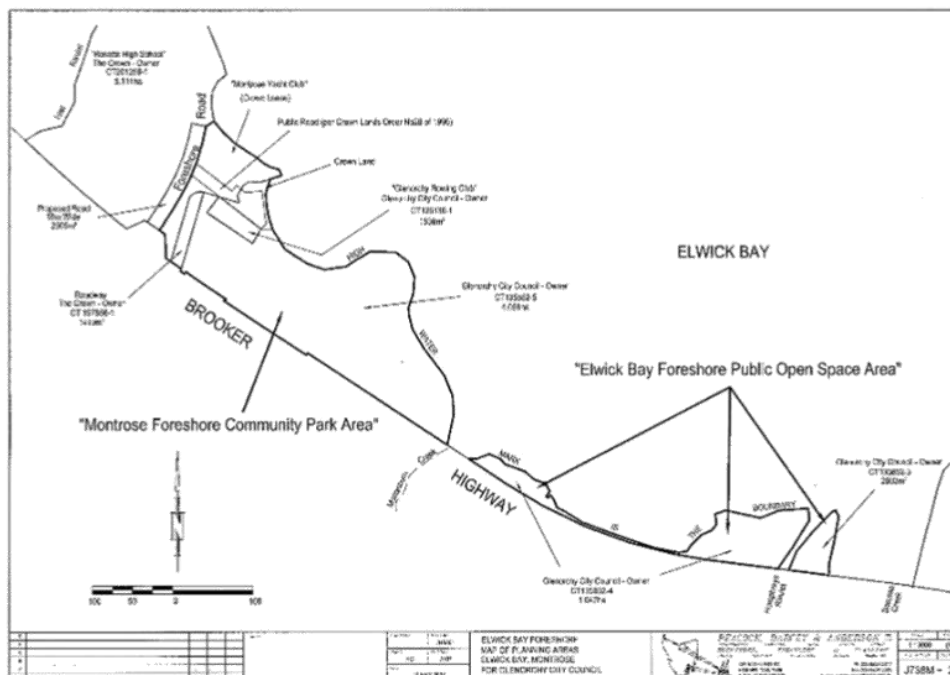
Objective: To ensure that subdivision is suitable for the intended use and development and to restrict the carrying out of subdivision within the Precinct to the Council or a public authority.	
Acceptable Solution	Performance Criteria
A1 Subdivision must be by or for the Council or a public authority.	P1 No performance criteria.
A2 No acceptable solution.	P2 Each lot must have sufficient area, suitable proportions, adequate services and sufficient frontage to a road or access by right of way to satisfy its intended use or development.
A3 Where a subdivision creates a road, the minimum reservation width must be 20m.	P3 No performance criteria.

The subdivision standards within the zone are considered adequate for the specific area and unnecessary for inclusion in the SAP. The standards are generally consistent with the requirements under clause 27.5.1 of the SPP.

3.7.34 Figure F2.1 Wilkinsons Point Precinct Map



3.7.35 Figure F2.2 Elwick Bay Precinct Map



3.7.36 Map F2 Wilkinsons Point and Elwick Bay Specific Area Plan - LISTmap



3.8 ROAD RAILWAY AND ASSETS CODE

The Road and Railway and Assets Code would be triggered by substantial intensification of the use of the sites access in terms of vehicle movements. The provisions of the Code are considered reasonable with respect to the existing and future development of the site, as are the respective provisions within the SPP.

3.9 PARKING AND ACCESS CODE

The provisions of the Parking and Access Code apply to the site; these are generally reasonable as they provide for the safe and efficient use of all users.

New development is required to be assessed in relation to the standards of the code, which are considered generally acceptable for the existing and future development of the site.

3.10 STORMWATER MANAGEMENT CODE

New development is required to be assessed in relation to the standards of the Stormwater Code, which are considered generally acceptable for the existing and future development of the site. This Code has been removed from the SPP.

3.11 BIODIVERSITY CODE

Almost the entirety of the River Derwent is mapped within the Biodiversity Code, as is a small portion of Council land to the northeast and west of the site, as per the following diagram. Any application that involves the clearance and conversion or disturbance of native vegetation or river beds within the mapped areas would be subject to a discretionary application, and likely to require a natural values assessment.

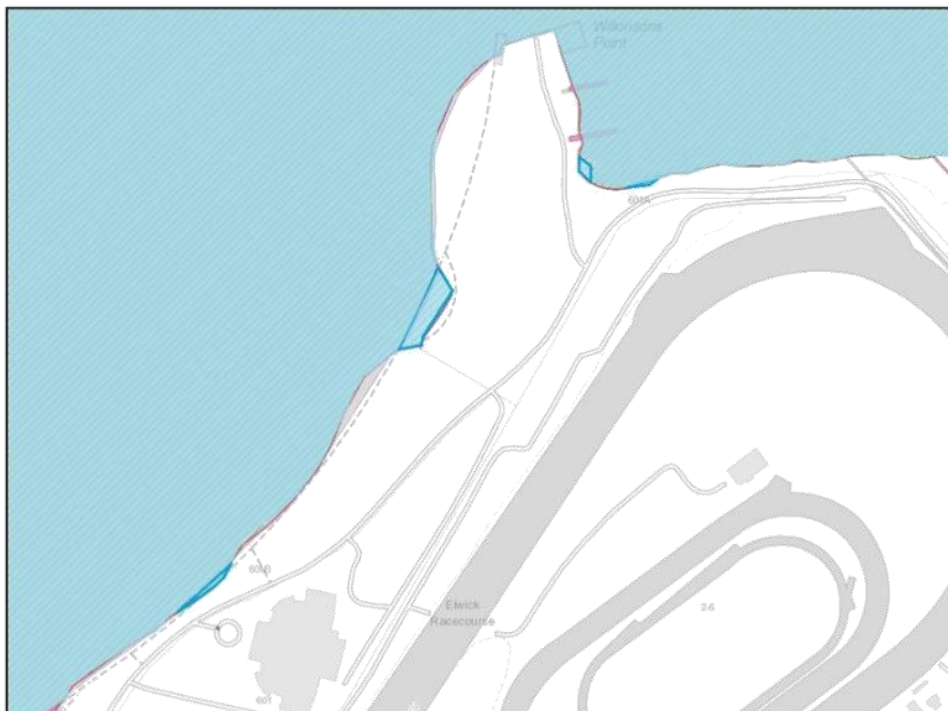


Figure 36: GIPS Biodiversity Code shown shaded blue (source: The LIST)

The SPP categorises the Biodiversity Code and the Waterway and Coastal Protection Code within the Natural Assets Code. It is not clear what the extent of either code will be but neither allow for exempt development where it will not impact on values.

3.12 WATERWAY AND COASTAL PROTECTION CODE

Within 40m of the coastal edge the site is subject to the Waterway and Coastal Protection Code, as per the following figure. A portion of the proposed development is located within this mapped

area and would require assessment in terms of minimising impacts on water quality and managing vegetation as similar provisions applied under the previous scheme.



Figure 37: GIPS Waterway and Coastal Protection Code (source: The LIST)

The provision of E11.7.1 results in all applications within the mapped areas requiring a discretionary application, including temporary artworks and installations.

E11.7.1 Buildings and Works

Objective:

To ensure that buildings and works in proximity to a waterway, the coast, identified climate change refugia and potable water supply areas will not have an unnecessary or unacceptable impact on natural values.

Acceptable Solution

A1
Building and works within a Waterway and Coastal Protection Area must be within a building area on a plan of subdivision approved under this planning scheme.

Performance Criteria

P1
Building and works within a Waterway and Coastal Protection Area must satisfy all of the following:
(a) *avoid or mitigate impact on natural values;*

	(b) mitigate and manage adverse erosion, sedimentation and runoff impacts on natural values; (c) avoid or mitigate impacts on riparian or littoral vegetation; (d) maintain natural streambank and streambed condition, (where it exists); (e) maintain in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation; (f) avoid significantly impeding natural flow and drainage; (g) maintain fish passage (where applicable); (h) avoid landfilling of wetlands; (i) works are undertaken generally in accordance with 'Wetlands and Waterways Works Manual' (DPIWE, 2003) and "Tasmanian Coastal Works Manual" (DPIPWE, Page and Thorp, 2010), and the unnecessary use of machinery within watercourses or wetlands is avoided.
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3.13 INUNDATION PRONE AREAS CODE

The subject site has areas mapped as within the Coastal Inundation Hazard Areas mapped as High, Medium, and Low Hazard Areas. The two jetties, GASPI Shelter and sections of the boardwalk (approved) are all situated in areas that are prone to inundation.



Figure 38: GIPS 2015 Inundation Prone Areas Code (source: The LIST)

Of particular concern are those parts of the site that are mapped as 'High Hazard Areas'; defined as:

...an area forecast to be subject to 0.2 m sea level rise from the Mean High Tide by 2050 and a rounding up to the nearest highest 0.1 m.

This provision only applies to mapped areas. Table E15.1 of the Scheme identifies the high risk level for Berriedale is 0.8 TR_20SLR (Sea Level Rise by 20cm above 2010 base levels), where the following standard would apply:

E15.7 Development standards for Building and Works

E15.7.1 Coastal Inundation High Hazard Areas

Objective:

To ensure that high risk from coastal inundation is appropriately managed and takes into account the use of buildings.

Acceptable Solution

Performance Criteria

A1

P1

For a habitable building, including extensions to existing habitable buildings, there are no

For a habitable building, including extensions to existing habitable buildings, there is no Acceptable Solution.	Performance Criteria except if it is development dependent on a coastal location. R1
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The following definition is relevant:

Buildings and works dependent on a coastal location: means buildings and works for which there is a demonstrated need to be located at a coastal location, including boat sales and storage, marine farming shore facilities, marine-related public open space & recreation facilities, pleasure boat facilities, roads & other utilities and wharves. Dwellings, except for a caretakers dwelling associated with any of the above, are not included.

Development on the site can be prepared so that habitable floor levels are located above anticipated sea level rise. Many of the nearby MONA developments have also been subject to this code and were able to satisfactorily address the code requirements and design standards to gain approval.

The Code does not prevent development outside mapped areas being constructed with habitable floor levels below the level of inundation and does not include areas over water that would be at risk of inundation as is the coastal edge, even though they are equally at risk as the mapped areas. While an application for development should clearly identify where there is a risk of inundation, opportunity should exist where it can be demonstrated engineering and architectural solutions are capable of keeping water out.

The existing DEC site and Entertainment Precinct Concept will require development on that part of the site that is mapped as at risk of inundation. Visitor accommodation and other potential uses could be located elsewhere and are not dependent on the coastal location, however there are few opportunities to locate the development that would meet the demands necessary to make the development feasible.

Development of the site along the coastal edge would not be supported if the risk from inundation was so great that it was not capable of being engineered to negate adverse impacts; particularly with respect to finance and insurance. As such, the planning scheme does not need to be prohibitive with regard to building within Inundation Prone Areas, but rather enable discretion where the level of risk is appropriately assessed and the design features proposed are capable of reducing risk to an acceptable level. The proposed amendment should enable Council to request an inundation risk management plan to demonstrate that development is capable of meeting with these requirements.

3.14 COASTAL EROSION HAZARD

The subject site has areas mapped as within the Coastal Erosion Hazard Areas mapped as Medium and Low Hazard Areas and Coastal Investigation Areas. The two jetties and GASPI Shelter are all situated in areas that are at risk of erosion.

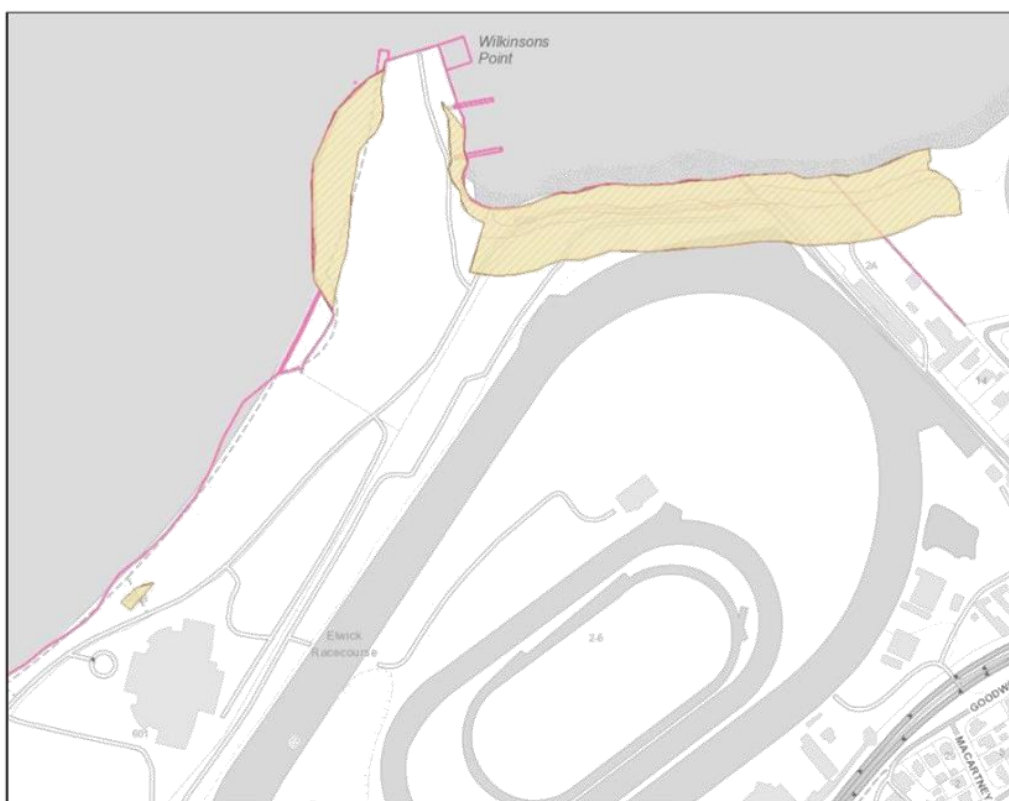


Figure 39 The Coastal Erosion Hazard extent for the site (GIPS 2015)

For development and works proposed in the mapped overlay area, the following standard would apply:

E16.7 Development Standards

E16.7.1 Buildings & Works

Objective:

To ensure that development in Coastal Erosion Hazard Areas is fit for purpose and appropriately managed based on the level of exposure to the hazard.

Acceptable Solutions

Performance Criteria

A1

No Acceptable Solution.

P1

Buildings and works must satisfy all of the following:

- (a) not increase the level of risk to the life of the users of the site or of hazard for adjoining or nearby properties or public infrastructure;
- (b) erosion risk arising from wave run-up, including impact and material suitability, may be mitigated to an acceptable level through structural or design methods used to avoid damage to, or loss of, buildings or works;

	(c) erosion risk is mitigated to an acceptable level through measures to modify the hazard where these measures are designed and certified by an engineer with suitable experience in coastal, civil and/or hydraulic engineering; (d) need for future remediation works is minimised; (e) health and safety of people is not placed at risk; (f) important natural features are adequately protected; (g) public foreshore access is not obstructed where the managing public authority requires it to continue to exist; (h) access to the site will not be lost or substantially compromised by expected future erosion whether on the proposed site or off-site; (i) provision of a developer contribution for required mitigation works consistent with any adopted Council Policy, prior to commencement of works; (j) not be located on an actively mobile landform.
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Development of the site can be arranged in such a way to ensure erosion risk is minimised and the protection on public safety and infrastructure continues.

The code does not prevent development beyond the mapped area and does not require any mitigation measures beyond this. An application for development should clearly identify where there is a risk of erosion, development opportunity should exist where it can be demonstrated engineering and architectural solutions are capable of minimising risk to development and public safety.

The SPP has the Coastal Erosion Hazard Code which requires that use and development must demonstrate that it can achieve and maintain a tolerable risk from coastal erosion; and includes controls for Vulnerable Use and the need for buildings areas to be located outside the erosion hazard area for subdivision. Standards of the SAP have been prepared with respect to the SPP provisions.

3.15 STATE PLANNING PROVISIONS

The State Planning Provisions (SPP) have been released and result in modified provisions from the current interim planning schemes. At the time of writing this report, there is still uncertainty in relation to the Local Planning Provisions that will be included within the finalised State Planning Scheme, as it is understood that they are currently comment for the Tasmanian Planning Commission after being drafted by Council.

3.15.1 SPP Standards

The SPP have removed Desired Future Character Statements as they are applied in the Zones, however there is potential that alternative controls could be embedded in the Zones through Local Planning Provisions with Local Area Objectives. It is assumed that without an amendment Wilkinsons Point will remain within the Community Purpose an Open Space Zones. There is

uncertainty as to whether Local Area Objectives will be applied to Wilkinsons Point in these Zones and the implications that this will have to any discretionary use or development on the site.

The SPP controls for the categorisation of Use Class or Development does not make a distinction in relation to zoning of the part of the site or which title the proposed use is to occur. Where an application for development includes a site that spans multiple titles and zones, the application would potentially have a different use status depending on the zone.

In terms of temporary use and development, there is scope for exemptions for occasional use for cultural events. There are exemptions for markets and for minor infrastructure, including playground equipment and public art; if only on public land, or by a public authority respectively. As such, there is limited scope for exemptions for temporary works or development for artworks on Wilkinsons Point land and permit applications will still be necessary.

Mandatory requirements for landscaping and building design have been removed from the Community Purpose Zone. Performance Criteria have been revised to exclude assessment with respect to Desired Future Character Statements.

The SPP Historic Heritage Code does not apply in respect of places whose historic cultural heritage significance derives solely from their cultural value to the Aboriginal people of Tasmania. As such, the heritage values of Wilkinsons Point will continue to be assessed against the *Aboriginal Heritage Act 1975* by Aboriginal Heritage Tasmania.

The Inundation Code has been renamed as the Coastal Inundation Hazard Code and the standards have been changed. Use and development within a High Coastal Hazard Band is still required to demonstrate that it 'relies upon a coastal location'; there are controls for Vulnerable Use, inclusive of Visitor Accommodation for an emergency evacuation plan; and the need for buildings areas to be located outside the inundation hazard area for subdivision.

4. PROPOSED AMENDMENT

4.1 THE INTENT

It is intended to amend the current *Glenorchy Interim Planning Scheme 2015* to insert a new Wilkinsons Point Sporting District SAP to the site and to remove the Wilkinsons Point SAP site from the existing Wilkinsons Point and Elwick Bay Specific Area Plan, and amend this SAP to reflect the provisions of the balance of the remaining site area. The use of a SAP is consistent with advice received from the Glenorchy City Council and the Tasmanian Planning Commission and allows for improved flexibility over standards of the Codes.

The following is a summary of the intents of the amendment with respect to the assessment of the site in the earlier parts of this report, and in relation to the specific headings of the Scheme. Within the discussion, statements have been highlighted that form the 'Plan Purpose Statements' of the Specific Area Plan.

The primary intent of the amendment is to facilitate the ongoing evolution of use and development on the site, including the development of a sporting hub for the municipality, in order to ensure the long-term viability of Wilkinsons Point as a key contributor to Tasmania's tourism industry and economic development. The amendment will recognise Wilkinsons Point as the landmark facility that provides for a variety of sporting and cultural activities. The site will incorporate sports specific retail, food and beverage services, a park and ride, world class basketball facilities, events spaces, and a hotel.

4.1.1 Application of the SAP

The revised SAP is to be applied to the same area as defined under the current specific area. The precinct boundaries have been adjusted according to the requirements of the updated masterplan.

4.1.2 Zoning

It is proposed that the area of the site zoned Community Purpose be rezoned to Recreation, to better reflect the future ownership and uses on the site. In addition to this it proposed that the area zoned Open Space be realigned to follow the boundary of the proposed Landscape Precinct of the SAP to reflect the precinct zoning of the SAP.



Figure 40: Proposed Zoning (Source: LISTmap; alterations by Ireneinc)

4.1.3 Purpose Statements

The Specific Area Plan will provide purpose statements that will enable development concepts to proceed on the land. Therefore, the Desired Future Character Statements for Wilkinsons Point within the Recreation Zone will be redundant and will be removed as part of the proposed amendment.

The Desired Future Character Statements (DFCS) within the Recreation Zone for Wilkinsons Point represent the existing site qualities, not those anticipated in the Wilkinsons Point Masterplan. In some instances, it is unclear why the DFCS are necessary when they have been otherwise generally unused in the planning scheme, and the development standards of the Zone have been drafted to satisfy the purpose statements. The State Planning Provisions do not refer to DFCS.

The proposed SAP is intended to provide broader scope to enable greater creative and innovative outcomes for the site. Provisions have been proposed for the SAP for 'Plan Purpose' statements and Local Area Objectives which are considered adequate

The following 'Plan Purpose' statements are considered appropriate to provide a framework for future development:

- a) *To provide for a state NBL team training and performance facility, supported by a range of active recreation, hotel accommodation, sports retail, and food services whilst retaining public access for passive recreation and community events.*
- b) *To cultivate a vibrant and engaging district that prioritises pedestrian movement and activity through designed landscaped areas, integrated infrastructure, and connectivity within the site.*

- c) To promote sustainable transport options through:
 - i. Reducing potential for pedestrian/ vehicle conflict and enhancing the pedestrian environment;
 - ii. The development of a park and ride facility;
 - iii. Providing infrastructure to support the use of bicycles, walking, and other sustainable transport modes.
- d) To ensure that sports focused retail outlets enhance and support recreational and entertainment activities on the site, without undermining the activity centre hierarchy.

4.1.4 Use

As discussed in the Application of the Scheme above, it is critical that development and use associated with the transformation of the site not be unnecessarily constrained. In addition, the connotation of the Community Purpose zone is considered inappropriate following the transfer of Wilkinsons Point to private ownership. The changes proposed to the Use Table from the current zone to be included in the proposed Wilkinsons Point Sporting District SAP are outlined in the Comparative Use Table, in Appendix B of this report.

4.1.5 Signage

The primary intent of this part of this amendment is to ensure that development within the plan area do not result in the degradation of architectural and landscaped areas. There are provisions to allow for a pole/pylon sign as permitted, given the existing DEC sign at the sites main entrance. The provisions are designed to allow for the upgrade of this signage as permitted development.

4.2 SPECIFIC AMENDMENT

4.2.1 Ordinance

Amend the *Glenorchy Interim Planning Scheme 2015* ordinance in the following way:

F2 Wilkinsons Point and Elwick Bay Specific Area Plan

- Remove the following precincts from the Specific Area Plan:
 - F2.7 Brooker Highway Frontage Precinct
 - F2.8 Derwent Entertainment Centre Precinct
 - F2.9 Wilkinsons Point Visitor Service Precinct
- Adjust the mapping of F2.6 Elwick Bay Foreshore Public Open Space Precinct to remove the part of the precinct which is now to be included within the proposed Wilkinsons Point Sporting District SAP.
- To be replaced with these precincts with the *Wilkinsons Point Sporting District Specific Area Plan* as shown in Figure 41.

Part F Specific Area Plans

- Include the Proposed Wilkinsons Point Sporting District Specific Area Plan accompanying this report

4.2.2 Mapping

Amend the mapping to include a plan that follows the outline of the Wilkinsons Point Specific Area Plan as per the following diagrams.

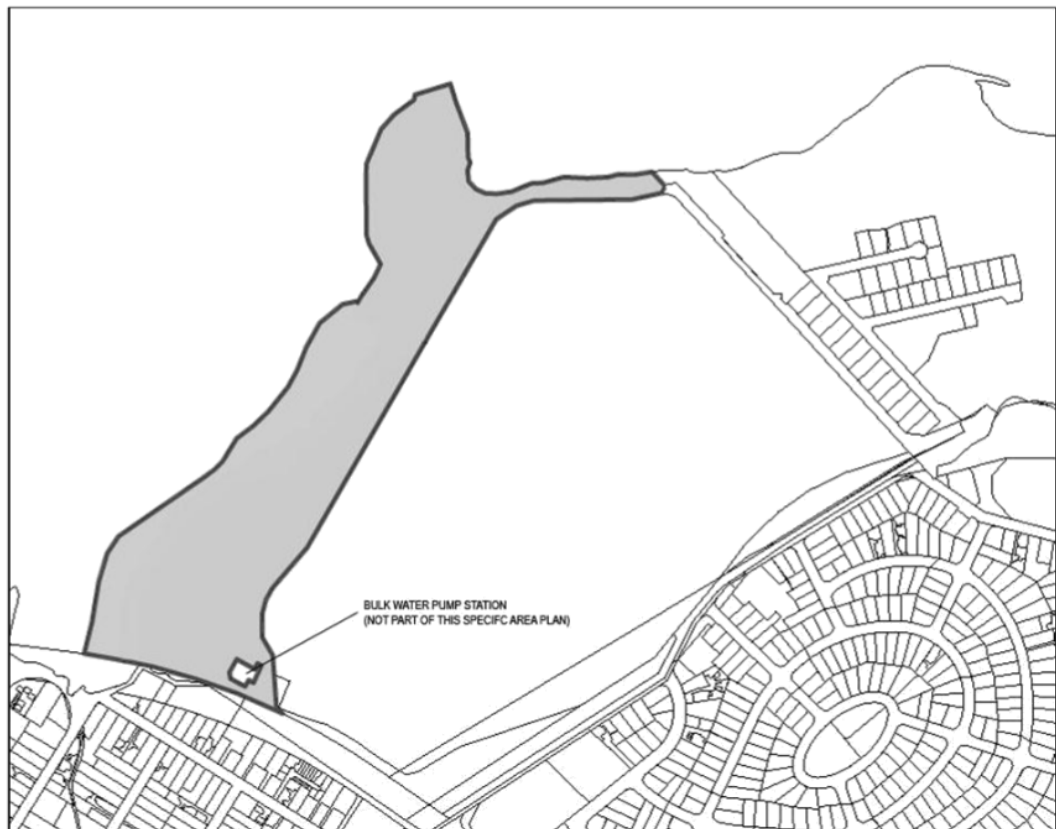


Figure 41: Wilkinson's Point Sporting District Specific Area

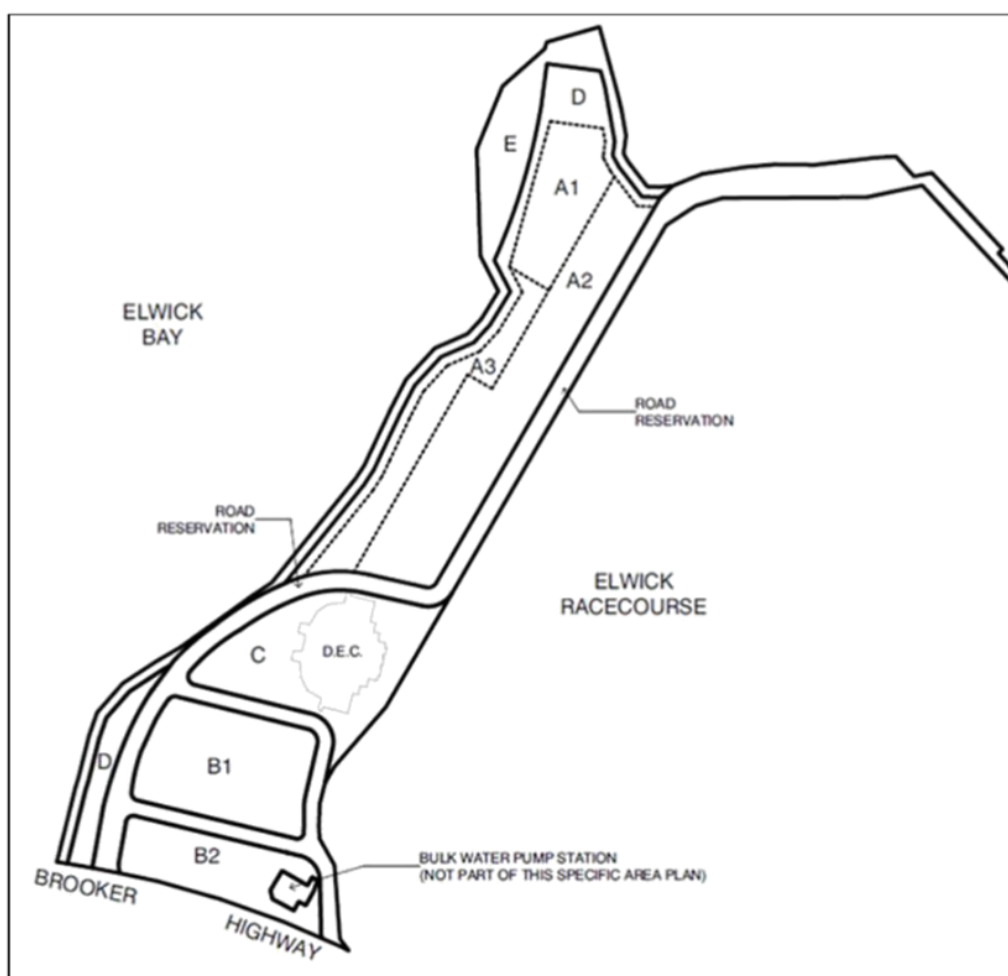


Figure 42 Wilkinsons Point Sporting District Specific Area Plan precincts

4.3 AMENDMENTS TO CURRENT WILKINSONS POINT AND ELWICK BAY SPECIFIC AREA PLAN

In addition to the specific amendment outlined above, it is also proposed that some minor alterations are made to the two remaining precincts from the current SAP to ensure that the standards remain logical and concise.

5. ASSESSMENT UNDER LAND USE PLANNING AND APPROVALS ACT

Section 32 of the *Land Use Planning and Approvals Act 1993* (The Act) requires amendments to planning schemes meet and be considered against the following;

- (1) *A draft amendment of a planning scheme, and an amendment of a planning scheme, in the opinion of the relevant decision-maker within the meaning of section 20(2A)-*
 - (a)
 - (b)
 - (c)
 - (d)
 - (e) *must, as far as practicable, avoid the potential for land use conflicts with use and development permissible under the planning scheme applying to the adjacent area; and*
 - (ea) *must not conflict with the requirements of section 300; and*
 - (f) *must have regard to the impact that the use and development permissible under the amendment will have on the use and development of the region as an entity in environmental, economic and social terms.*
- (2) *The provisions of section 20(2), (3), (4), (5), (6), (7), (8) and (9) apply to the amendment of a planning scheme in the same manner as they apply to planning schemes.*

Section 20 also includes the following:

- 20.(1) (a) *seek to further the objectives set out in Schedule 1 within the area covered by the scheme; and*
- (b) *prepare the scheme in accordance with State Policies made under section 11 of the State Policies and Projects Act 1993; and*
- (c)

The above provisions are considered in the following sections.

5.1 LAND USE CONFLICTS WITH ADJACENT USES - 32.1.E

The proposed Wilkinsons Point SAP allows greater discretion for uses on the site; for the site to develop as a sporting hub for the municipality; and to recognise existing approved uses. The Wilkinsons Point SAP adjoins permitted use and development in a number of Zones as discussed further in this section and include the following:

- General Residential Zone;
- Inner Residential Zone;
- Utilities Zone;
- Community Purpose Zone;

- Environmental Management Zone; and
- Open Space Zone.

The Inner Residential and General Residential Zones are located along the southern boundary of the Specific Area. Both zones allow Residential and Visitor Accommodation as permitted uses. Development is unlikely to be situated within 50m of this boundary, given the proposed pattern of development as determined in the new Masterplan for the site. In terms of vehicle movements from the site the dwellings are located in excess of 50m from the access to the Montrose Foreshore Community Park which will not result in unreasonable impacts to the residents, particularly due to the fact that the Brooker Highway lies between the dwellings and the site.

5.2 REQUIREMENTS OF SECTION 300

Section 300 provides as follows:

300. Amendments under Divisions 2 and 2A of interim planning schemes

(1) An amendment may only be made under Division 2 or 2A to a local provision of a planning scheme, or to insert a local provision into, or remove a local provision from, such a scheme, if the amendment is, as far as is, in the opinion of the relevant decision-maker within the meaning of section 20(2A), practicable, consistent with the regional land use strategy, if any, for the regional area in which is situated the land to which the scheme applies.

(2) An amendment, of a planning scheme, that would amend a local provision of the scheme or insert a new provision into the scheme may only be made under Division 2 or 2A if -

- a) the amendment is not such that the local provision as amended or inserted would be directly or indirectly inconsistent with the common provisions, except in accordance with section 30EA, or an overriding local provision; and*
- b) the amendment does not revoke or amend an overriding local provision; and*
- c) the amendment is not to the effect that a conflicting local provision would, after the amendment, be contained in the scheme.*

(3) Subject to section 30EA, an amendment may be made to a local provision if -

- a) the amendment is to the effect that a common provision is not to apply to an area of land; and*
- b) a planning directive allows the planning scheme to specify that some or all of the common provisions are not to apply to such an area of land.*

(4) An amendment may not be made under Division 2 or 2A to a common provision of a planning scheme unless the common provision, as so amended, would not be inconsistent with a planning directive that requires or permits the provision to be contained in the planning scheme.

(5) Subject to section 30EA, an amendment of a planning scheme may be made under Division 2 or 2A if the amendment consists of -

- a) taking an optional common provision out of the scheme; or*
- b) taking the provision out of the scheme and replacing it with another optional common provision.*

The amendment proposed is a Specific Area Plan of the Wilkinsons Point land and as such is a local provision, which can be amended under Division 2 or 2A.

5.3 REGIONAL IMPACT

The *Southern Tasmanian Land Use Strategy 2010-2035* (STRLUS), is the most recent regional land use strategy that is applicable to the land subject to this amendment application. It would be anticipated that when a review of the STRLUS is undertaken that the impact and significance of Wilkinsons Point would be introduced into the regional strategy.

The proposed amendment is consistent with the Strategic Economic Opportunities of the STRLUS, which identifies the following:

A place of arts, culture and recreation - The region has a long history as a cultural hub in recognition of our significant cultural values. The region accommodates many cultural facilities, world class recreational opportunities and events. (p 60)

Redevelopment of the site would be consistent with the following regional policy:

SEO 1: Support and protect strategic economic opportunities for Southern Tasmania.

In terms of tourism, the Wilkinsons Point development has the opportunity to contribute a significant increase in tourists to the state, particularly through the introduction of the National Basketball League. It is highly consistent with regional policies for Tourism:

T 1 Provide for innovative and sustainable tourism for the region

Particularly policies T1.6 and T1.7, recognise that planning schemes may not be responsive enough to potential tourism uses and development.

Wilkinsons Point and its development will provide innovative high quality social and community facilities that will be a focal point within the Greater Hobart region, and particularly the northern suburbs. This is consistent with the following policy for Social Infrastructure:

SI 1.5 Provide multi-purpose, flexible and adaptable social infrastructure that can respond to changing and emerging community needs over time.

The amendment is supportive of innovation and cultural identity of the community to contribute to a liveable community and economic growth. This is consistent with the Vision of the Strategy (p17), the Tourism policies, and the Strategic Economic Opportunities. There is scope for a review of the regional strategy to place greater emphasis on the importance of the Sporting, Arts and Cultural Industries consistent with State Government's more recent visitor economy strategy. Furthermore, the recognition should be given to the importance of the industry to the less tangible community benefits including jobs growth, contribution to place-making, community identity, and spurring innovation.

Wilkinsons Point, with the introduction of Park and Ride facilities and potential for use of the established ferry routes, will be able to contribute to the increase of alternative infrastructure to the benefit of the broader community, including potential for upgrades to use of the rail corridor and ferry service that will be capable of servicing a variety of areas. This is highly consistent with the policies of the following:

LUTI 1 Develop and maintain an integrated transport and land use planning system that supports economic growth, accessibility and modal choice in an efficient, safe and sustainable manner.

One of the appeals of Wilkinsons Point is its coastal location and the potential to access it by the water, however this is a natural asset that requires careful management of environmental management to protect its values. This amendment has been prepared with respect to a number of the regional policies that recognise appropriately located *development should be allowed for including the following:*

WR 2.4 Allow recreation and tourism developments adjacent to waterways where impacts on biodiversity and native vegetation can be kept to acceptable levels.

In terms of the Activity Centre Hierarchy, Wilkinsons Point should be considered as an Activity Centre as it will satisfy components of the definition, particularly as it could potentially be a key location for entertainment and sporting events. The narrow scope for definition of Activity Centres is an existing issue within the strategy and is due to the timing of the strategy being drafted. The STRLUS has not necessarily accounted for the implications that large scale re-development like Wilkinsons Point could have with respect to central Glenorchy and Hobart as the breadth of its success and its contribution to the centres due to its specialist nature and unique drawcard for the state.

It has been demonstrated that Wilkinsons Point will not compete with the STRLUS hierarchy of centres but rather has the potential to consolidate the identified centres growth, by providing a unique type of large format retail for the southern region. This amendment will allow for the site to be developed according to the new Masterplan, and to make a positive contribution to the facilities and services available for the community. The park and Ride has the potential to result in improvements to the congestion issues for the northern suburbs, and the NBL will encourage further visitors to the municipality. These drawcard for the site may result in an increase in further localised activity consistent with existing land use zoning.

In considering the policies of the STRLUS in relation to Wilkinsons Point, it could possibly be considered as a 'specialist centre' within the hierarchy. The proposed amendment results in changes that would allow for uses that are consistent with the private ownership of the land and its redevelopment in accordance with the new masterplan while being mindful to the allowable uses under the current zoning. The amendment would enable further development of the site consistent with achieving the following regional policy:

AC 1 Focus employment, retail and commercial uses, community services and opportunities for social interaction in well-planned, vibrant and accessible regional activity centers that are provided with a high level of amenity and with good transport links with residential areas.

5.4 SCHEDULE 1 OBJECTIVES OF LUPAA

The objectives of the Act are considered in the following table:

PART 1 - OBJECTIVES	AMENDMENT RESPONSE
<i>(a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and</i>	The site is an existing developed area and future development has been investigated with respect to natural values. Future development will be required to be constructed in terms of a detailed management plan to ensure that there is minimal impact on identified values.
<i>(b) to provide for the fair, orderly and sustainable use and development of air, land and water; and</i>	The proposal restores the capabilities for the future development of the land that existed prior to the introduction of the Interim Planning Scheme. The proposed amendment will provide for fair and orderly development of land through more intensive use of existing developed, and under-utilised land where it will have minimal impact on the amenity of surrounding development.

<i>(c) to encourage public involvement in resources management and planning; and</i>	The planning process provides for public involvement.
<i>(d) to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c): and</i>	The proposed amendment will facilitate development that will ensure the long-term viability for the operation of the Derwent Entertainment Centre that has had sizeable economic benefit to the state and is currently underutilised.
<i>(e) to promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State.</i>	The assessment process promotes the involvement of the public as well as local and state government. The amendment includes Council land and therefore requires consent to lodgement of the application. Furthermore, any future Development Applications within adjoining Council or Crown Land will likewise require consent for lodgement.

PART 2 - OBJECTIVES	AMENDMENT RESPONSE
<i>(a) to require sound strategic planning and coordinated action by State and local government; and</i>	The amendment has been prepared with respect to relevant strategic outcomes of the state and local government.
<i>(b) to establish a system of planning instruments to be the principle way of setting objectives, policies and controls for the use, development and protection of land;</i>	The proposal is seeking to amend the planning scheme with the inclusion of a Specific Area Plan, which has been prepared with respect to the existing provisions and those of the State Planning Provisions, to achieve the strategic intents consistent with relevant objectives and policies.
<i>(c) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land;</i>	The amendment will provide for development that will be required to be assessed with regard to environmental impacts where necessary and will facilitate the viability of the Derwent Entertainment Centre, and the site as a whole, into the long term. The GASPI Has demonstrated the site has substantial economic and social effects and benefits.
<i>(d) to require land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels;</i>	Not directly applicable to the amendment.
<i>(e) to provide for the consolidation of approvals for land use and development and related matters, and to co-ordinate planning approvals with related approvals;</i>	Not directly applicable to the amendment.
<i>(f) to secure a pleasant, efficient and safe working environment for all Tasmanians and visitors to Tasmania;</i>	The proposal will allow for upgraded infrastructure and change the way in which people move around the site, making improvements that will make it more pleasant, efficient and safe for visitors and Tasmanians.
<i>(g) to conserve those buildings and areas or other places which are of scientific,</i>	The site is recognised for cultural values for Aboriginal Heritage. The proposed amendment

<i>aesthetic, architectural or historical interest, or otherwise of special cultural value;</i>	will not alter the existing requirements for approval from the respective agencies for further development that will impact on these values. The proposed amendment will facilitate the continued evolution and interest on the site that is part of its special cultural values.
<i>(h) to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;</i>	The site is located where it is capable of being serviced by public infrastructure, future applications will need to be designed to ensure that they do not impact on provision of orderly infrastructure.
<i>(i) to provide a planning framework which fully considers land capability.</i>	The site is not used for agricultural purposes, it is within an existing urban area and its future land capability is not considered to be substantial.

5.5 STATE POLICIES

The following are the state policies that have been considered as part of this application.

5.5.1 The State Coastal Policy 1996

As the site is located within the Coastal Zone the State Coastal Policy applies. The following is an assessment with regard to the three main principles that guide Tasmania's State Coastal Policy:

PRINCIPLE	AMENDMENT RESPONSE
<i>Natural and Cultural values of the coast shall be protected.</i>	The site has identified cultural values for Aboriginal Heritage. The proposed amendment will not alter the existing requirements for approval from the respective agencies for further development that will impact on these values. Future applications would need to be prepared with the requirements that protect natural values for the coastal edge and maritime environment. Investigations have been undertaken regarding the ecological values of the coastal edge and maritime environment and have found that these would be unlikely to impact on listed threatened flora and fauna.
<i>The Coast shall be used and developed in a sustainable manner.</i>	This principle recognises: <i>'The economic and social values of tourism and recreation in the coastal zone'</i> The amendment would enable the development of suitable tourism and recreation values in the coastal zone through locating development and use where it can gain advantage from its coastal location, and also continue to improve access to the coast. The amendment would ensure the coastline remains available and accessible to the public.
<i>Integrated management and protection of the coastal zone is a shared responsibility.</i>	Any future applications for development that include coastal land will require consent from the State Government as the Landowner of the River Derwent. The amendment will need to be

publicly advertised; and approved by local and state government before being initiated to satisfy that provisions effectively manage the coast responsibly.

5.5.2 The State Policy on Water Quality Management 1997

The purpose of this Policy is:

To achieve the sustainable management of Tasmania's surface water and groundwater resources by protecting or enhancing their qualities while allowing for sustainable development in accordance with the objectives of Tasmania's Resource Management and Planning System.

The Policy applies to:

all surface waters, including coastal waters, and groundwaters, other than:

- (i) privately owned waters that are not accessible to the public and are not connected to, or flow directly into, waters that are accessible to the public; or*
- (ii) waters in any tank, pipe or cistern.*

The amendment does not include any buildings or works within the coastal waters area. The proposed amendment changes will not impact on the schemes ability to continue to sustainably manage surface water consistent with the Policy.

5.5.3 The State Policy on the Protection of Agricultural Land 2009

The purpose of this Policy is:

To conserve and protect agricultural land so that it remains available for the sustainable development of agriculture, recognising the particular importance of prime agricultural land.

The Objectives of the Policy are:

To enable the sustainable development of agriculture by minimising:

- (a) conflict with or interference from other land uses; and*
- (b) non-agricultural use or development on agricultural land that precludes the return of that land to agricultural use.*

The land is not categorised for agricultural potential as it is recognised as being within an urban area. The proposed amendment does not result in changes that would have any greater potential for conflict with land uses than the existing planning scheme provisions do. The proposed amendment is considered to not result in any greater agricultural land use conflicts nor result in the loss of land for agricultural purposes.

5.5.4 National Environment Protection Measures (NEPMs)

NEPMs are also taken to be State Policies in Tasmania. NEPMs are made under Commonwealth legislation and given effect in Tasmania through the State Policies and Projects Act.

The current NEPMs are:

- *Air Toxics*
- *Ambient Air Quality*

- *Assessment of Site Contamination*
- *Diesel Vehicle Emissions*
- *Movement of Controlled Waster*
- *National Pollutant Inventory*
- *Used Packaging*

The Codes within the Scheme deal in detail with the relevant matters (noise and air quality) and the assessment of the development application, when submitted, can be undertaken against the appropriate Use and Development Standards. The proposed amendment is not considered to be affected by the other NEPMS.

APPENDIX A - TITLES



**RESULT OF SEARCH**

DEPUTY RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

**SEARCH OF TORRENS TITLE**

VOLUME 110871	FOLIO 1
EDITION 4	DATE OF ISSUE 19-Jul-2001

SEARCH DATE : 24-Jul-2019

SEARCH TIME : 04.41 PM

DESCRIPTION OF LAND

City of GLENORCHY

Lot 1 on Plan 110871

Derivation : Whole of Lot 1 7.165 Ha. vested in the Derwent

Entertainment Centre Management Authority

Prior CTs 4651/45 and 33936/1

SCHEDULE 1

C35345 TRANSFER to GLENORCHY CITY COUNCIL Registered
10-Jul-1997 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

C192564 TRANSFER of EASEMENT Burdening Easement: Pipeline
Easement for the Hobart Regional Water Authority over
the strips of land marked "Pipeline Easement "A"
"Variable Width" and "Pipeline Easement "B" Variable
width" shown on Plan No 110871 with conditions as to
useage.

C192565 TRANSFER of EASEMENT Burdening Easement: Right of
Carriageway for Hobart Regional Water Authority over
the land marked "Right of Way Variable Width" shown
on Plan no.110871

C35345 FENCING PROVISION in Transfer

.

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 157350	FOLIO 1
EDITION 1	DATE OF ISSUE 17-Sep-2009

SEARCH DATE : 16-Sep-2019

SEARCH TIME : 12.00 PM

DESCRIPTION OF LAND

City of GLENORCHY

Lot 1 on Sealed Plan 157350

Derivation : Whole of Lot 1001 (1.160ha) The Crown and Whole
of 2.182ha acquired by The Crown
Prior CTs 157350/1001 and 135856/1

SCHEDULE 1

C307904 & C906192 TRANSFER to GLENORCHY CITY COUNCIL

SCHEDULE 2

C906192 & C924665 Land is limited in depth to 15 metres,
excludes minerals and is subject to reservations
relating to drains sewers and waterways in favour of
the Crown
SP157350 EASEMENTS in Schedule of Easements
C307904 BOUNDARY FENCES AND OTHER CONDITIONS in Transfer
C906192 FENCING PROVISION in Transfer

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 157350	FOLIO 2
EDITION 1	DATE OF ISSUE 17-Sep-2009

SEARCH DATE : 16-Sep-2019

SEARCH TIME : 12.03 PM

DESCRIPTION OF LAND

City of GLENORCHY

Lot 2 on Sealed Plan 157350

Derivation : Whole of Lot 1000 (7452m2) The Crown, Part of 427

Acres Gtd. to George Frederick Read and Part of 41A-2R-23P Gtd.

to Thomas Yardley Lowes

Prior CTs 157350/1000 and 135856/2

SCHEDULE 1

C307904 & C906192 TRANSFER to GLENORCHY CITY COUNCIL

SCHEDULE 2

C906192 & C924664 Land is limited in depth to 15 metres,
excludes minerals and is subject to reservations
relating to drains sewers and waterways in favour of
the Crown

SP157350 EASEMENTS in Schedule of Easements

C307904 BOUNDARY FENCES AND OTHER CONDITIONS in Transfer

C906192 FENCING PROVISION in Transfer

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



SCHEDULE OF EASEMENTS

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SCHEDULE OF EASEMENTS NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	Registered Number SP 157350
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PAGE 1 OF 1 PAGE/S

EASEMENTS AND PROFITS

Each lot on the plan is together with:-

- (1) such rights of drainage over the drainage easements shown on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and
- (2) any easements or profits a prendre described hereunder.

Each lot on the plan is subject to:-

- (1) such rights of drainage over the drainage easements shown on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and
- (2) any easements or profits a prendre described hereunder.

The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

Lot 2 on the plan is subject to a Pipeline Easement for the Hobart Regional Water Board over the Pipeline Easement 4.00 Wide shown on the plan created by and more fully set forth in Transfer of Easement No. B92658 registered 24th March 1987.

SIGNED by **SUSAN JENNIFER HAIMES**
being and as the Acting Manager Crown Land Services
prescribed in Statutory Rule No. 187 of 2001 and
pursuant to an Instrument of Delegation dated
25 November 2004 in the presence of:-

)
)
)
)
)

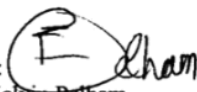


Signature of witness:

Name of witness: Kelvin Pelham

Occupation: Property Officer

Address: Crown Land Services
134 Macquarie Street
HOBART



(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: The Crown FOLIO REF: Sect 27A, 135856/1 & 135856/2 SOLICITOR & REFERENCE: Crown Land Services 20 48 69	PLAN SEALED BY: The Crown DATE: 23 June 2009 20 48.69..... REF NO. Crown Delegate
NOTE: The Council Delegate must sign the Certificate for the purposes of identification.	



SCHEDULE OF EASEMENTS

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SCHEDULE OF EASEMENTS NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	Registered Number SP 157350
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PAGE 1 OF 1 PAGE/S

EASEMENTS AND PROFITS

Each lot on the plan is together with:-

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- (2) any easements or profits a prendre described hereunder.

Each lot on the plan is subject to:-

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SIGNED by **SUSAN JENNIFER HAIMES**
being and as the Acting Manager Crown Land Services
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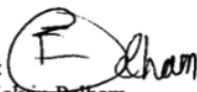


Signature of witness:

Name of witness: Kelvin Pelham

Occupation: Property Officer

Address: Crown Land Services
134 Macquarie Street
HOBART



(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: The Crown FOLIO REF: Sect 27A, 135856/1 & 135856/2 SOLICITOR & REFERENCE: Crown Land Services 20 48 69	PLAN SEALED BY: The Crown DATE: 23 June 2009 20 48.69..... REF NO. Crown Delegate
NOTE: The Council Delegate must sign the Certificate for the purposes of identification.	



FOLIO PLAN

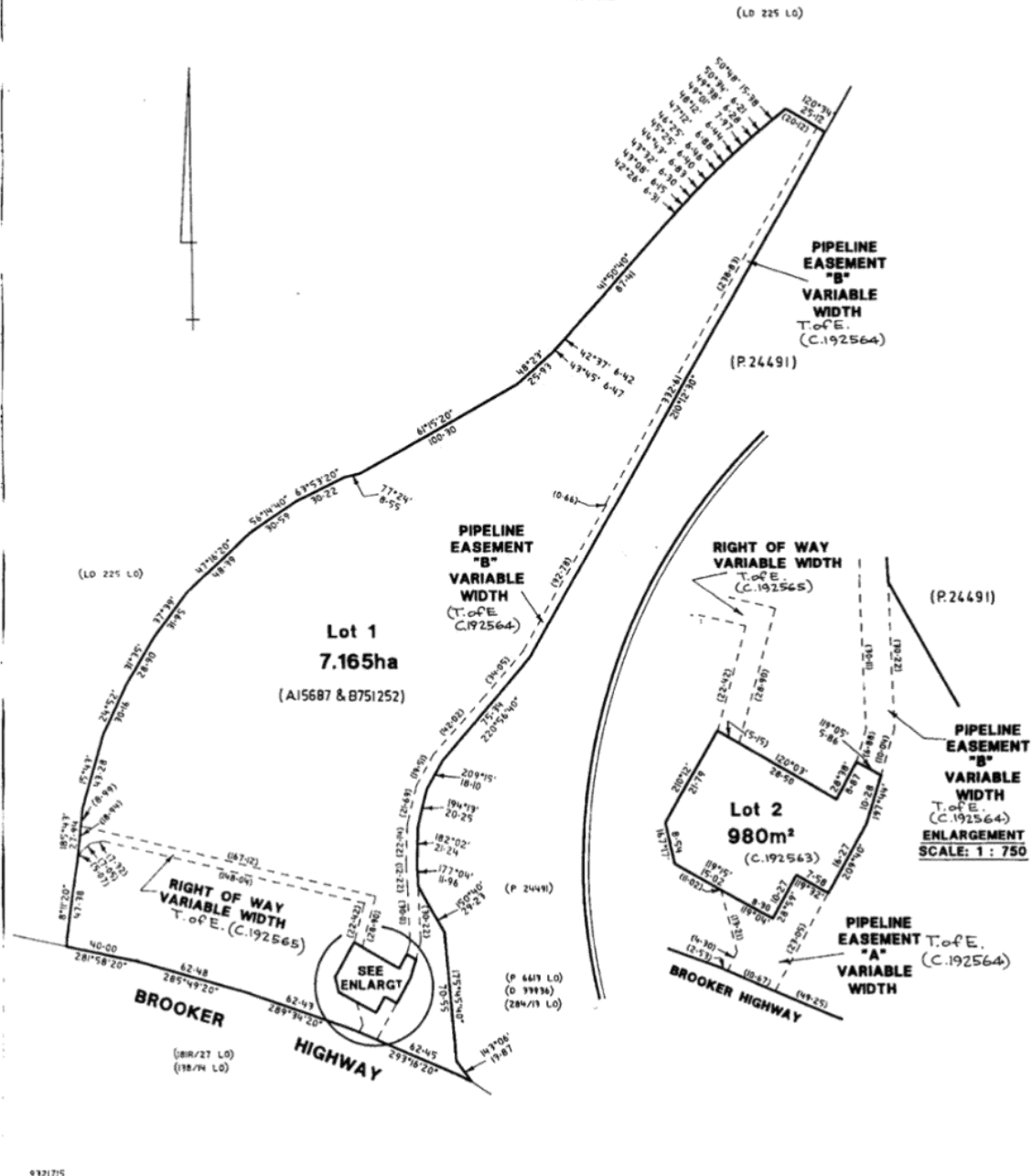
DEPUTY RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



OWNER (THE CROWN) LOT 1: THE DERWENT ENTERTAINMENT CENTRE MANAGEMENT AUTHORITY (A15687 & B751252) LOT 2: THE CROWN FOLIO REFERENCE F/R4651/45, F/R33936/1, NOTN 24/5346, SURR.31/9266 27A APP. (C.192563) GRANTEE WHOLE OF LOT 1 7.165ha VESTED IN THE DERWENT ENTERTAINMENT CENTRE MANAGEMENT AUTHORITY PART OF 427AC. G.T.D. TO G.F. READ		PLAN OF SURVEY BY SURVEYOR H. A. BROLSMA LOCATION CITY OF GLENORCHY SCALE 1: 2000 LENGTHS IN METRES		REGISTERED NUMBER P110871 APPROVED EFFECTIVE FROM 29 JUL 1994 Recorder of Titles
TASMAP CODE No 17 (SHEE No. 5225)	LAST UPI No 5832 5833	LAST SURVEY PLAN No D.33936	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	

NOT EXAMINED

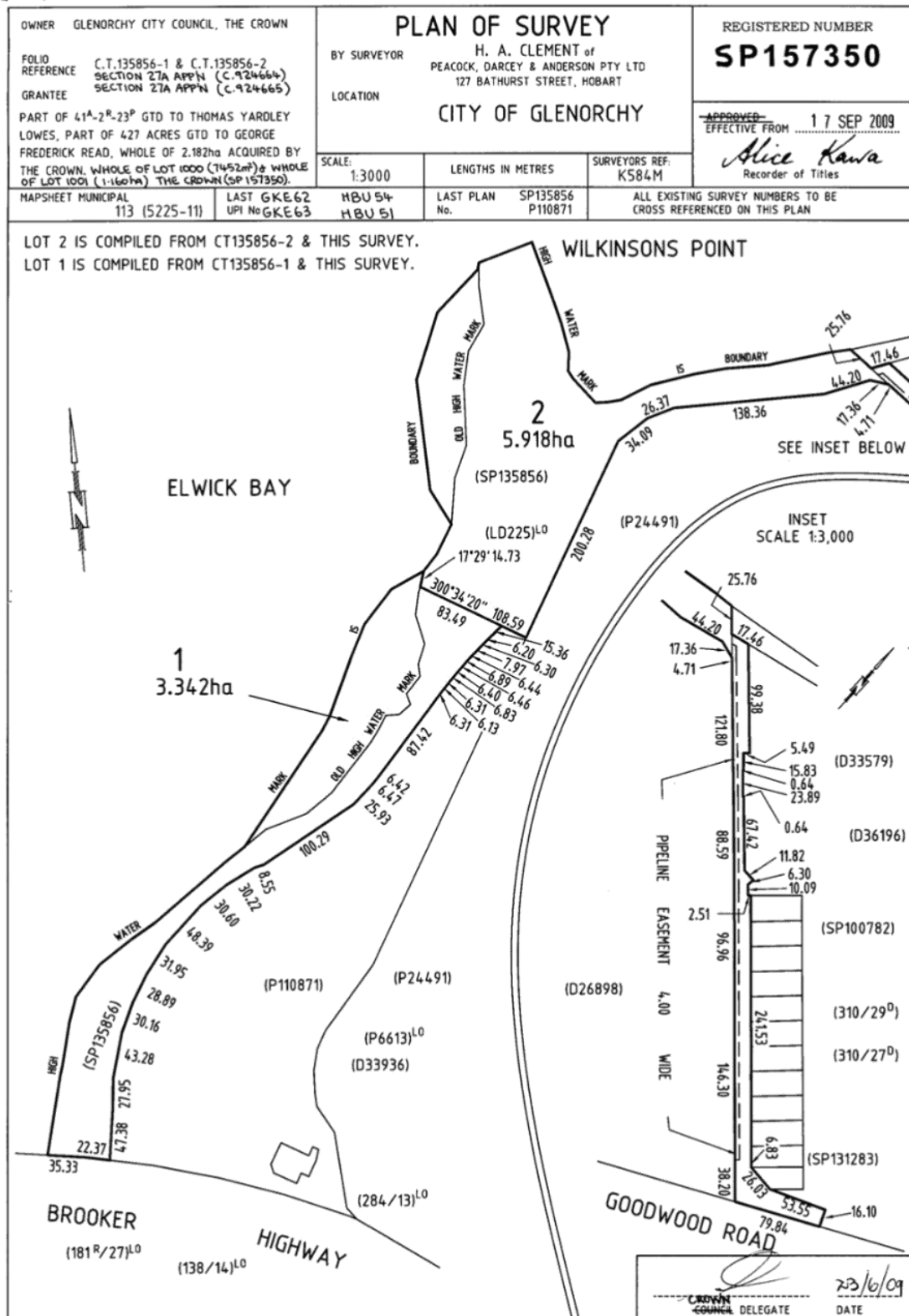




FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

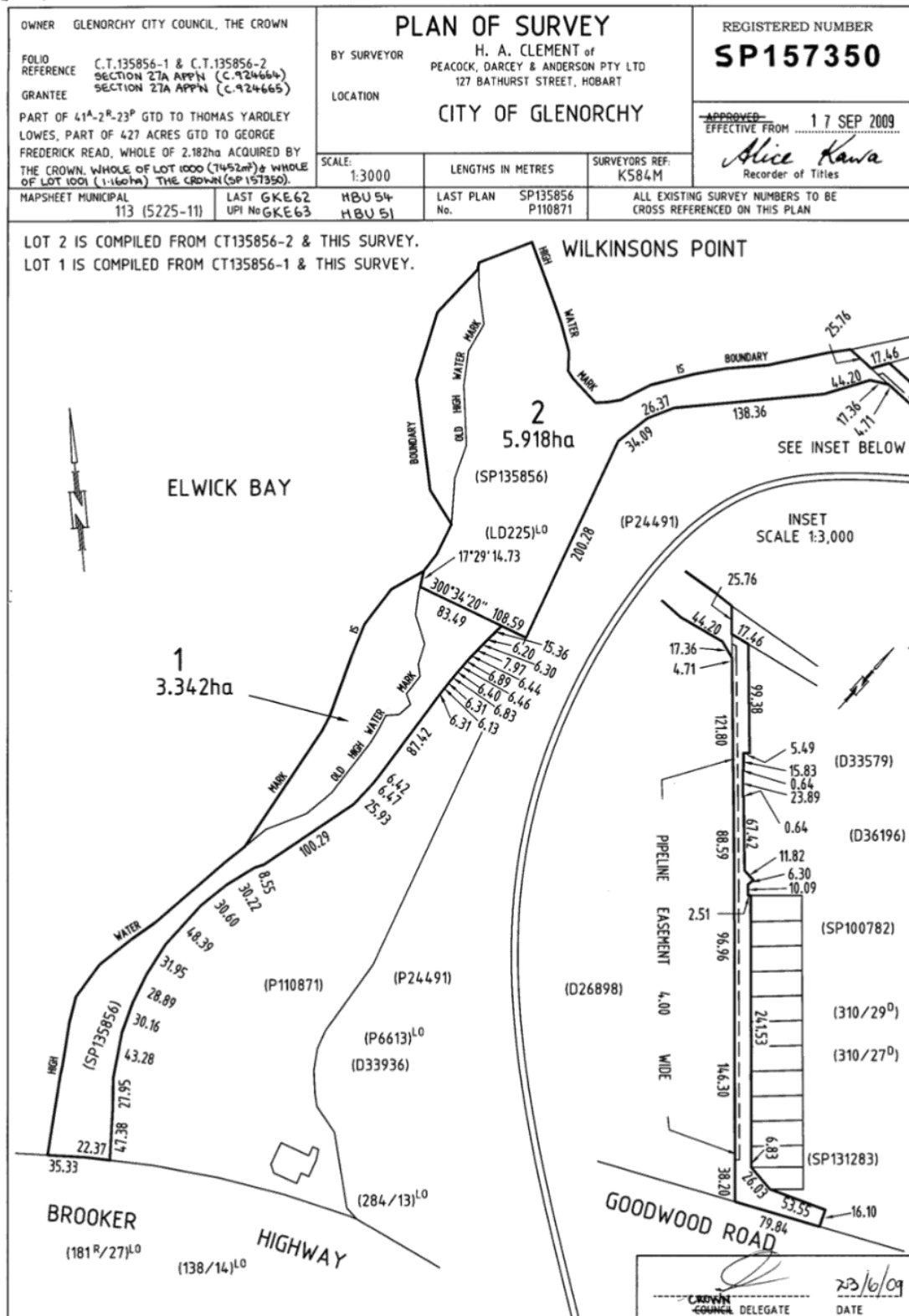




FOLIO PLAN

RECORDER OF TITLES

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APPENDIX B - COMPARATIVE USE TABLE



COMPARATIVE USE TABLE

NPR = No Permit Required

P = Permitted

D = Discretionary

X = Prohibited

USE CLASS Definitions included where relevant	COMMUNITY PURPOSE ZONE	OPEN SPACE ZONE	WPEB SAP Montrose Bay Community Park	WPEB SAP Elwick Bay Foresore Public Open Space	WPEB SAP Brooker Highway Frontage	WPEB SAP Derwent En- tertainment Centre	WPEB SAP Wilkinsons Point Visitor Service	RECREATION ZONE	**NEW SAP Precinct A - Sports and Entertain- ment	**NEW SAP Precinct B - Highway Precinct	**NEW SAP Derwent En- tertain- ment Centre Precinct	**NEW SAP Elwick Bay Public Open Space Precinct	**New SAP Precinct C - Landscape Precinct
Bulky Goods Sales	X	X	X	X	X	X	X	X	X	X	X	X	X
Business and Profession- al Services use of land for administration, clerical, technical, professional or similar activities. Examples include a bank, call centre, consulting room, funeral parlour, medical centre, office, post office, real estate agency, travel agency and veterinary centre.	P - only if office for a community- based organisation, otherwise Prohibited	X	X	X	X	X	X	D - only if office for a community- based organisation, or an office for a recreation-based organisation or a consulting room allied to a recreational use	P - only if supporting a permitted use on the site	X	D - only to support permitted uses on the site, otherwise Prohibited	X	X
Custodial Facility	X	X	X	X	X	X	X	X	X	X	X	X	X
Community Meeting and Entertainment use of land for social, religious and cultural activities, entertainment and meetings. Examples include an art and craft centre, church, cinema, civic centre, function centre, library, museum, public art gallery, public hall and theatre.	P - only if an art and craft centre or a public hall, otherwise D	D	P - only if for GASPI activities, D - only if for sporting, social and cultural events, otherwise prohibited	P only if for GASPI activities, otherwise Prohibited	D	P - Only if at the DEC or associated with a function centre (e.g. museum or food and wine pavilion) or for occasional sporting, social and cultural events, otherwise D	D - Only if an art and craft centre, public art gallery, museum or occasional, social and cultural events	D	P	P	P	P - Only if: for occasional or temporary sporting, social or cultural events; or for GASPI activities, events or infrastructure, otherwise Prohibited	P - Only if: for occasional or temporary sporting, social or cultural event, otherwise Prohibited.
Crematoria and ceme- teries	D	X	X	X	X	X	X	X	X	X	X	X	X
Domestic animal breed- ing, boarding and train- ing	X	D - only if for training animals, otherwise prohibited	X	X	X	X	X	D - only if for animal training, otherwise prohibited	X	X	X	X	X
Emergency Services	P	D	X	X	X	X	X	D	X	X	X	X	X
Educational and Occa- sional Care use of land for educational or short-term care purposes. Examples include a childcare centre, day respite facility, employment training centre, kindergarten, primary school, secondary school and tertiary institution.	P	X	P - only if for GASPI activities, D - only if undertaken within existing facilities or associated with management and maintenance of Elwick Bay - Wilkinsons Point foreshore area, otherwise Prohibited	X	X	X	X	D - only if a childcare centre on land described in CT 57408/1, CT 13468/1, CT 230303/1, CT109788/2, CT 218468/1, CT 216733/1 or CT 134490/1 [L1], or an employment training centre, otherwise Prohibited	D - Only if a childcare centre located in Sub- Precinct A1 or A2	D - Only if for childcare centre, otherwise Prohibited	X	X	X

USE CLASS Definitions included where relevant	COMMUNITY PURPOSE ZONE	OPEN SPACE ZONE	WP EB SAP Montrose Bay Community Park	WP EB SAP Elswick Bay Foresore Public Open Space	WP EB SAP Brooker Highway Frontage	WP EB SAP Derwent En- tertainment Centre	WP EB SAP Wilkinson's Point Visitor Service	RECREATION ZONE	**NEW SAP Precinct A - Sports and Entertain- ment	**NEW SAP Precinct B - Highway Precinct	**NEW SAP Derwent En- tertain- ment Centre Precinct	**NEW SAP Elswick Bay Public Open Space Precinct	**New SAP Precinct C - Landscape Precinct
Extractive Industry	X	X	X	X	X	X	X	X	X	X	X	X	X
Food Services use of land for preparing or selling food or drink for consumption on or off the premises. Examples include a café, restaurant and take-away food premises.	D	D	D only if kiosk, café, restaurant or take away food premises for occasional sporting, social and cultural events, otherwise prohibited	P - Only for occasional or temporary sporting, social or cultural events, or for GASPI activities, otherwise prohibited	D	P - Only if at the DEC or associated with a function centre (e.g. food and wine pavilion) or for occasional sporting, social and cultural events, otherwise prohibited	D - Only if: (a) a café or restaurant, or (b) a take away food premises if for occasional sporting, social and cultural events, otherwise prohibited	D	P - Except if a takeaway premises with a drive through facility D - Except if permitted	P - Except if a takeaway premises with a drive through facility D - Except if permitted	P - Except if a take-away premises with a drive through facility; or ancillary to permitted uses on the site, otherwise D	P - Only if: for occasional or temporary sporting, social or cultural events; or for GASPI activities, events or infrastructure, otherwise Prohibited	P
General retail and hire use of land for selling goods or services, or hiring goods. Examples include an adult sex product shop, amusement parlour, beauty salon, betting agency, commercial art gallery, department store, hairdresser, market, primary produce sales, shop, shop front dry cleaner, supermarket and video shop	X	D	D - Only if a recreational hire outlet providing recreational equipment to the users of the park and foreshore areas, otherwise prohibited	X	X	X	D - Only if a commercial art gallery, otherwise Prohibited	D	D	P - Only if for a shop D - Except if permitted	P - Only if for a market, otherwise D	P - Only if: for occasional or temporary sporting, social or cultural events; or for GASPI activities, events or infrastructure, otherwise Prohibited	P - only if for a premises associated with the sale, hire or repair of recreational equipment, otherwise Prohibited.
Hospital Services	P	X	X	X	X	X	X	X	X	X	X	X	X
Hotel Industry use of land to sell liquor for consumption on or off the premises. If the land is so used, the use may include accommodation, food for consumption on the premises, entertainment, dancing, amusement machines and gambling. Examples include a hotel, bar, bottle shop, nightclub and tavern.	X	X	X	X	X	X	D - except if bottleshop	X	P	X	X	X	X
Manufacturing and pro- cessing use of land for manufacturing, assembling or processing products other than Resource processing. Examples include boat building, brick making, cement works, furniture making, glass manufacturing, metal and wood fabrication, mineral processing and textile manufacturing.	X	X	X	X	X	X	X	X	X	X	X	X	X
Motor racing facility	X	X	X	X	X	X	X	X	X	X	X	X	X
Natural and cultural val- ues management use of land to protect, conserve or manage ecological systems, habitat, species, cultural sites or landscapes.	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR

USE CLASS Definitions included where relevant	COMMUNITY PURPOSE ZONE	OPEN SPACE ZONE	WPB SAP Montrose Bay Community Park	WPB SAP Elwick Bay Foresore Public Open Space	WPB SAP Brooker Highway Frontage	WPB SAP Derwent En- tertainment Centre	WPB SAP Wilkinsons Point Visitor Service	RECREATION ZONE	**NEW SAP Precinct A - Sports and Entertain- ment	**NEW SAP Precinct B - Highway Precinct	**NEW SAP Derwent En- tertain- ment Centre Precinct	**NEW SAP Elwick Bay Public Open Space Precinct	**New SAP Precinct C - Landscape Precinct
Passive Recreation use of land for informal leisure and recreation activities principally conducted in the open. Examples include public parks, gardens and playgrounds, and foreshore and riparian reserves.	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR
Pleasure boat facility use of land to provide fa- cilities for boats operated primarily for pleasure or recreation, including boats operated commercially for pleasure or recreation. An example is a marina.	X	D	D Only if a recreational hire outlet providing recreational equipment to the users of the river, otherwise Prohibited	D Only for the temporary mooring of vessels at the wharf and jetty facilities at Wilkinsons Point, otherwise Prohibited	X	X	X	D	X	X	X	D	X
Port and shipping use of land for: (a) berthing, navigation, servicing and maintenance of marine vessels which may include loading, unloading and storage of cargo or oth- er goods, and transition of passengers and crew; or; (b) maintenance dredging. Ex- amples include berthing and shipping corridors, shipping container storage, hard- stand loading and unloading areas, passenger terminals, roll-on roll-off facilities and associated platforms, ste- vedore and receipt offices, and a wharf.	X	X	X	D - Only for the temporary mooring of vessels and loading or unloading of visitors or passengers at wharf and jetty facilities at Wilkinsons Point, otherwise Prohibited	X	X	X	X	X	X	X	D - only if for temporary mooring of vessels and loading or unloading of passengers, otherwise Prohibited	X
Recycling and waste disposal	P only if waste transfer station, otherwise Prohibited	X	X	X	X	X	X	X	X	X	X	X	X
Research and develop- ment use of land for electronic technology, biotechnology, or any other research and development purposes, other than as part of an educational use.	X	X	X	X	X	X	X	X	X	X	X	X	X

USE CLASS Definitions included where relevant	COMMUNITY PURPOSE ZONE	OPEN SPACE ZONE	WP EB SAP Montrose Bay Community Park	WP EB SAP Elswick Bay Foreshore Public Open Space	WP EB SAP Brooker Highway Frontage	WP EB SAP Derwent En- tertainment Centre	WP EB SAP Wilkinsons Point Visitor Service	RECREATION ZONE	**NEW SAP Precinct A - Sports and Entertain- ment	**NEW SAP Precinct B - Highway Precinct	**NEW SAP Derwent En- tertain- ment Centre Precinct	**NEW SAP Elwick Bay Public Open Space Precinct	**New SAP Precinct C - Landscape Precinct
Residential use of land for self contained or shared living accommodation. Examples include an ancillary dwelling, boarding house, communal residence, home-based business, hostel, residential aged care home, residential college, respite centre, retirement village and single or multiple dwellings.	D - Only if residential aged care, respite centre or retirement village, or multiple dwellings for the aged or community housing, otherwise Prohibited	X	X	X	X	X	D - only for apartments that are located on the southern side of the primary access road, otherwise Prohibited	X	D - Only if for student accommodation and located in Sub-Precinct A1, otherwise Prohibited.	X	X	X	X
Resource Development use of land for propagating, cultivating or harvesting plants or for keeping and breeding of livestock or fishstock. If the land is so used, the use may include the handling, packing or storing of produce for dispatch to processors. Examples include agricultural use, aquaculture, bee keeping, controlled environment agriculture, crop production, horse stud, intensive animal husbandry, plantation forestry and turf growing.	X	X	X	X	X	X	X	X	P - if for a kitchen or community garden, otherwise Prohibited.	X	P - - if for a kitchen or community garden, otherwise Prohibited.	X	X
Resource Processing use of land for treating, processing or packing plant or animal resources. Examples include an abattoir, animal saleyard, cheese factory, fish processing, milk processing, winery and sawmilling.	X	X	X	X	X	X	X	X	D - only if for brewery, winery or distillery associated with a food services use, otherwise Prohibited	X	X	X	X
Service Industry use of land for cleaning, washing, servicing or repairing articles, machinery, household appliances or vehicles. Examples include a car wash, commercial laundry, electrical repairs, motor repairs and panel beating.	X	X	X	X	X	X	X	X	X	X	X	X	X
Sports and Recreation use of land for organised or competitive recreation or sporting purposes including associated clubrooms. Examples include a bowling alley, fitness centre, firing range, golf course or driving range, gymnasium, outdoor recreation facility, public swimming pool, race course and sports ground.	P	D	D	X	X	P - Only if at the DEC or associated with a function centre (e.g. food and wine pavilion), otherwise D	D	NPR - if provided by Council or agency, other permitted	P	P	P	P - Only if for occasional or temporary sporting, social or cultural events, otherwise Prohibited	X

USE CLASS Definitions included where relevant	COMMUNITY PURPOSE ZONE	OPEN SPACE ZONE	WPB SAP Montrose Bay Community Park	WPB SAP Elwick Bay Foreshore Public Open Space	WPB SAP Brooker Highway Frontage	WPB SAP Derwent En- tertainment Centre	WPB SAP Wilkinsons Point Visitor Service	RECREATION ZONE	**NEW SAP Precinct A - Sports and Entertain- ment	**NEW SAP Precinct B - Highway Precinct	**NEW SAP Derwent En- tertain- ment Centre Precinct	**NEW SAP Elwick Bay Public Open Space Precinct	**New SAP Precinct C - Landscape Precinct
Tourist Operation use of land specifically to attract tourists, other than for accommodation. Examples include a theme park, visitors centre, wildlife park and zoo.	P only if visitor centre, otherwise D.	D	X	X	D	D	D	D	X	X	X	X	X
Transport Depot and Distribution use of land for distributing goods or passengers, or to park or garage vehicles associated with those activities, other than Port and shipping. Examples include an airport, bus terminal, council depot, heliport, mail centre, railway station, road or rail freight terminal and taxi depot.	X	X	X	X	X	X	X	X	P - only if for commuter transit services in Sub-Precinct A2, otherwise Prohibited.	D - Only if in relation to commuter transit services, otherwise Prohibited.	X	P - Only if for a ferry terminal, otherwise Prohibited.	X
Utilities use of land for utilities and infrastructure including: (a) telecommunications; (b) electricity generation; (c) transmitting or distributing gas, oil, or power; (d) transport networks; (e) collecting, treating, transmitting, storing or distributing water; or (f) collecting, treating, or disposing of storm or floodwater, sewage, or siltage. Examples include an electrical sub-station or powerline, gas, water or sewerage main, optic fibre main or distribution hub, pumping station, railway line, retarding basin, road, sewage treatment plant, storm or flood water drain, water storage dam and weir.	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D	NPR - Only if for minor utilities, otherwise D
Vehicle fuel sales and services use of land primarily for the sale of motor vehicle fuel and lubricants, and if the land is so used, the use may include the routine mainte- nance of vehicles. An exam- ple is a service station.	X	X	X	X	X	X	X	X	X	X	X	X	X
Vehicle Parking use of land for the parking of motor vehicles. Examples include single and multi-storey car parks.	D	D	X	X	X	X	X	D	P	X	X	X	X

USE CLASS Definitions included where relevant	COMMUNITY PURPOSE ZONE	OPEN SPACE ZONE	WPB SAP Montrose Bay Community Park	WPB SAP Elwick Bay Foreshore Public Open Space	WPB SAP Brooker Highway Frontage	WPB SAP Derwent En- tertainment Centre	WPB SAP Wilkinsons Point Visitor Service	RECREATION ZONE	**NEW SAP Precinct A - Sports and Entertain- ment	**NEW SAP Precinct B - Highway Precinct	**NEW SAP Derwent En- tertain- ment Centre Precinct	**NEW SAP Elwick Bay Public Open Space Precinct	**New SAP Precinct C - Landscape Precinct
Visitor accommodation use of land for providing short or medium term accommodation for persons away from their normal place of residence. Examples include a backpackers hostel, bed and breakfast establishment, camping and caravan park, holiday cabin, holiday unit, motel, overnight camping area, residential hotel and serviced apartment.	X	X	X	X	X	X	D - only if a motel or serviced apartments	X	P - only if for a hotel or serviced apartments and located in Sub- Precinct A1 D - Except if permitted and only if located in Sub Precinct A1, otherwise Prohibited	X	X	X	X
HEIGHTS	P - 10 D - 12M	P - 6.5M D - No Figure	P - 5m or 1 storey (which- ever is the lesser) D - No Figure	No development standards	P - 7.2 - 10m or 2 storeys D - No Figure	P - 8m D - 8m, except for an architectural element	P - SPA Min: 6m - Max: 7.2m or 2 storeys SPB Min: 6m to 14m - Max: 7.2m to 17.5m SPC1 Min: 6m - Max: 7.2m or 2 storeys SPC2 Min: 10m - Max: 12.5m SPC3 Min: 14m - Max: 20m	P - 10m D - No Figure	P - A1 - 40m A2 - 18m A3 - 10m D - No Figure	P - B1 - 22m B2 - 10m D - No Figure	P - 12m D - No Figure	P - 5m D - No Figure	P - 10m D - No Figure

APPENDIX C - SPORTING TYPOLOGY PRECEDENTS



WILKINSONS POINT STADIUM MIXED USE PRECINCT PRECEDENTS

Background

- Basketball arena is a core element of 'The Link' Master Plan prepared for teh East Perth Redevelopment Authority.
- Regeneration of urban blocks within the city of Perth.
- Basketball arena constructed, as an early delivery within the framework of the wider master plan.
- Adjacent sites yet to be redeveloped.

Notable design features

- Striking architectural design of basketball arena
- a distinctive landmark building.
- High quality public realm around the stadium, linking new plaza spaces to established pattern of streets.
- Opportunity sites for mixed use development on neighbouring land parcels.



1 'The Link' Master Plan Study Area: BEFORE development
• Source: The Link Master Plan - wa.gov.au



2 Perth Arena location, East Perth, adjacent established road and rail corridors.
• Source: Google Earth



MASTERPLAN NOTES

- Perth Arena and Plaza, with below-ground parking.
- Milligan Street extension - for bus movement to and from the bus terminal and minor access for cars.
- Proposed bus only bridge between James Street and bus terminal.
- Intuitive new development activating Ross Street, that may potentially extend over railway land in the future.
- Opportunity for building of mixed land uses over the railway.
- Potential bridge over railway and subway, creating a new open space.
- Ross Street streetscape improved, including designated street parking, three metre shared path and widened footpaths.
- Shared surface street and linear park along City Milligan Street alignment and over services corridor.
- Entertainment Centre land can be developed independently with commercial along Milligan Street and a predominance of residential development in the remainder.
- Central square and low key street with a pedestrian bridge to Ross Street extending the connection from Studio Lane.
- Milligan Street to become a grand boulevard with a 14-metre northern promenade, a wider southern footpath, car street parking and cycle lanes in a slow speed environment.
- King Street and Lake Street connected to form a two-way, pedestrian friendly street within a vibrant public square.
- Green Street alignment extended to create pedestrian-oriented street and a small square.
- East-west busway/corridor for pedestrians, and street buses for taxis and service vehicles, both running above the underground bus terminal concourse.
- Iconic bridge structure created as Celebration Place, with active edges along William Street and the northern face of the bridge.
- A landmark building, covering the Farncombe tunnel, with an active ground floor and a roof structure covering most of Celebration Place.

3 'The Link' Master Plan Study Area

- Source: The Link Master Plan - wa.gov.au

PRECEDENT 3: PERTH - 'THE LINK' MASTER PLAN, EAST PERTH, WA



WILKINSONS POINT
STADIUM MIXED USE PRECINCT PRECEDENTS

Background

- Gabba Stadium Master Plan prepared by Populous
- 2018 master plan proposals
- Opportunity to integrate new commercial uses
- Transport: close proximity to proposed cross-river rail project
- Heritage considerations to retain listed former police station (proposed sports museum).

Notable design features

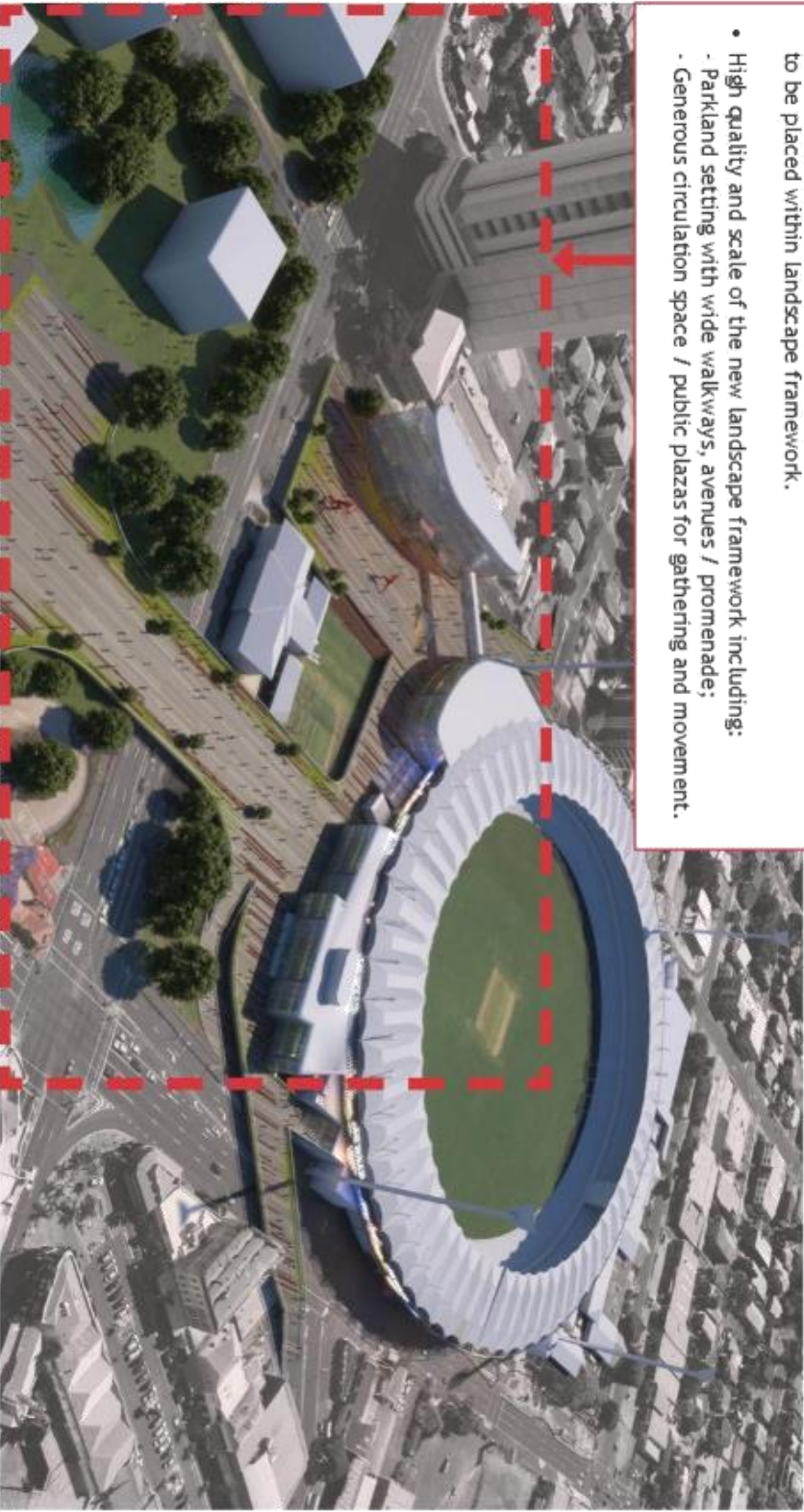
- Public open space: wide circulation space, sufficient to accommodate large crowds (match day + public transport).
- Mixture of hard and soft landscape design
- Visual connection from street to stadium: strong legibility
- Electronic visual display 'wrap-around' feature on stadium facade / elevation to main public space and street.



1 Left, Gabba Stadium Master Plan
• Source: brisbanetimes.com.au



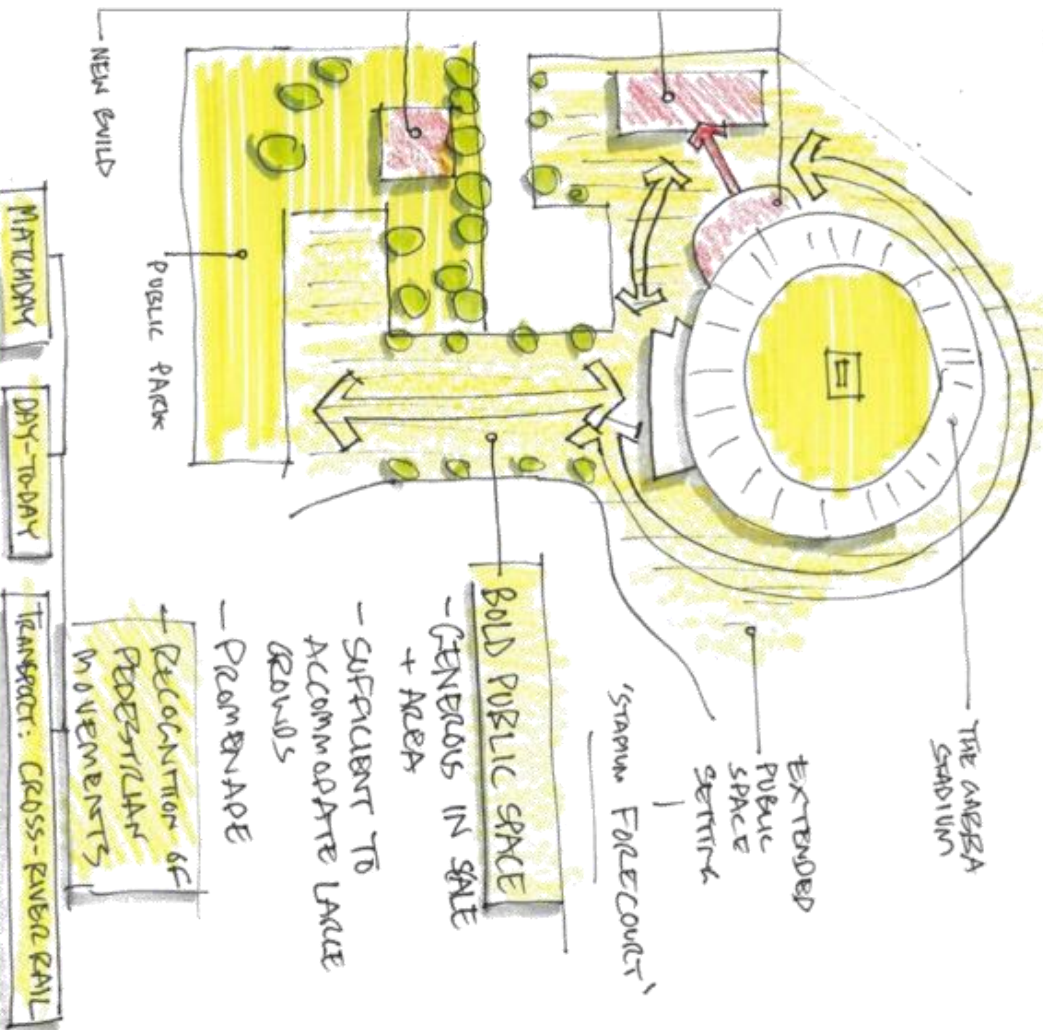
2 Above, Gabba Stadium Master Plan, visualisation
• Source: brisbanetimes.com.au



3 Gabba Stadium Master Plan visualisation
• Source: populous.com

PRECEDENT 1: THE GABBA STADIUM MASTER PLAN,
BRISBANE, QLD

GABBA STADIUM MASTER PLAN
BRISBANE, QUEENSLAND



VALUES & TRANSFERABLE LESSONS:

- Built form of larger scale and massing can be accommodated in a generous parkland setting
 - Opportunities for new mixed use buildings to be placed within landscape framework.
- Importance of high quality public realm design for:
 - soft landscape (parks, reserves, including opportunity to integrate existing trees); and
 - hard landscape (plazas, public squares, circulation areas around buildings including arena).
- Large scale of public open space: wide plazas and linear parks/routes,
 - sufficient scale to accommodate many people (match day crowds and regular visitors).
- Direct line of sight from street to destination (arena), for legibility, orientation & placemaking.
 - Views through public space: vistas along and through streets, spaces and landscape.

WILKINSONS POINT STADIUM MIXED USE PRECINCT PRECEDENTS

Background

- Western Sydney Stadium recently completed, 2019.
- Stadium design by Populous.
- Redevelopment of former stadium on same site.
- Transport: close proximity public transport, river and rail.
- Central location in heart of community, close to city centre, also set within parkland setting adjacent to river.

Notable design features

- Public open space: wide circulation space, sufficient to accommodate large crowds (match day + public transport).
- Mixture of hard and soft landscape design
- Visual connection from street to stadium: strong legibility
- Public plazas, promenades and walking routes link to existing streets, parks, public spaces and riverside.



1 Proposed linear park with walkways, adjacent to stadium
• Source: infrastructure.nsw.gov.au



2 Linear parkway with walkways, recreation & play
• Source: infrastructure.nsw.gov.au

3 Western Sydney stadium: public realm and connections
• Source: irenelinc



Key:

1. Redeveloped stadium.
2. Plaza public space encircles stadium, links to streets.
3. Parkland setting.
4. Riverside aspect and connection.
5. Active travel links to:
6. ... existing street,
7. ... public spaces,
8. ... riverside walk,
9. ... high street
10. ... Parramatta rail station.

PRECEDENT 2: WESTERN SYDNEY STADIUM, PARAMATTA, NSW



4 'Riverside terraces' visualisation, stadium adjacent park
• Source: infrastructure.nsw.gov.au



5 WSS DA Master Plan
• Source: infrastructure.nsw.gov.au



6 WSS Stadium location, N/W of Parramatta centre, river & rail.
• Source: Google Earth

VALUES & TRANSFERABLE LESSONS:

- Public transport and active travel connections are prominent and easily accessible.
- walking & cycling routes link stadium precinct to urban centre via other parks & spaces; and river ferry services within walking distance; and rail and bus services within walking distance.
- 'Watch and play':
 - stadium caters for spectators to watch top level sport; and
 - opportunities to participate in sport provided in public space around the stadium, including: play equipment & fitness areas; level grassed areas for informal sport & recreation.
- Variety of high quality spaces inc.:
 - soft landscape (parks, integration of existing trees); and
 - hard landscape (plazas, circulation areas around sports arena).





RETAIL AND ECONOMIC IMPACT AND COMMUNITY BENEFIT APPRAISAL

DRAFT REPORT | Prepared for
SEPTEMBER 2019 | Ireneinc

Independent
insight.



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1. INTRODUCTION

SGS Economics and Planning have been engaged to prepare a Retail and Economic Impact Assessment, and Community Benefit Appraisal of Wilkinsons Point to inform the proposed development and associated special area plan amendment.

1.1 The proposal

The proposal consists of sports and entertainment-related development across five precincts and the upgrade of the Derwent Entertainment Centre for it to host major sporting events (including NBL), performing acts, exhibitions and trade shows and smaller private and corporate events. The DEC would host and attract an NBL team to Tasmania.

The five precincts are:

1. Wilkinsons Point Entertainment Precinct (entertainment, food, reception centre)
2. Brooker Highway Frontage Precinct (shopping centre, entertainment)
3. Hotel Precinct (accommodation)
4. Sports Precinct (indoor sports centre)
5. Wilkinsons Visitor Service Precinct (restaurants, bars, promenade, observation point)

The proposed development will generate a range of economic impacts on the local economy, including expanding on the existing retail hierarchy. The attraction of major events would generate additional spending in the local economy. The entire development would provide and widen a range of services and activities for the local and wider population.

1.2 Purpose of this Report

For the proposed development to be able to proceed, it requires the special area plan to be amended. At present, the plan does not allow for retail in most of the areas.

To inform the proposed development and associated special area plan amendment, there is a need to understand better:

- The impact of the proposed retail components in the precincts on the existing retail hierarchy and offer in the catchment area;
- The economic impacts of the entire proposed development on the Glenorchy economy; and
- The social, environmental and economic costs and benefits of the entire proposed development.

This interim report includes:

- A retail impact assessment of the impact of the proposed development on the existing retail offer in the catchment areas. This includes analysis of existing and planned supply and current and future demand for retail in the catchment area; and
- An economic impact assessment (EIA) of the entire development providing an estimation of the value the project will add to the local and economy and the number of jobs it will create.

A future version of the report will also include a high-level cost-benefit analysis of the entire development in terms of social and economic consequences (and environmental where applicable).

2. RETAIL IMPACT ASSESSMENT

This section details and reports on the impact of the proposed retail components in the precincts on the existing retail hierarchy and offer in the catchment area.

2.1 Methodology

Defining retail catchment and relevant retail market segments

To define the catchment that would be impacted by the new retail at Wilkinsons Point, plans for the site and relevant planning documents (regional land use strategy, retail hierarchy documents, and relevant Council planning and economic development strategies) were reviewed.

It is anticipated that the retail offer at Wilkinsons Point will be focussed around sports and recreation, and not necessarily mirror the entire spectrum of retail offer one would typically see across local suburbs. This includes specialised sports goods and branded apparel and high-quality food and beverage venues.

Given that this retail offer is of a higher order, the offer will serve a much wider catchment than just the Glenorchy local government area. People would be willing to travel to access the collection of sports stores and food and beverage establishments provided. For that reason, the geographic catchment in this study has been defined as 'Greater Hobart' which includes the local government areas of Brighton, Clarence, Hobart and Glenorchy.

The exception to the above is a separate analysis of the fast-food hospitality components of the redevelopment. This offer is assumed to serve the local Glenorchy area only, i.e. people wouldn't travel from other areas further away to access the fast food hospitality as it is likely available in their own local area.

The relevant retail market segments for the analysis were identified as big-box sports retail, specialty sports retail, food and beverage, and fast food.

2.2 New supply

Based on the plans provided by FK Architects, the full buildout of retail floorspace (GFA) is some 8,820 sqm of sports retail specialty stores, 6,975 sqm of food and beverage hospitality and 2,658 sqm of fast food hospitality, as shown in Table 1.

TABLE 1: PROPOSED NEW RETAIL SUPPLY

Precinct	Use	GFA	Notes
Highway	Big Box Sport Retail	5,820	3 large anchor store spaces, two on level 1, one on ground floor
Highway	Specialty Sports Retail	3,000	2 small spaces and space adjacent to anchor
Highway	Fast food	2,658	2 large or 4 small fast food stores, one large drive-thru
Highway/Sports	F&B	6975	Several 2 storey high quality food and beverage offerings overlooking the River, including hotel restaurant/bar

Source: FK Architects, 2019

In addition, there is 6,538 sqm of GFA for sports activities (bowling, rock climbing, indoor skiing, latitude) that have not been considered as a retail component for this analysis.

The estimated turnover (or retail expenditure) of the new retail (full build-out) has been estimated using retail turnover density (RTD) assumptions sourced from Urbis Loop.

The estimated annual turnover of the proposed retail at the DEC site are shown in Table 2.

TABLE 2: ESTIMATED PER ANNUM TURNOVER OF THE NEW RETAIL OFFER

Retail use	Store type	Turnover (per annum)
Big Box Sport Retail	Specialty Store	\$21,180,000
Specialty Sports Retail	Specialty Store	\$6,663,000
Fast food	Hospitality	\$10,267,000
F&B	Hospitality	\$37,830,000
Total		\$75,940,000

Source: SGS Economics and Planning, 2019

These retail expenditure estimates provide an understanding of the additional supply of retail proposed. This additional supply can then be compared with demand to determine whether the proposed retail at Wilkinsons Point is likely to align with demand or whether it would generate an oversupply, and to what extent.

2.3 Demand forecast

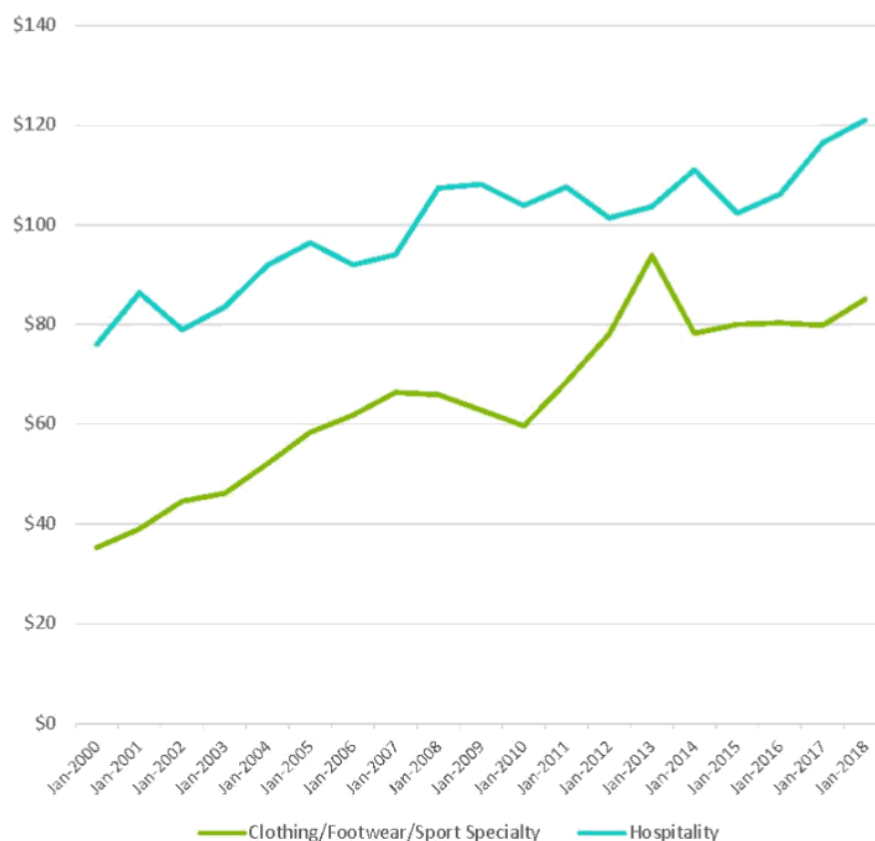
To estimate the demand for sports and food and beverage retail in the catchment area, both present-day and future:

- The present-day and future population of Glenorchy LGA and the catchment area were determined. The population was forecast out into the future by using State Government population projections.
- Total Glenorchy and Greater Hobart retail expenditure by commodity group (sports specialty store and hospitality) were estimated using MarketInfo expenditure data for the catchment area. This takes account of the relationship between retail spending and local demographics characteristics.
- Per capita trends in expenditure on sports retail and hospitality were also included. As shown in Figure 1, per capita spending on clothing/footwear/sports specialty and hospitality has been increasing in real terms (i.e. minus inflation). In the past four years, expenditure on clothing/footwear/sports specialty has been increasing by 2.1% per annum and hospitality by 2.2% per annum.
- Once retail expenditure in the catchment was calculated, leakages were removed. For example, it was assumed that 6% of expenditure on sports equipment would be spent online¹ and not in the catchment area. Similarly, it is assumed that 25% of fast food expenditure by Glenorchy residents will be spent outside of the Glenorchy LGA (remembering that the catchment for fast food is the Glenorchy local government area only).
- There is also an arbitrary discount of 50% for expenditure on restaurant/Café/Takeaway and Clothing/Shoes as a conservative assumption to reflect that not all growth in these expenditure categories will be competing with the goods on offer at the centre (e.g. business suits, evening wear are not offered at the sports retailers).

¹ As estimated by the Productivity Commission (2011)

The above calculations produced the expenditure forecasts, as shown in Table 3.

FIGURE 1: PER CAPITA MONTHLY SPEND ON SPORTS RETAIL AND HOSPITALITY IN TASMANIA – IN REAL TERMS



Source: ABS Cat 8501 Retail Turnover, State by Industry Subgroup, Trend

TABLE 3: CATCHMENT RETAIL PER ANNUM EXPENDITURE FORECASTS BY CATEGORY

Retail category		2019	2024	2029	2034
Big Box Sport and Specialty Sport Retail (Greater Hobart)	Expenditure per annum	\$82,984,451	\$96,024,466	\$110,901,575	\$127,627,636
	Additional per annum expenditure		\$13,040,015	\$27,917,124	\$44,643,185
Food and beverage hospitality (Greater Hobart)	Expenditure per annum	\$140,661,323	\$163,408,404	\$189,310,745	\$218,436,316
	Additional per annum expenditure		\$22,747,082	\$48,649,423	\$77,774,993
Fast food hospitality (Glenorchy only)	Expenditure per annum	\$29,272,102	\$33,648,147	\$38,774,116	\$44,630,338
	Additional per annum expenditure		\$4,376,045	\$9,502,014	\$15,358,236

Source: SGS Economics and Planning, 2019

The additional expenditure per annum can be captured by the new retail offer proposed at the DEC. If only new expenditure is captured, the proposal will have no impact on existing retail in the catchment area.

2.4 Impact analysis

Full build-out of retail floorspace

The table below compares the supply and the demand analyses to determine whether the proposed retail at Wilkinsons Point is likely to align with demand or whether it would generate an oversupply and to what extent.

The proposed development would result in an oversupply of retail floorspace if completed in full before 2024, but demand growth driven by increasing population and higher real expenditure per capita will be sufficient to sustain the specialty retail (i.e. sports goods and apparel) and F&B activities at Wilkinson's Point by 2029.

While the supply of fast food space shows a negative impact in 2029, this impact is well under a million dollars, or less than a year's worth of expenditure growth for Glenorchy, and its size is equivalent to a rounding error. For planning purposes, it is expected that there will be sufficient demand to support this development in 2029.

TABLE 4: IMPACT OF PROPOSED RETAIL DEVELOPMENT – FULLY BUILT IMMEDIATELY

Retail category		2024	2029	2034
Big Box Sport and Specialty Sport Retail (Greater Hobart)	Additional p.a. expenditure in catchment	\$13,040,000	\$27,917,000	\$44,643,000
	Proposed floorspace at DEC (sqm)	8,820	8,820	8,820
	Expected turnover at redeveloped DEC	\$27,842,951	\$27,842,951	\$27,842,951
	Impact on existing retail centres in catchment	Negative impact (\$14,802,936)	No impact	No impact
	Oversupply of floorspace (sqm)	3,188	0	0
Food and beverage hospitality (Greater Hobart)	Additional p.a. expenditure in catchment	\$22,747,082	\$48,649,423	\$77,774,993
	Proposed floorspace at DEC (sqm)	6,975	6,975	6,975
	Expected turnover at redeveloped DEC	\$37,830,413	\$37,830,413	\$37,830,413
	Impact on existing retail centres in catchment	Negative impact (\$15,083,331)	No impact	No impact
	Oversupply of floorspace (sqm)	2,225	0	0
Fast food hospitality (Glenorchy only)	Additional p.a. expenditure in catchment	\$4,376,045	\$9,502,014	\$15,358,236
	Proposed floorspace at DEC (sqm)	2,658	2,658	2,658
	Expected turnover at redeveloped DEC	\$10,266,750	\$10,266,750	\$10,266,750
	Impact on existing retail centres in catchment	Negative impact (\$5,890,705)	Minor negative impact (\$764,736)	No impact
	Oversupply of floorspace	1,220	158	0

Source: SGS Economics and Planning, 2019

Staged build-out of retail floorspace

Given that there is no impact by the proposal by 2029, a staged approach to building out the site is a method that would lead to the proposal having no adverse impact on existing retail sites.

Table 5 below demonstrates a staged approach where retail floorspace is more gradually build-up resulting in no adverse impacts on existing retail in the catchments.

TABLE 5: IMPACT OF PROPOSED RETAIL DEVELOPMENT – STAGED APPROACH

Retail category		2024	2029	2034
Big Box Sport and Specialty Sport Retail (Greater Hobart)	Additional p.a expenditure in catchment	\$13,040,015	\$27,917,124	\$44,643,185
	Proposed floorspace at DEC (full)	4,092	8,820	8,820
	Expected turnover at redeveloped DEC	\$12,916,833	\$27,842,951	\$27,842,951
	Impact on existing retail centres in the catchment	No impact	No impact	No impact
Food and beverage hospitality (Greater Hobart)	Additional p.a. expenditure in catchment	\$22,747,082	\$35,724,718	\$62,898,214
	Proposed floorspace at DEC (full)	3,480	6,975	6,975
	Expected turnover at redeveloped DEC	\$18,874,528	\$37,830,413	\$37,830,413
	Impact on existing retail centres in the catchment	No impact	No impact	No impact
Fast food hospitality (Glenorchy only)	Additional p.a. expenditure in catchment	\$4,376,045	\$9,502,014	\$15,358,236
	Proposed floorspace at DEC (full)	1,000	2,500	2,658
	Expected turnover at redeveloped DEC	\$3,862,585	\$9,656,462	\$10,266,750
	Impact on existing retail centres in the catchment	No impact	No impact	No impact

Source: SGS Economics and Planning, 2019

The above tables are based on analysis that assumes that no additional future supply apart from the proposed development is built. It is also assumed that existing stores in the catchment area are currently trading at acceptable levels meaning there is no unmet demand at present.

This analysis only focuses on sports-related retail, for example sneakers, fitness wear, sports gear and outdoor equipment; plus fast food and food and beverage service. It does not make any assessment of supply and demand for other retail floorspace such as professional, evening and fashion clothing; homewares, electrical and so forth. There is scope for additional retail space to come online between now and 2029 in addition to Wilkinson's Point without oversupplying the market, as long as this retail does not target sports retail.

Another omission is expenditure inflows from outside the catchment area, for example, guests at the hotel and spectators at events at the DEC. These impacts are thought to be small in comparison to spending from the greater Hobart region, none-the-less this expenditure would lead to a marginally higher supportable floor space.

2.5 Conclusion

The interim results suggest that the proposed level of floor space will be supportable at a 15-year horizon (2029). That is, demand growth driven by increasing population and higher real expenditure per capita will be sufficient to sustain the specialty retail (i.e. sports goods and apparel) and hospitality activities at Wilkinson's Point without reducing the turnover of existing competing stores.

However, the full development will not be supportable in 2024.

Timing of delivery of fast food space

Although the full fast food space of 2658 square metres is not supportable by 2029, it is not efficient to delay the construction of 158 square metres of fast food space. Also, this quantity is no more than a rounding error in a ten year projection of demand. For this reason, it is reasonable to say that growing demand will support the full development by 2029, and the economic impact assessment and community assessment will be conducted on this basis.

The table below shows the floor space of a staged development approach (which incrementally increases floorspace so as to not negatively impact existing competing retail).

TABLE 6: SUPPORTABLE FLOOR SPACE AT DEC SITE

Precinct	Use	GFA supportable		
		2024	2029	2034
Highway	Big Box Sport Retail	2,700	5,820	5,820
Highway	Specialty Sports Retail	1,392	3,000	3,000
Highway	Fast food	1,000	2,658	2,658
Highway	F&B	730	730	730
Sports	F&B	2,750	6,245	6,245

3. ECONOMIC IMPACT ASSESSMENT

An Economic Impact Assessment (EIA) generates an estimate of the level of economic activity associated with project implementation by tracing how the economic stimuli accumulate in an economy through multiple rounds of economic transactions. When a new development (such as the redevelopment of the DEC) brings new expenditure into a local economy, this has positive economic benefits including new jobs and income.

3.1 The modelling framework

The EIA assessed the impact on the regional economy of the proposed works at Wilkinsons point. The assessment identified how direct impacts such as a) precinct construction and b) operating expenditures, and c) the consumer expenditures attracted to the region by the precinct, translate through multiple rounds of transactions into overall changes in regional economic measures such as:

- Jobs created/ supported. This includes both direct jobs at the precinct, but also flow-on jobs in connected industries, such as suppliers.
- Value-added to gross regional product (GRP). This is a measure of the income generated, including wages, profits and taxes.

The basic steps in undertaking an EIA include:

- Isolating how the project stimulates the regional economy (direct impacts).
- Generating region-specific econometric models and subsequently deriving economic multipliers for major regional industry groups.
- Applying these multipliers (by relevant industry group) to the direct impacts to estimate total regional impacts in terms of regional (output) value-added and employment.

The model examines how the proposed development affects the economy through all of the upstream and downstream linkages. The assessment traced all the flow-on effects – ‘production’ and ‘consumption’ induced effects - in the local / regional economy, to estimate the direct and indirect effects of the turnover generated during the proposal’s construction and operational phases.

The region of analysis is defined as greater Hobart and includes the municipalities of Glenorchy, Brighton, Hobart and Clarence.

The timeframe for the analysis extends from 2020 to 2029. It considers a staged approach to the building out of the retail components at Wilkinsons Point.

The EIA in this section captures the economic impacts only and gives no consideration to other economic, social or environmental costs or benefits that the project may generate. These broader impacts are considered in the CBA.

3.2 Assessed economic impacts

There are a number of impacts that improve the economic outcomes of Glenorchy and greater Hobart due to the construction of the various elements and the redevelopment of the DEC.

Economic impacts are generated from construction which will increase demand for materials and services, driving flow-on effects through the regional economy; and once operational the renewal of the DEC and operation of the hotel, food and beverage establishments, retail offer, gyms and sports activities will generate additional expenditure in the region. This expenditure is the operating costs of the various components, which includes payments to suppliers, wages, business services (cleaning, accounting, insurance etc) which inject new money into the local economy.

These outcomes are measured at a high level by changes in real gross regional product (GRP) in terms of value-added. GRP is a commonly used measure of the net output of an economy (that is, the total output minus business inputs).

It follows that the increase in economic activity generated will support an increase in employment in the region. This increase in employment is articulated via new full-time equivalent (FTE) jobs and consists of 'new' employment only. Jobs that are transferred from elsewhere in the economy are excluded from the impact assessment.

3.3 Results

The economic impacts are considered in two stages; the construction phase, and the operational phase. The operational impacts from retail and food and beverage business expenditure are also considered in two different years (2024 and 2029) reflecting a staged build-out of the site as shown in Table 6.

Construction phase

With a staged approach, the and planning and construction of the various elements on the site will occur over a 10-year time period, assumed to be 2020 to 2029 for the analysis.

Indicative construction costs for the hotel (\$80 million) and the redevelopment of the DEC (\$35 million) were provided by the client. The construction costs of the other components were broadly estimated using Rawlinsons Australian Construction Handbook 2019. The Handbook provides an average cost per square metre range for a wide selection of buildings.

SGS used the square metre cost estimates from Rawlinsons and the size of the proposed uses to estimate the construction costs. These estimates are indicative, and useful only to gauge a broad understanding of the likely level of economic impact.

The estimated construction costs are:

- \$35 million for the renovation and renewal of the DEC (as provided by the client)
- \$80 million for the Promontory Hotel and Reception (as provided by the client)
- \$25 million for the retail components
- \$64 million for the food and beverage components
- \$14 million for the active sports components
- \$31 million for multi-story carparking
- \$500,000 for landscaping around buildings

The total estimated construction costs are \$260 million. The economic impacts of the construction effort are outlined in Table 7.

The direct stimulus (capital costs of construction) captured in the greater Hobart economy, is expected to generate \$6.7 million in direct regional value-added and support up to 42 full-time equivalent (FTE) jobs per annum over the 10 year construction period, as shown in Table 7. The figures are an average per annum; some years will see much higher impacts

(particularly the early years) when the construction effort is peaking, while other years will be lower than the average (between construction stages).

In addition, economic supplier and contractor linkages imply flow-on effects, which are shown in the table below. When the flow-on effects are incorporated, this stimulus translates to a combined (direct and indirect) economic impact of:

- Output \$52.3 million per annum over ten years
- Value-added to GRP \$18.1 million per annum over ten years
- Employment 129 FTE jobs supported, in the region, per annum

TABLE 7: PER ANNUM ECONOMIC IMPACTS – CONSTRUCTION PHASE (10 YEARS)

Source of Stimulus	Output	Value-added to GRP	Employment (FTE)
Direct	\$26,020,000	\$6,740,000	42
Flow-on impacts	\$26,350,000	\$11,330,000	87
Total	\$52,360,000	\$18,080,000	129

Source: SGS Economics and Planning, 2019

Over the entire construction period, the works will add \$180 million worth of value to the regional economy and support 1,287 years' worth of FTE jobs.

Operational phase

The SGS model is also used to estimate the permanent economic impact of ongoing operations at the proposed developments by industry, namely retail trade, food and beverage services, accommodation and sports and recreation. These impacts are based on operating expenditure estimates prepared by SGS.

Retail trade

Based on the plans provided by FK Architects, the full build-out of retail floorspace (GFA) is some 8,820 sqm of retail stores, as shown in the retail impact assessment.

The expenditure generated in these stores provides an economic stimulus to the local economy. Expenditure is estimated using the retail turnover estimates from section 2, with the expenditure component (i.e. the costs of operation) estimated using Australian Industry data from the ABS² which shows that total expenses are some 96% of revenue for the retail industry. At full build-out, the expenditure from the retail components totals \$27.8 million per annum.

The table below shows the results of the I-O model for retail trade. The table below reflects the staged approach from Table 5.

In stage one, the direct stimulus in retail trade is expected to generate \$7.2 million in direct regional value-added per annum and support up to 97 FTE jobs at Wilkinsons Point (Table 8). The impact rises to \$15.5 million and 295 jobs onsite once the retail offer is fully built-out in 2029.

In addition, economic supplier and contractor linkages generate flow-on effects, which are shown in the table. When the flow-on effects are incorporated, this stimulus translates to a combined (direct and indirect) economic impact of:

- Output \$50.5 million per annum from 2029
- Value-added to GRP \$27.6 million per annum from 2029
- Employment 295 FTE jobs supported, per annum from 2029

² ABS (2019). Australian Industry, 2017-18, Table 1 Key data by industry subdivision

TABLE 8: PER ANNUM ECONOMIC IMPACTS – RETAIL TRADE INDUSTRY

RESULTS	Stage 1	Stage 2	Stage 3
	2024	2029	2034
Output			
Direct	\$12,410,000	\$26,760,000	\$26,760,000
Flow-on impacts	\$11,030,000	\$23,780,000	\$23,780,000
Total	\$23,440,000	\$50,530,000	\$50,530,000
Value Added to GRP			
Direct	\$7,190,000	\$15,500,000	\$15,500,000
Flow-on impacts	\$5,630,000	\$12,140,000	\$12,140,000
Total	\$12,820,000	\$27,640,000	\$27,640,000
Employment			
Direct	97	210	210
Flow-on impacts	40	86	86
Total	137	295	295

Source: SGS Economics and Planning, 2019

There are currently 2,415 people employed in the retail industry in the Glenorchy LGA³; 48% of whom are employed full-time. Assuming that half of the 300 or so new direct jobs at Wilkinsons point are full-time after stage 2, with the others casual or part-time, the retail offer at the site will increase the size of the retail industry in the Glenorchy LGA by nearly 20% (based on present-day employment).

Food and beverage

Based on the plans provided by FK Architects, the full build-out of food and beverage floorspace (GFA) is some 6,975 sqm of food and beverage hospitality and 2,658 sqm of fast food hospitality, as shown in Table 1 in the retail impact assessment.

The expenditure generated in these outlets provides an economic stimulus to the local economy. Expenditure is estimated using the retail turnover estimates from the section 2, with the expenditure component (i.e. the costs of operation) estimated using Australian Industry data from the ABS⁴ which shows that total expenses are 94% of revenue for the food and beverage services industry. At full build-out, the expenditure from the food and beverage components total \$45.1 million per annum.

The table below shows the results from the I-O model for the food and beverage services industry. It is assumed that the food and beverage component on the site is built-out over-time. The table below reflects the staged approach from Table 6.

In stage one, the direct stimulus in the food and beverage services industry at the site is expected to generate \$10.0 million in direct regional value-added per annum and support up to 175 full-time equivalent (FTE) jobs at Wilkinsons Point (Table 9). The impact rises to \$21.2 million and 371 FTE jobs on-site once the food and beverage offer is fully built out.

When the flow-on effects are incorporated, this stimulus translates to a combined (direct and indirect) economic impact of:

- Output \$83.6 million per annum from 2029

³ ABS (2018). 2016 Census - Counting Employed Persons, Place of Work (POW).

⁴ ABS (2019). Australian Industry, 2017-18, Table 1 Key data by industry subdivision

- Value-added to GRP \$40.9 million per annum from 2029
- Employment 505 FTE jobs supported, per annum from 2029

TABLE 9: PER ANNUM ECONOMIC IMPACTS – FOOD AND BEVERAGE SERVICES INDUSTRY

RESULTS	Stage 1	Stage 2	Stage 3
	2024	2029	2034
Output			
Direct	\$21,340,000	\$45,140,000	\$45,140,000
Flow-on impacts	\$18,190,000	\$38,490,000	\$38,490,000
Total	\$39,530,000	\$83,620,000	\$83,620,000
Value Added to GRP			
Direct	\$10,000,000	\$21,160,000	\$21,160,000
Flow-on impacts	\$9,320,000	\$19,700,000	\$19,700,000
Total	\$19,320,000	\$40,870,000	\$40,870,000
Employment			
Direct	175	371	371
Flow-on impacts	64	134	134
Total	239	505	505

Source: SGS Economics and Planning, 2019

There are currently 901 people employed in the food and beverage services industry in the Glenorchy LGA⁵; 33% of whom are employed full-time. Assuming again that half of the 371 new direct jobs at Wilkinsons point are full-time after stage 2, with the others casual or part-time, the food and beverage offer at the site will increase the size of the food and beverage services industry in the Glenorchy LGA by around 60% (based on present-day employment).

At present 4.8% of workers in Glenorchy are employed in food and beverage services compared to 5.9% across all of Tasmania. This implies that the food and beverage industry in Glenorchy is under-developed. The development of the restaurants and bars and other food outlets at Wilkinsons Point is an opportunity to address this.

Accommodation

The proposed development at Wilkinsons Point includes a 204-room hotel and reception centre. The accommodation will allow more people to stay in the region injecting money into the economy.

Assuming an occupancy rate of 75%, an average room price of \$200 per night and that costs of operation are 86% of revenue⁶; the hotel will inject around \$9.6 million via its operating expenses into the regional economy per annum.

The economic impacts of this are shown in Table 10.

The direct stimulus (operating expenses) captured in the greater Hobart economy, is expected to generate \$4.1 million in direct regional value-added and support up to 50 full-time equivalent (FTE) jobs directly at the hotel.

Once the economic supplier and contractor linkages are included as flow-on effects, the stimulus translates to a combined (direct and indirect) economic impact of:

- Output \$17.6 million per annum

⁵ ABS (2018). 2016 Census - Counting Employed Persons, Place of Work (POW).

⁶ Average rate for the accommodation industry. Sourced from ABS (2019). Australian Industry, 2017-18, Table 1 Key data by industry subdivision

- Value-added to GRP \$8.1 million per annum
- Employment 78 FTE jobs supported, in the region, per annum

TABLE 10: PER ANNUM ECONOMIC IMPACTS – ACCOMMODATION INDUSTRY

Source of Stimulus	Output	Value-added to GRP	Employment (FTE)
Direct	\$9,620,000	\$4,110,000	50
Flow-on impacts	\$7,980,000	\$3,990,000	29
Total	\$17,600,000	\$8,100,000	78

Source: SGS Economics and Planning, 2019

Sports and recreation activities

Impacts on the region's sport and recreation industry are generated by the operating expenditures of the sports and recreation business and facilities at Wilkinsons Point. This includes the proposed big-box activities (bowling, rock climbing, skiing etc.), the basketball centre and gym. It does not include any new activities in the DEC (such as NBL games) after renovation as this information has not been provided.

The expenditure of these facilities was estimated by using Urbis Loop data on average rents for gyms/fitness centres, and kids play areas/entertainment centres. The per sqm rents were used to broadly estimate the operating expenditures⁷ of the proposed sporting and recreation businesses on site. The combined operating expenses were estimated at \$34.3 million. This is an indicative figure only.

The economic impacts of this are shown in Table 11.

The direct stimulus captured in the greater Hobart economy is expected to generate \$10.4 million in direct regional value-added and support up to 180 FTE jobs directly.

Once the economic supplier and contractor linkages are included flow-on effects, this stimulus translates to a combined (direct and indirect) economic impact of:

- Output \$56.3 million per annum
- Value-added to GRP \$21.2 million per annum
- Employment 266 FTE jobs supported, in the region, per annum

TABLE 11: PER ANNUM ECONOMIC IMPACTS – SPORT AND RECREATION ACTIVITIES INDUSTRY

Source of Stimulus	Output	Value-added to GRP	Employment (FTE)
Direct	\$34,330,000	\$10,380,000	180
Flow-on impacts	\$21,960,000	\$10,810,000	87
Total	\$56,290,000	\$21,190,000	266

Source: SGS Economics and Planning, 2019

Total operational phase impacts

The table below shows the total economic impacts of all the components of the Wilkinsons Point development once fully built-out.

At Wilkinsons Point itself (direct impacts), it is estimated that \$51.2 million per annum will be added to the GRP of greater Hobart. The operating expenditure of all the components will generate around 809 FTE jobs across the site.

⁷ Urbis Loop (2019) reveals that rent usually forms around 17% of total expenditure for retail services (as opposed to retail sales). Turnover estimates were not available for these uses.

Once flow-on impacts are included, the total value added to GRP of the greater Hobart economy if the proposed uses are built out is \$97.8 million per annum, supporting 1,145 FTE jobs.

TABLE 12: TOTAL PER ANNUM ECONOMIC IMPACTS – ALL INDUSTRIES

Source of Stimulus	Output	Value-added to GRP	Employment (FTE)
Direct	\$115,840,000	\$51,150,000	809
Flow-on impacts	\$92,200,000	\$46,650,000	336
Total	\$208,050,000	\$97,800,000	1,145

The above estimates do not include any economic impacts from the renovation of the DEC itself, besides the renovation costs. At present the DEC is used for various events which generate expenditure in the local economy. If the number and quality of events increase with the redevelopment, this will lead to additional positive economic impacts for the region⁸.

Limitations of EIA

Though a cost-effective and widely used technique for economic impact analysis, I-O modelling has some limitations, as follows.

- The model assumes relationships between industries are static over the forecast period. That is, productivity improvements are not factored in and historic relationships are assumed to hold.
- The input output model derives relationships between industries using total production estimates. Consequently, the relationships are 'average', whereas the stimulus used as an input is 'marginal'. Such an approach does not account for any 'underutilised capacity' at the industry level or additional economies of scale that might ensue, as production expands from its existing base.
- The model assumes that there are no supply constraints. A drawback is that the model does not take into account the 'crowding out' of other sectors. This is recognition of the fact that there are scarce resources in an economy. Especially in the case of large construction projects there may be impacts in terms of availability of labour.
- A feasible alternative to using I-O modelling for economic impact assessments is to utilise partial or general equilibrium econometric models. These models are considerably more expensive to develop and not suitable for the level of analysis required for this project.
- EIA does not assess the merits of the project but traces how project implementation influences overall economic activity levels over time, e.g. in terms of jobs creation and income generation. The CBA is the better indicator of whether the project is beneficial from a community perspective.

⁸ The impact has not been quantified as the number and scale of events at the DEC in the future compared to present was not available at the time of analysis.

4. COMMUNITY BENEFIT APPRAISAL

A key benefit of the proposed Wilkinsons Point development is the social benefits of establishing sports and recreation facilities in the community.

Many of the benefits discussed here have also been quantified in the Economic Impact Assessment. Unlike the EIA, this section seeks to quantify the social and economic benefits of the project, rather than just the financial flows.

This section prepares a high-level estimate of the economic and social benefits that are expected to occur as a result of the Wilkinsons Point development.

4.1 Economic impacts

Many of the economic benefits and costs of the development have already been discussed and quantified in the Economic Impact Assessment, for example:

- Construction costs – estimated at \$260 million over the period of the project.
- Value-added from accommodation, retail and food and beverage. Note that this does not include flow on economic impacts.

The impact of participation in sports will be estimated as part of a social impact assessment.

In addition to this, maintenance and depreciation costs of 4% per year of completed construction have been estimated.

Economic impacts not quantified

Some of the economic impacts have not been able to be quantified in this assessment. These include:

- Potential economic impacts of Wilkinsons Point as a tourist drawcard through holding special events, such as sports tournaments, bringing interstate and overseas visitors who would not otherwise have visited Tasmania
- Costs of acquiring land
- Transport and infrastructure costs avoided elsewhere in Tasmania
- Benefits of a 'destination shopping experience' which could result in a reduction in retail expenditure leaking online.

4.2 Social impacts

The principal social benefit of the Wilkinsons Point Development will be the sports and recreation space to be established there.

Participation in sport and physical activity in Tasmania

Department of Health guidelines recommends that adults engage in at least 30 minutes of physical activity on at least five days per week, and for children and young people aged from 5 to 17 years to engage in 60 minutes of physical activity each day.

Most Australians do not engage in enough physical activity for good health. In 2014-15, 56 percent of all adults in Australia were not sufficiently active (Australian Institute for Health and Welfare (AIHW), 2018).

Tasmanians are more active on average than all other States and Territories except for the ACT. Two-thirds of Tasmanians engage in sport and physical recreation, compared to the Australian average of 60.2% (ABS, 2015). The most popular forms of physical activity for women were walking for exercise, going to the gym, swimming/diving and running. For men, the most popular forms of physical activity were going to the gym, walking for exercise, cycling, jogging and golf.

Tasmanians and Territorians were the keenest participants in organised sport and organised physical activity. Thirty percent of Tasmanians are involved in playing organised sport, and a further 11.3% are involved in non-playing roles, compared to the Australian average of 25.6% players and 7.7% involved in non-playing roles.

Despite this, most Tasmanians do not get enough exercise for good health. Twenty one percent of Tasmanians took no exercise at all in 2017-18, and 85% were not sufficiently active for good health (ABS, 2018).

Participation in sport and improved health

There is abundant evidence of the link between participation in sport and active recreation and improved health outcomes, for example see Eime et al (2015), Wharburton et al (2006), Street and James (2007). Physical inactivity has been found to contribute to the risk of a range of chronic conditions, including heart disease, diabetes, dementia and numerous types of cancer (Australian Institute for Health and Welfare (AIHW), 2017).

A large range of national and international studies have modelled the link between low levels of physical activity, higher chronic disease risk and higher health costs, lower productivity, shorter lifespans and lower quality of life; and the wellbeing benefits of engagement in physical activity.

- A 2016 study estimated that physical inactivity cost US\$67.5 billion worldwide in 2013 in health care costs and lost productivity (Ding, et al., 2016).
- Medibank Private, a health insurer, calculated the cost of physical inactivity to the Australian economy to be \$13.8 billion, based on healthcare costs, economic productivity, and increased mortality (Medibank Private, 2008).
- Cadhilac et al (2011) found that a ten percent reduction in physical inactivity from its current levels of 70% would result in lifetime opportunity cost savings of \$162 million in Australia.
- Wellbeing increases from participation on different types of cultural and sporting activities in the UK (Fujiwara, Kudrna, & Dolan, 2014) found that increased wellbeing from participation in sport was found to have a value of £1,127 per person per year (or £94 per month).

Wilkinsons Point's role in supporting healthy physical activity

One way to encourage and support physical activity and recreation among the population is to ensure that as many Tasmanians as possible have access to a range of facilities that support sport and recreation. This will ensure that Tasmanians have a choice of fun, safe activities to choose from to keep fit, such that most or all Tasmanians can find an activity that they enjoy and fits into their lifestyle, so achieving sufficient physical activity for health becomes achievable and fun.

The proposed Wilkinson's Point development does this in a number of ways:

- The sports precinct will support and encourage a wide range of physical activities, potentially ranging from basketball, indoor rock climbing, skiing and ten pin bowling, as well as more freeform styles of physical play.
- The proposed outdoor spaces will allow for a mix of structured and unstructured physical activities for people to engage in in a way that matches their schedules, personal preferences and levels of fitness.

- Beautifying and activating the waterfront and combining it with wide mixed-use paths will encourage walking, cycling, running, rollerblading etc by providing an attractive, safe and active space to use.

How this is modelled

The physical activity benefits of the Wilkinsons' Point Development have been estimated based on Cadhilac et al, (2011) estimate of a ten percent reduction in physical inactivity in Australia resulting in cost savings of \$162 million. This amounts to a benefit of \$1.819 million in benefits to Greater Hobart of a ten percent reduction in inactivity (in 2019 dollars). It is highly unlikely that a single sports and leisure development will result in a ten percent reduction in inactivity in Greater Hobart, so a more conservative one percent reduction was estimated. This amounts to an annual benefit of \$182,000 per year from health improvements.

Leisure time benefits

Most people who participate in sport do so not only to avoid future health costs, but for enjoyment, social interaction and goal setting and achievement. In addition, the Wilkinsons Point development allows for non-physical recreation,

The value of leisure time in the CBA has been valued at \$13.78, based on the Australian Transport Council's guidelines (Australian Transport Council, 2006), inflated to 2019 dollars based on growth in average weekly earnings (AWE).

Estimating how much the Wilkinsons Point development will be used is difficult, as this would require a much stronger understanding of the specific details of the sports facilities being offered. Keen users of the area might visit several times per week for leisure, for example a nearby resident who walks their dog along the foreshore every morning, a member of a local bowling league or a person keen on fitness who does weights at the gym three times per week. Others will visit the facility less often, such as people trying out the indoor ski centre, a children's party at the indoor rock climbing.

Given that this is a high-level CBA, we have assumed that the average Greater Hobart resident will spend two hours per year at Wilkinsons Point for leisure – equivalent to around four percent of Hobart residents visiting once per week on average.

Since the leisure benefits of the development have been quantified, it is not necessary to estimate the revenue raised from this as it would result in double counting.

Social impacts not quantified

There are other potential social impacts that have not been quantified here due to uncertainty about the size of the impact. These include:

- Disruptions during the construction of the facility, such as noise, dust and traffic delays
- When constructed, potential congestion and noise around the site when major events are on
- Potential reductions in congestion from park and ride facilities, reducing the need to drive into Hobart City for commuters

4.3 Results of cost-benefit analysis

Table 13 below shows the results of the cost-benefit analysis, at discount rates of 3%, 7% and 10%. The project is expected to result in a total present value of benefits of \$459 million and present value of construction and maintenance costs of \$287 million, at a 7% discount rate. This results in a net present value (NPV) for the project of \$171.56 million, with a benefit-cost ratio (BCR) of 1.60.

TABLE 13: COST-BENEFIT ANALYSIS RESULTS

	3%	7%	10%
Construction costs	\$221.96	\$182.75	\$159.88
Maintenance costs	\$182.29	\$105.12	\$74.19
Total costs	\$404.24	\$287.88	\$234.08
Health benefits from reduction in physical inactivity	\$3.29	\$1.95	\$1.41
Leisure time benefits	\$110.84	\$65.72	\$47.45
Tourism value add	\$63.38	\$34.65	\$23.38
Retail value add	\$255.68	\$126.92	\$79.62
Food and beverage value add	\$411.95	\$230.19	\$155.85
Total benefits	\$845.15	\$459.44	\$307.71
NPV	\$440.90	\$171.56	\$73.63
BCR	2.09	1.60	1.31

Source: SGS Economics and Planning, 2019

APPENDIX

Construction cost assumptions

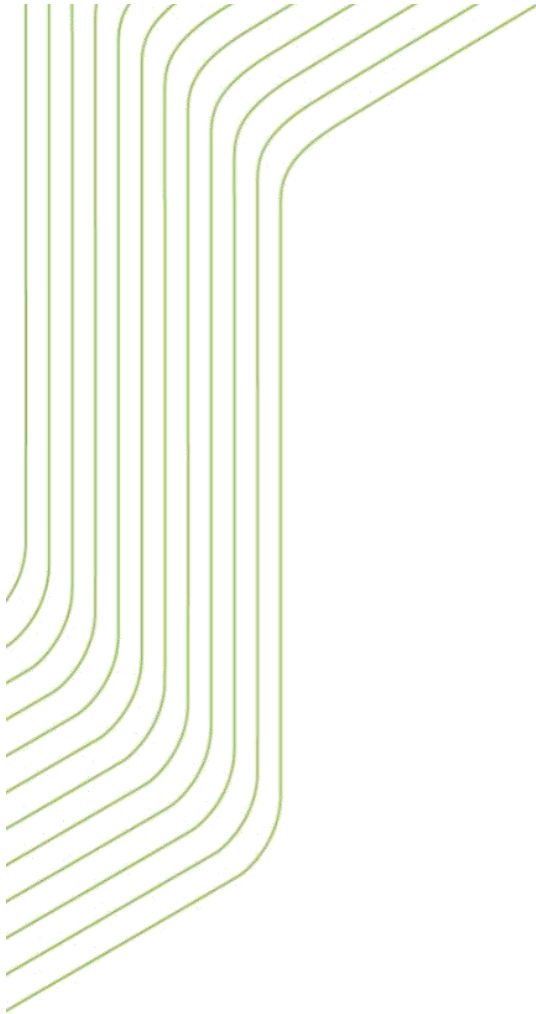
The table below shows the components and the assumptions from Rawlinsons (2019) Construction Handbook used to estimate the construction costs including contingencies.

TABLE 14: CONSTRUCTION COST ASSUMPTIONS

Component	SQM	Cost per SQM	Construction cost	Building type selected from Rawlinsons Construction Handbook	Construction cost source
HIGHWAY FRONTAGE PRECINCT					
Big Box Sport Retail	5,820	\$1,590.50	\$9,256,710	Suburban Neighbourhood shell 2 storeys. Includes finishes, fittings, services and contingency plus fit out and air-conditioning. Costs in Hobart.	Rawlinsons (2019)
Specialty Sports Retail	3,000	\$5,095.00	\$15,285,000	Suburban shopping centre. Includes finishes, fittings, services and contingency plus enclosed mall/arcades, air conditioning, landscaping and plus trading area fit outs. Costs in Hobart.	Rawlinsons (2019)
Fast food	2,340	\$6,685.00	\$15,642,900	From international standard hotel - public floors such as reception, bars, restaurants, etc. Average for all capital cities. Low end of range. Costs in Hobart.	Rawlinsons (2019)
F&B	730	\$6,945.10	\$5,069,923	From international standard hotel - public floors such as reception, bars, restaurants, etc. Average for all Australian capital cities (Hobart not available)	Rawlinsons (2019)
Big Box Activities (bowling rock climbing/skiing)	12,742	\$1,080.00	\$13,761,360	Bowling Alley. Costs in Hobart.	Rawlinsons (2019)
small performance space		\$2,157.50	\$0	Civic Centre, 300-500 capacity. Costs in Hobart.	Rawlinsons (2019)
DERWENT ENTERTAINMENT CENTRE					
Renovation and renewal			\$35,000,000		Provided by the client
SPORTS PRECINCT					
Basketball centre	4,884	\$2,260.00	\$11,037,840	Community recreation centre - medium standard (there is no high). Costs in Hobart.	Rawlinsons (2019)
new multi-story carparking	35,636	\$877.50	\$31,270,590	Multi-story carpark. Average of all capital cities (Hobart not available).	Rawlinsons (2019)
F&B	6,245	\$6,945.10	\$43,372,150	From international standard hotel - public floors such as reception, bars, restaurants, etc. Average for all capital cities (Hobart not available). Low end of range	Rawlinsons (2019)
PROMONTORY - HOTEL AND RECEPTION					Provided by the client
Hotel and reception			\$80,000,000		
Landscaping	10,000	\$48.40	\$484,000	Landscaping, around buildings including topsoil	Rawlinsons (2019)
TOTAL			\$260,180,473		

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Wilkinsons Point Precinct Plan

Aboriginal Heritage Assessment Report Final Report Version 2

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CULTURAL
HERITAGE
MANAGEMENT
AUSTRALIA

Wilkinsons Point Precinct Plan
Aboriginal Heritage Assessment Report CHMA 2019

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Executive Summary

Project Details

Ireneinc have been engaged by the LK Group to prepare a Precinct Plan for Wilkinsons Point, on the southern margins of the River Derwent, at Glenorchy (see Figure 1). The area covered by the Precinct Plan encompasses approximately 16.5ha (Title references CT157350-1 and CT110871-1), and is currently owned by the Glenorchy City Council. Figures 2 and 3 show the boundaries of the area covered by the Precinct Plan. Figure 4 shows the current draft Precinct Plan layout.

CHMA Pty Ltd and Rocky Sainty (AHO) have been engaged by Ireneinc to undertake an Aboriginal heritage assessment for the area encompassed within the Wilkinson Point Precinct Plan (the study area). The information generated from the assessment will be used to inform future planning decisions for the Precinct Plan. This report presents the findings of the assessment.

Registered Aboriginal Sites in the Vicinity of the Study Area

As part of Stage 1 of the assessment process, a search was undertaken of the Aboriginal Heritage Register (AHR) to determine whether any registered Aboriginal heritage sites are located within or in the general vicinity of the study area.

The search shows that there are a total of 29 registered Aboriginal sites that are located within an approximate 2km radius of the study area (search results provided by Kate Moody from AHT on the 14-8-2019). Table i provides the summary details for these 29 sites, with Figure i showing the reported location of the 29 sites, in relation to the study area boundaries (based on information generated from the AHR).

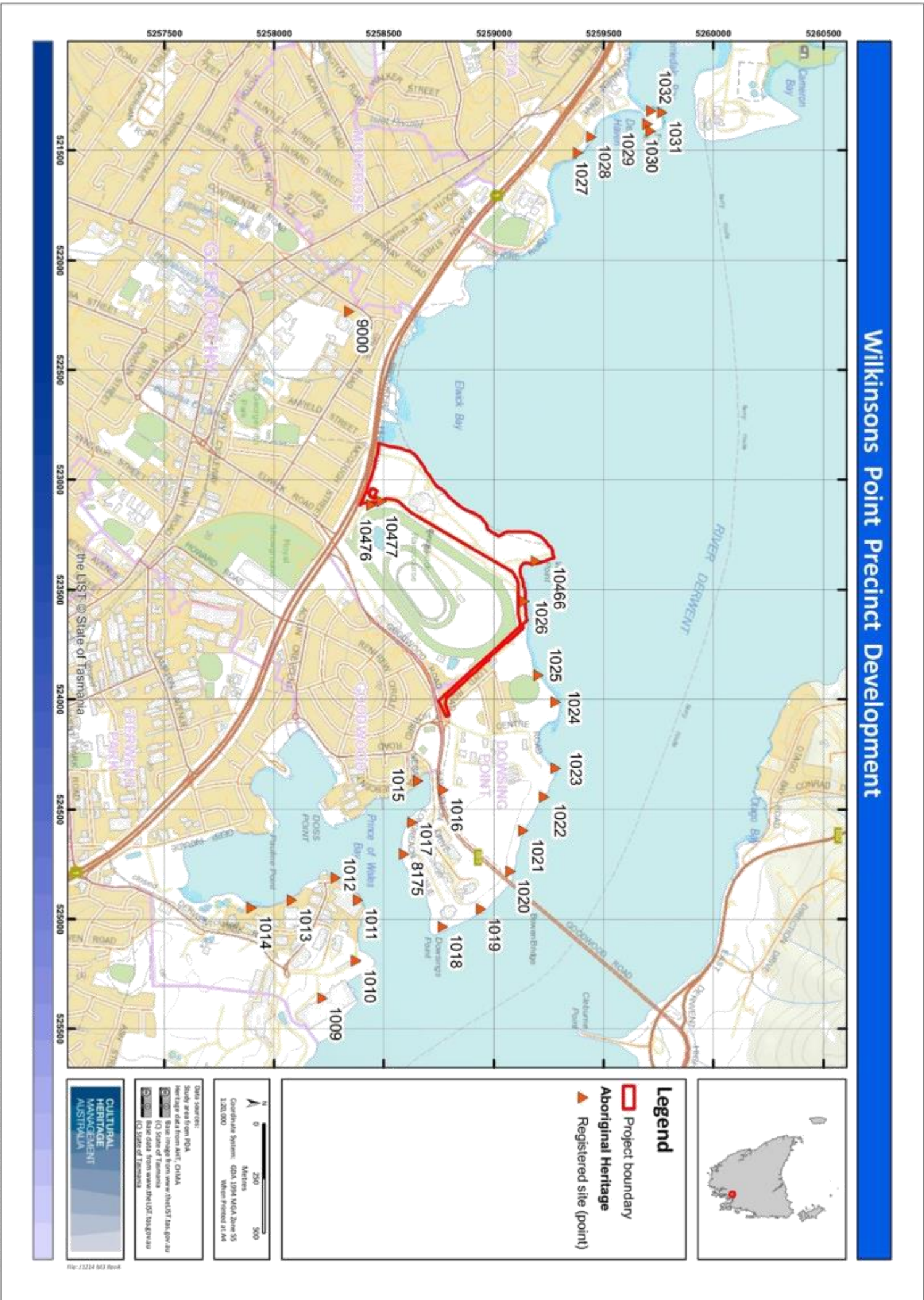
Four of these registered Aboriginal sites appear to be situated either within, or in a 50m radius of the study area boundaries (sites AH1026, AH10466, AH10476 and AH10477). These sites are highlighted in red in Table 1. The detailed results of the AHR search are presented in section 4.2 of this report.

Table i: Summary details for registered Aboriginal sites in the general vicinity of the Wilkinsons Point study area (Based on the results of the AHR search dated 14/8/2019)

AH Site Number	Site Type	Locality	Grid Reference (GDA94) Easting	Grid Reference (GDA94) Northing
1009	Shell Midden	Derwent Park	525360	5258219
1010	Shell Midden	Derwent Park	525190	5258375
1011	Shell Midden	Derwent Park	524912	5258382
1012	Shell Midden		524812	5258282
1013	Shell Midden	Derwent Park	524912	5258082
1014	Shell Midden	Derwent Park	524947	5257899
1015	Shell Midden	Goodwood	524370	5258656
1016	Shell Midden	Dowsing Point	524411	5258771
1017	Shell Midden		524558	5258629

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AH Site Number	Site Type	Locality	Grid Reference (GDA94) Easting	Grid Reference (GDA94) Northing
1018	Shell Midden		525035	5258767
1019	Shell Midden		524955	5258942
1020	Shell Midden	Dowsing Point	524782	5259075
1021	Shell Midden	Dowsing Point	524598	5259135
1022	Shell Midden	Dowsing Point	524444	5259228
1023	Shell Midden		524312	5259282
1024	Shell Midden	Dowsing Point	524012	5259282
1025	Shell Midden	Dowsing Point	523890	5259202
1026	Shell Midden	Glenorchy	523553	5259139
1027	Shell Midden	Rosetta	521512	5259382
1028	Shell Midden	Rosetta	521437	5259444
1029	Shell Midden	Rosetta	521380	5259700
1030	Shell Midden	Rosetta	521412	5259715
1031	Shell Midden	Rosetta	521327	5259765
1032	Shell Midden	Rosetta	521319	5259718
10466	Not a Site	Glenorchy	523369	5259192
10476	Shell Midden	Glenorchy	523115	5258444
10477	Isolated Artefact	Glenorchy	523097	5258490
8175	Shell Midden	Dowsing Point	524704	5258590
9000	Artefact Scatter	Glenorchy	522232	5258341



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Summary of Results

The field survey was undertaken over a period of one day (23-8-2019) by Stuart Huys (CHMA archaeologist) and Rocky Sainty (Aboriginal Heritage Officer). The study area encompasses a total of approximately 16.5ha. The field team walked a series 5.3km of survey transects across the study area, with the average width of each transect being 10m. The survey transects were aligned to cover those parts of the study area where natural ground surfaces and original soil deposits were still present. The survey avoided those areas where there were built surfaces such as carparks, roads, and existing buildings. As part of the field survey assessment, the field team attempted to relocate any Aboriginal sites that were identified through the Aboriginal Heritage Register (AHR) search as potentially occurring within the study area.

No Aboriginal heritage sites, suspected features, or areas of elevated archaeological potential were identified during the survey assessment of the Wilkinsons Point study area.

As noted in section 4.2 of this report, the results of the AHR search shows that there are four registered Aboriginal sites that appear to be situated either within, or in a 50m radius of the study area boundaries (sites AH1026, AH10466, AH10476 and AH10477). As part of the field survey assessment, the field team attempted to relocate each of these four sites.

Site AH1026 is classified as a shell midden, which was originally recorded by Officer (1980). The grid reference location provided on the AHR places the site on the northern boundary of the study area. The field team carried out a detailed inspection along the Derwent foreshore margins, in the general area where the site was reported to be located. The foreshores at the high tide mark along this section of Wilkinsons Point has been fortified with large rocks and rubble, in an effort to stabilise the steep embankment against erosion. It seems most likely that the foreshores were fortified subsequent to the original recording of the site in 1980, and the site is now covered with introduced rock material.

Site AH10466 is classified on the AHR as "not a site". The site was originally recorded by Maynard in 2007, and was described as being a shell midden deposit which was identified on the foreshores of the River Derwent, at the north tip of Wilkinsons Point. The site was subsequently revisited by Mike Jones from AHT, and the site was re-evaluated as not being of Aboriginal origin, and re-classified as not being a site. The field team re-inspected this area in order to generate a first-hand impression of the site context. The inspection confirmed that the area where AH10466 is located is massively disturbed. An embankment cutting adjacent to the jetty, in the immediate vicinity of AH10466 shows fill material to a depth of over 1m. The observations made during the assessment supports the contention of Mike Jones that AH10446 is not an Aboriginal site.

Site AH10476 (a shell midden) and AH10477 (an isolated artefact) were both recorded by Everett (2007) as part of the Brooker Highway Transport study. Both

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sites appear to be located just outside the eastern boundary of the study area, within the Elwick Racecourse.

As part of the current field assessment, the field team inspected the reported location of these two sites. Although neither site was relocated during the inspection, it was confirmed that both sites are situated within the Elwick Racecourse grounds, just outside the south-east boundary of the study area. There was no evidence to indicate that these two sites may extend to within the study area

No other Aboriginal sites were identified in the study area, and this area has been assessed as being of low archaeological sensitivity. This is based on the absence of identified Aboriginal sites, the very high levels of historic disturbances, and the low potential for undetected Aboriginal sites to be present.

The detailed survey results and discussions are presented in section 7 of this report.

Management Recommendations

Heritage management options and recommendations provided in this report are made on the basis of the following criteria.

- Background research into the extant archaeological and ethno-historic record for the study area and the surrounding region (see sections 3 and 4 of the report).
- The results of the investigation as documented in section 7 this report;
- The legal and procedural requirements as specified in the *Aboriginal Heritage Act 1975* (The Act), as presented in section 9; and
- Consultation with Rocky Sainty (Aboriginal Heritage Officer), and the Aboriginal community consultation program, as documented in section 9.

Recommendation 1

Site AH1026 (a shell midden) is reported to be situated on the northern boundary of the study area. The site could not be relocated during the current survey, and it appears that the site has been destroyed or covered with fill material. As specified in section 9.1 of this report, all Aboriginal relics are protected under the *Aboriginal Heritage Act 1975* (The Act). It is illegal to destroy, damage, deface, conceal or otherwise interfere with a relic, unless in accordance with the terms of a permit granted by the Minister. However, AHT has advised that if a site could not be relocated, providing that an extensive search has been undertaken, then works may proceed at the recorded site location, then no Permit is required. It is recommended that any future works in this area should proceed in strict guidance of the Unanticipated Discovery Plan (see Appendix 1).

Recommendation 2

Sites AH10476 and AH10477 are confirmed as being located outside the study area boundaries, within the Elwick Racecourse grounds. It is advised that there are no further requirements for these sites.

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Recommendation 3

No other Aboriginal sites were identified in the study area, and this area has been assessed as being of low archaeological sensitivity. This is based on the absence of identified Aboriginal sites, the very high levels of historic disturbances, and the low potential for undetected Aboriginal sites to be present. On this basis it is recommended that there are no further archaeological requirements for the project.

Recommendation 4

If previously undetected archaeological sites or objects are located during the course of development works, the processes outlined in the Unanticipated Discovery Plan should be followed (see Appendix 1). A copy of the Unanticipated Discovery Plan should be kept on site during all ground disturbance and construction work, and construction personnel to be made aware of the Unanticipated Discovery Plan and their obligations under the *Aboriginal Heritage Act 1975* (the Act).

Recommendation 5

Copies of this report should be submitted to AHT for review and comment.

1.0 Project Outline

1.1 Project Details

Ireneinc have been engaged by the LK Group to prepare a Precinct Plan for Wilkinsons Point, on the southern margins of the River Derwent, at Glenorchy (see Figure 1). The area covered by the Precinct Plan encompasses approximately 16.5ha (Title references CT157350-1 and CT110871-1), and is currently owned by the Glenorchy City Council. Figures 2 and 3 show the boundaries of the area covered by the Precinct Plan.

The current draft Precinct Plan identifies five key Precinct zones, these being:

- The Wilkinsons Entertainment Precinct;
- Brooker Highway Frontage Precinct;
- Hotel Precinct;
- Sports Precinct;
- Wilkinsons Visitor Service Precinct.

Figure 4 shows the current draft Precinct Plan layout.

CHMA Pty Ltd and Rocky Sainty (AHO) have been engaged by Ireneinc to undertake an Aboriginal heritage assessment for the area encompassed within the Wilkinson Point Precinct Plan (the study area). The information generated from the assessment will be used to inform future planning decisions for the Precinct Plan. This report presents the findings of the assessment.

1.2 Aims of the Investigation

The principal aims of the current Aboriginal Heritage assessment are as follows.

- To undertake an Aboriginal cultural heritage assessment for the 16.5ha parcel of land encompassed by the proposed Wilkinsons Point Precinct Plan (the study area). The assessment is to be compliant with the *Aboriginal Heritage Standards and Procedures (June 2018)*
- Search the Aboriginal Heritage Register (AHR) to identify previously registered Aboriginal heritage sites within and in the general vicinity of the study area.
- Undertake relevant archaeological, environmental and ethno-historical background research to develop an understanding of site patterning within the study area.
- To locate, document and assess any Aboriginal heritage sites located within the study area.
- To assess the archaeological and cultural sensitivity of the study area.
- To assess the scientific and Aboriginal cultural values of any identified Aboriginal cultural heritage sites located within the study area.
- Consult with (or ensure the Aboriginal community representative consults with) Aboriginal organisation(s) and/or people(s) with an interest in the study area in order to obtain their views regarding the cultural heritage of the area.
- To develop a set of management recommendations aimed at minimising the impact of any future development plans on any identified Aboriginal heritage values.

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- Prepare a report which documents the findings of the Aboriginal heritage assessment, and meets the standards and requirements of the *Aboriginal Heritage Standards and Procedures (June 2018)* prepared by AHT, Department of Primary Industries, Parks, Water and Environment.

1.3 Project Limitations

All archaeological investigations are subject to limitations that may affect the reliability of the results. The main constraint to the present investigation was restricted surface visibility due primarily to the presence of built surfaces, fill material and vegetation cover. These constraints limited to some extent the effectiveness of the survey assessment. The issue of surface visibility is further discussed in Section 6 of this report.

1.4 Project Methodology

A three stage project methodology was implemented for this assessment.

Stage 1 (Pre-Fieldwork Background Work)

Prior to field work being undertaken, the following tasks were completed by CHMA staff.

Consultation with Aboriginal Heritage Tasmania

AHT was contacted and informed that a field survey was to be undertaken for the Wilkinsons Point Precinct Plan. As part of this initial contact a search request of the Aboriginal Heritage Register (AHR) was submitted to AHT in order to ascertain the presence of any previously registered sites in the vicinity of the study area (search request dated 9-8-2019).

The collation of relevant documentation for the project

As part of Stage 1 the following research was carried out and background information was collated for this project:

- A review of the relevant heritage registers (AHR register) and the collation of information pertaining to any registered heritage sites located within the general vicinity of the study area.
- Maps of the study area;
- Relevant reports documenting the outcomes of previous Aboriginal heritage studies in the vicinity of the study area;
- Ethno-historic literature for the region;
- References to the land use history of the study area;
- GIS Information relating to landscape units present in the study area;
- Geotechnical information for the study area, including soil and geology data.

Consultation with Aboriginal Heritage Officer (AHO)

Rocky Sainty is the AHO for this project. As part of Stage 1 works Stuart Huys (CHMA archaeologist) was in regular contact with Rocky Sainty. The main purpose of this contact was to discuss the scope of the present investigations, to ratify the proposed methodology for the investigations and to co-ordinate the timeframes for implementing field work.

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Stage 2 (Field Work)

Stage 2 entailed the field work component of the assessment. The field survey was undertaken over a period of one day (23-8-2019) by Stuart Huys (CHMA archaeologist) and Rocky Sainty (Aboriginal Heritage Officer).

The study area encompasses a total of approximately 16.5ha. The field team walked a series 5.3km of survey transects across the study area, with the average width of each transect being 10m. The survey transects were aligned to cover those parts of the study area where natural ground surfaces and original soil deposits were still present. The survey avoided those areas where there were built surfaces such as carparks, roads, and existing buildings.

As part of the field survey assessment, the field team attempted to relocate any Aboriginal sites that were identified through the Aboriginal Heritage Register (AHR) search as potentially occurring within the study area.

The results of the field investigation were discussed by Rocky Sainty and Stuart Huys. This included the potential cultural and archaeological sensitivity of the study area, and possible management options for any identified Aboriginal sites.

Stage 3

Stage three of the project involves the production of a Draft and Final Report that includes an analysis of the data obtained from the field survey, an assessment of archaeological sensitivity and management recommendations. The report has been prepared by Stuart Huys in consultation with Rocky Sainty. The report has been structured to comply with the standards and requirements of the current *Aboriginal Heritage Standards and Procedures* prepared by AHT, Department of Primary Industries, Parks, Water and Environment.



Plate 1: Rocky Sainty, the designated AHO for the Project

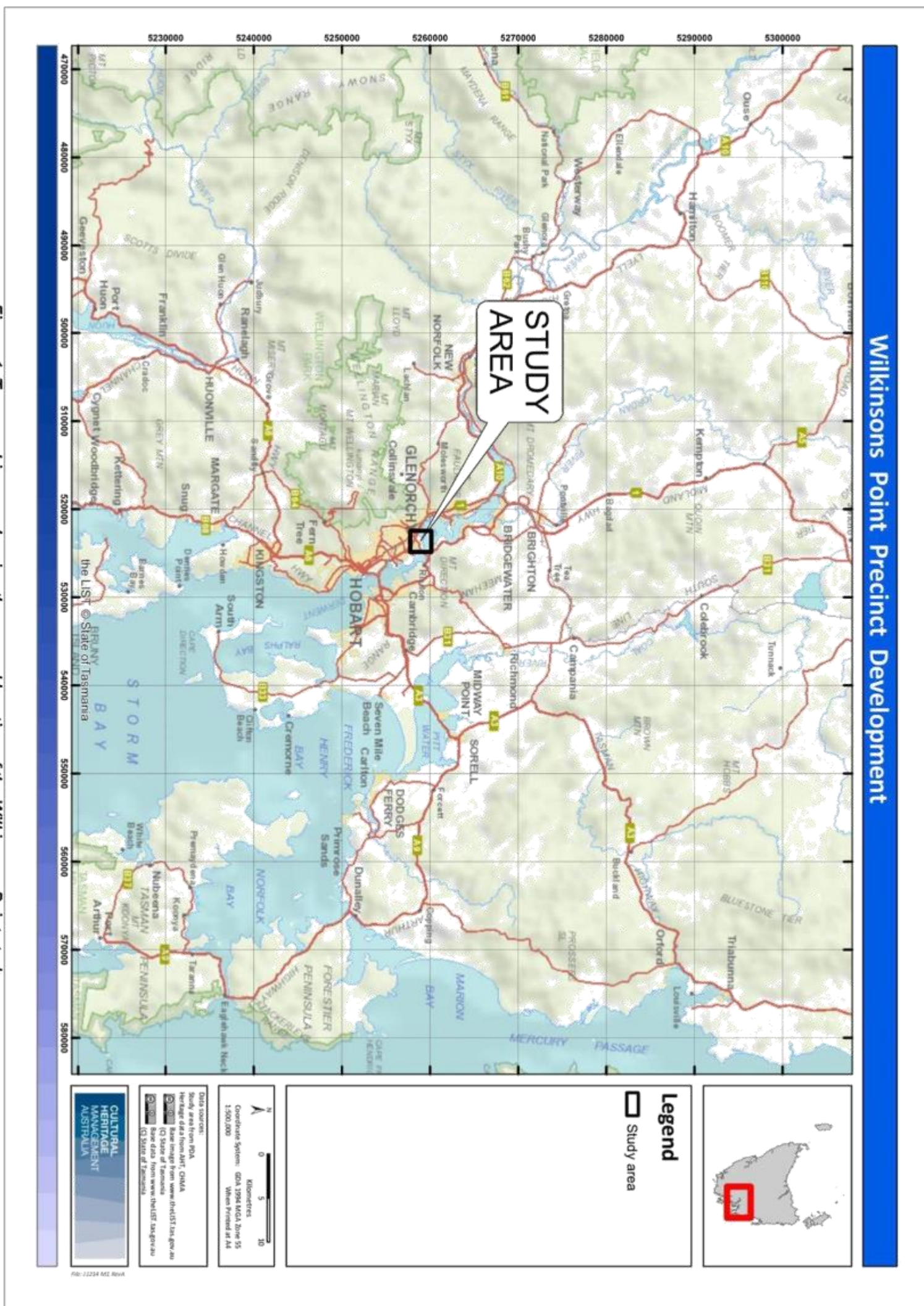


Figure 1: Topographic map showing the general location of the Wilkinsons Point study area

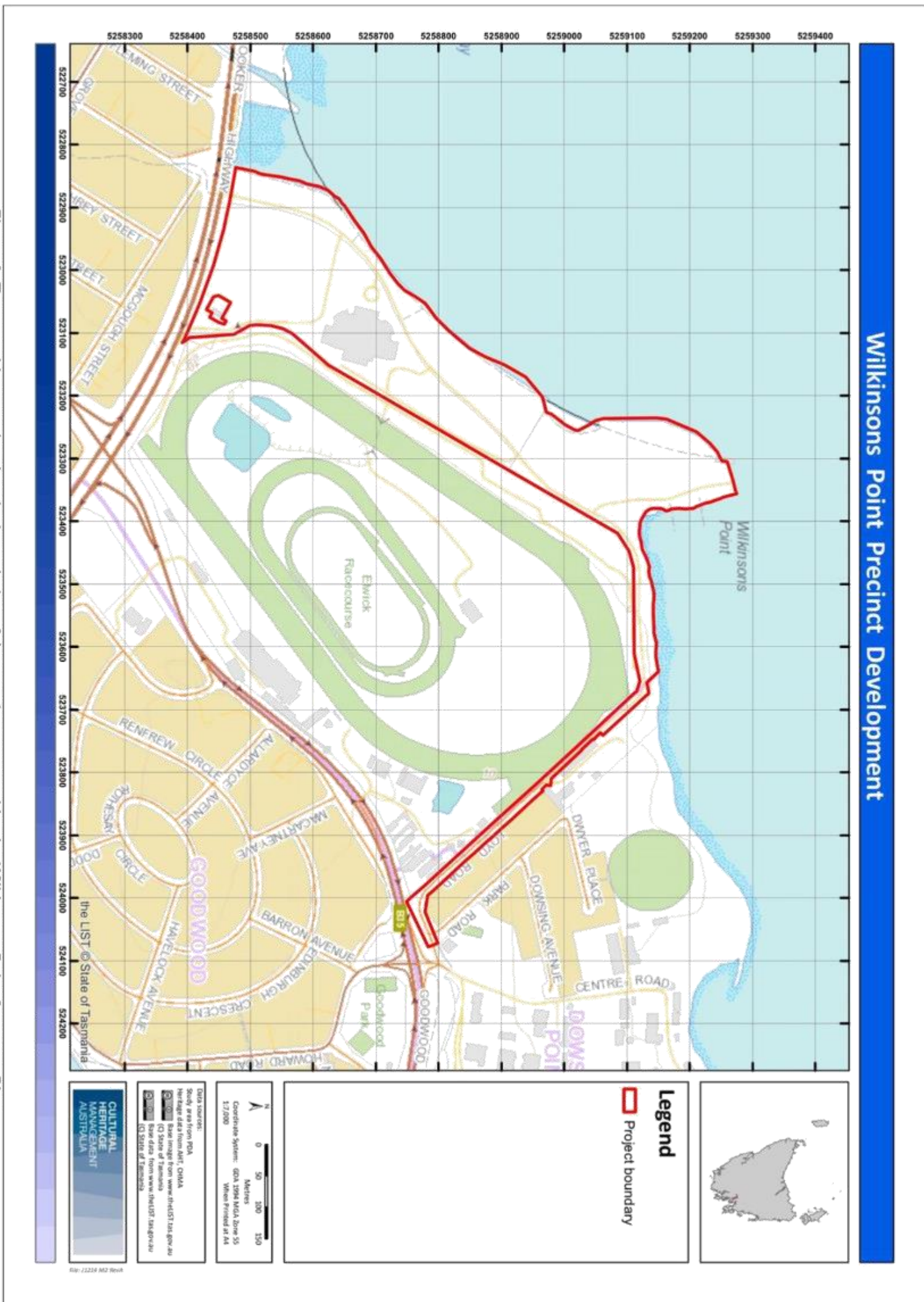


Figure 2: Topographic map showing the boundaries of the area incorporated by the Wilkinsons Point Structure Plan

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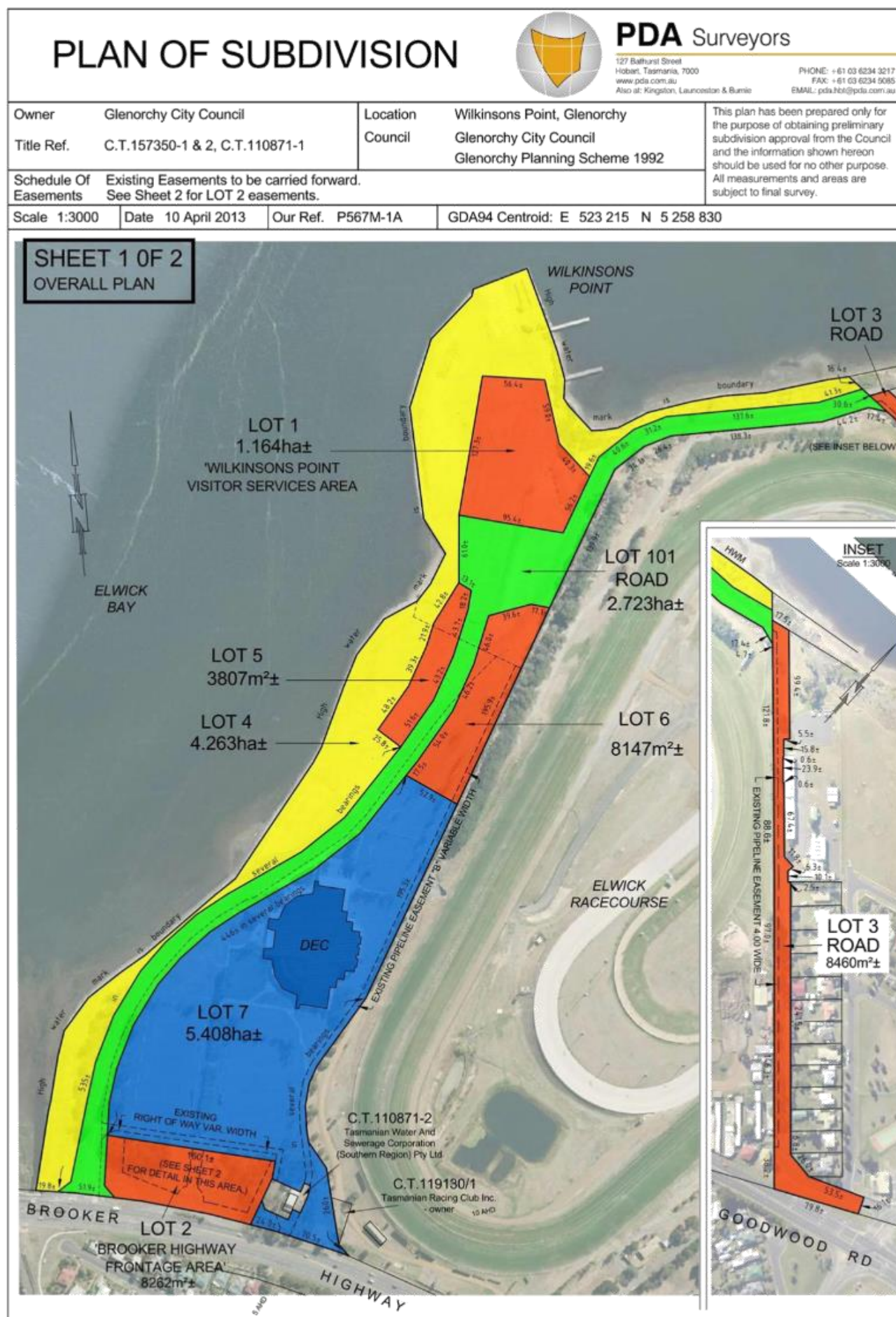




Figure 4: The draft Wilkinson's Point Precinct Plan map showing the five Precinct Zones

2.0 Environmental Setting of the Study Area

2.1 Introduction

Prior to undertaking archaeological survey of the study area, it is necessary to characterise the landscape. This includes considering environmental factors such as topography, geology, climate, vegetation and past and current landscape use. An assessment of the environmental setting helps to develop an understanding of the nature of Aboriginal occupation and site patterning that might be expected to occur across the study area. In addition, it must be remembered that in Aboriginal society, the landscape extends beyond economic and technological behaviour to incorporate social geography and the embodiment of Ancestral Beings.

The archaeological context is generally only able to record the most basic aspects of Aboriginal behaviour as they relate to artefact manufacture and use and other subsistence related activities undertaken across the landscape such as raw material procurement and resource exploitation. The distribution of these natural resources occurs intermittently across the landscape and as such, Aboriginal occupation and associated archaeological manifestations occur intermittently across space. However, the dependence of Aboriginal populations on specific resources means that an understanding of the environmental resources of an area accordingly provides valuable information for predicting the type and nature of archaeological sites that might be expected to occur within an area.

The primary environmental factors known to affect archaeological patterning include the presence or absence of water, both permanent and ephemeral, animal and plant resources, stone artefact resources and terrain.

Additionally, the effects of post-depositional processes of both natural and human agencies must also be taken into consideration. These processes have a dramatic effect on archaeological site visibility and conservation. Geomorphological processes such as soil deposition and erosion can result in the movement of archaeological sites as well as their burial or exposure. Heavily vegetated areas can restrict or prevent the detection of sites, while areas subject to high levels of disturbance may no longer retain artefacts or stratified deposits.

The following sections provide information regarding the landscape context of the study area including topography, geology, soils and vegetation. Much of this information is derived from The LIST – the Tasmanian Government Land Information System.

2.2 The Environmental Setting of the Study Area

The study area is located at Wilkinsons Point, on the southern margins of the River Derwent. The River Derwent estuary is a 'ria' or drowned river valley formed by coastal submergence about 6,000 years ago. The shoreline of the estuary in the surrounds of Wilkinsons Point is low-energy, with mudflats and shoals exposed at low tide (see Plate 5). The River is estuarine in this area, and subject to tidal influences. This low energy shoreline hosts a range of low energy shell fish species,

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including mud oyster and black mussel, which would have been important components of the traditional Aboriginal diet. Wilkinsons Point is a prominent north-south peninsula that delineates the eastern fringes of Elwick Bay. The terrain across Wilkinsons Point is typically flat to gently undulating, with slope gradients in the range of between 0-10° (see Plates 2 and 3).

Besides the River Derwent, the only other named water course in the immediate vicinity of the study area is Humphrey Rivulet. This semi-permanent water course has its origins in the ranges around Mt Hull, 8km to the south-west of the study area. The Rivulet flows in a north-east direction, eventually emptying into the River Derwent at the south-east end of Elwick Bay. The mouth of the rivulet is adjacent to the north-west boundary of the study area.

The underlying geology across Wilkinsons Point is dominated by Undifferentiated Quaternary sediments. The soils across the area mirror the underlying geology, and are uniformly described as Undifferentiated soils developed on Quaternary Alluvium.

Wilkinsons Point and surrounds has been very heavily modified through past development. The entire Point has been artificially levelled, with fill material introduced across virtually the entire study area. The depth of this fill material varies from around 0.5m to up to 3m. The foreshores of Elwick Bay and Wilkinsons Point have been fortified with rubble and large boulders, in an effort to stabilise the banks against the effects of erosion (see Plate 4). Built structures at Wilkinsons Point include the Derwent Entertainment Centre, with its associated bitumen carparks and access roads, the GASP Pavilion, and a series of jetties at the northern end of the Point, and Loyd Lane, which provides access to the Waterloo Barracks. Immediately to the east of the study area is the Elwick Racecourse (see Plates 6 and 7). Figure 5 presents an aerial image showing the study area, with the existing buildings, roads and infrastructure.

As a result of this modification and development, the native vegetation across the entire Point has been removed, and the natural soils and underlying geology has been virtually entirely obscured by fill material, landscaping or built surfaces. From an Aboriginal heritage perspective, there is very little potential for Aboriginal heritage sites to have survived in this very heavily modified landscape. If sites are present, they will have been severely impacted, or covered under fill material.

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Plate 2: View north-east across Wilkinsons Point study area showing the typically flat to gently undulating terrain encompassed within the study area



Plate 3: View south-west across Wilkinsons Point study area showing the typically flat to gently undulating terrain encompassed within the study area

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Plate 4: View north along the foreshores of Elwick Bay and Wilkinsons Point, showing the fortification of the shoreline



Plate 5: View north-east along the rock platforms and tidal mud flats in the intertidal zone at Wilkinsons Point, with rock bubble fortifying the embankment

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Plate 6: The Derwent Entertainment Centre, and the surrounding landscaped grounds in the southern portion of the study area



Plate 7: One of large Derwent Entertainment Centre carparks in the study area



3.0 Ethno-historic Background

3.1 Aboriginal Social Organisation in Tasmania

Ryan (2012) explains that the terms 'nation' and 'clan' are the preferred terms used by the Tasmanian Aboriginal community in place of 'tribe' and 'band' respectively. This terminology has been adopted in the following discussion.

According to Jones (1974), the social organisation of Tasmanian Aboriginal society appears to have consisted of three social units, these being the hearth group, the band (clan) and the tribe (nation). The hearth group was the basic family unit and would generally have consisted of a man and woman, their children, aged relatives and sometimes friends and other relatives. The size of hearth groups would generally range from between 2-8 individuals (Jones 1974; Plomley 1983). Plomley (1983) provides a description made by Peron of a hearth group he encountered at Port Cygnet:

There were nine individuals in this family, and clearly they represented a hearth group, because Peron visited their campsite with its single hut. The group comprised an older man and wife, a younger man and wife, and five children, one a daughter (Oure-Oure) of the older man and wife, and the other four the children of the younger man and wife. (Plomley 1983: 168).

The clan appears to have been the basic social unit and was comprised of a number of hearth groups (Jones 1974). Jones (1974:324-325) suggests that the clan owned a territory and that the boundaries of this territory would coincide with well-marked geographic features such as rivers and lagoons. Whilst the clan often resided within its territory, it also foraged widely within the territories of other clans. Brown (1986:21) states that the band was led by a man, usually older than the others and who had a reputation as a formidable hunter and fighter. Brown also suggests that the clan (as well as the hearth group) was ideally exogamous, with the wife usually moving to her husband's band and hearth group.

Each clan was associated with a wider political unit, the nation. Jones (1974:328-329) defines the tribe (or nation) as being:

...that agglomeration of bands which lived in contiguous regions, spoke the same language or dialect, shared the same cultural traits, usually intermarried, had a similar pattern of seasonal movement, habitually met together for economic and other reasons, the pattern of whose peaceful relations were within the agglomeration and of whose enmities and military adventures were directed outside it. Such a tribe had a territory, consisting of the sum of the land owned by its constituent bands...The borders of a territory ranged from a sharp well defined line associated with a prominent geographic feature to a broad transition zone. Jones (1974:328-329)

According to Ryan (2012:11), the Aboriginal population of Tasmania was aligned within a broad framework of nine nations, with each nation comprising between six to fifteen clans (Ryan 2012:14). The mean population of each nation is estimated to

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have been between 350 and 470 people, with overall population estimates being in the order of between seven to ten thousand people prior to European occupation (Ryan 2012: 14).

Ryan (2012: 13) presents a map showing the approximate boundaries for the nine Tasmanian Aboriginal Nations. This map shows that the study area falls within the boundaries of land occupied by the South East Nation (see Figure 6). The South East Nation was essentially a maritime people with their territory encompassing 555km of coastline, and their economy being based primarily on coastal resources. The boundaries of their territory extended from the west bank of the Derwent River, around present day New Norfolk down to South Cape, an inland through to the Huon Valley, and included all the D'Entrecasteaux Channel and Bruny Islands. In total, the territory of the South East Tribe encompassed 3100km² (Ryan 2012).

It is believed that prior to European contact the South East Nation probably consisted of seven individual bands. However, only four clans (bands) have been definitively recorded by the early European settlers. The study area falls within the range of the Mouheneenner Band who occupied the land around present day Hobart.

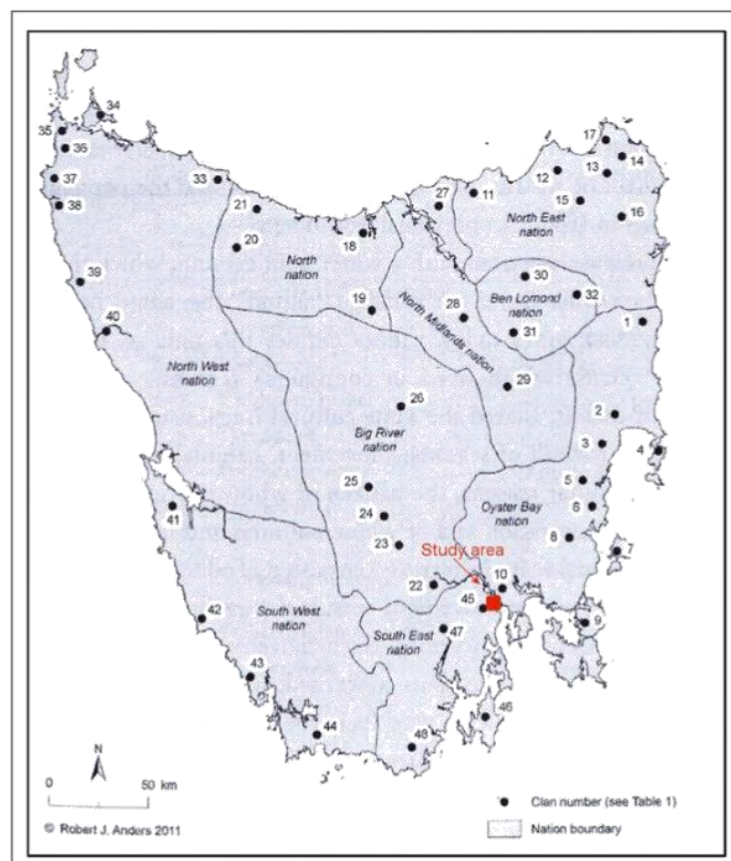


Figure 6: The Aboriginal Nations of Tasmania in relation to the proposed study area (after Ryan 2012:13)

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The South East Nation is believed to have spent the vast majority of the year exploiting the resources along the coastline, and the immediate hinterland areas. Their seasonal movement took place up and down the coastline. In winter they were primarily focused along the coastline gathering shellfish. In November they are reported to have gathered on North Bruny Island to exploit the mutton-bird colonies. By mid-summer the people had moved down to Recherche Bay to hunt seals. The South East People are known to have built sturdy bark catamarans, which were used to access the various Islands D'Entrecasteaux Channel and Bruny Islands. More extensive voyages were also undertaken across Storm Bay to the Tasman Peninsula (Ryan 2012). Figure 7 illustrates the proposed movements of the South East Nation.

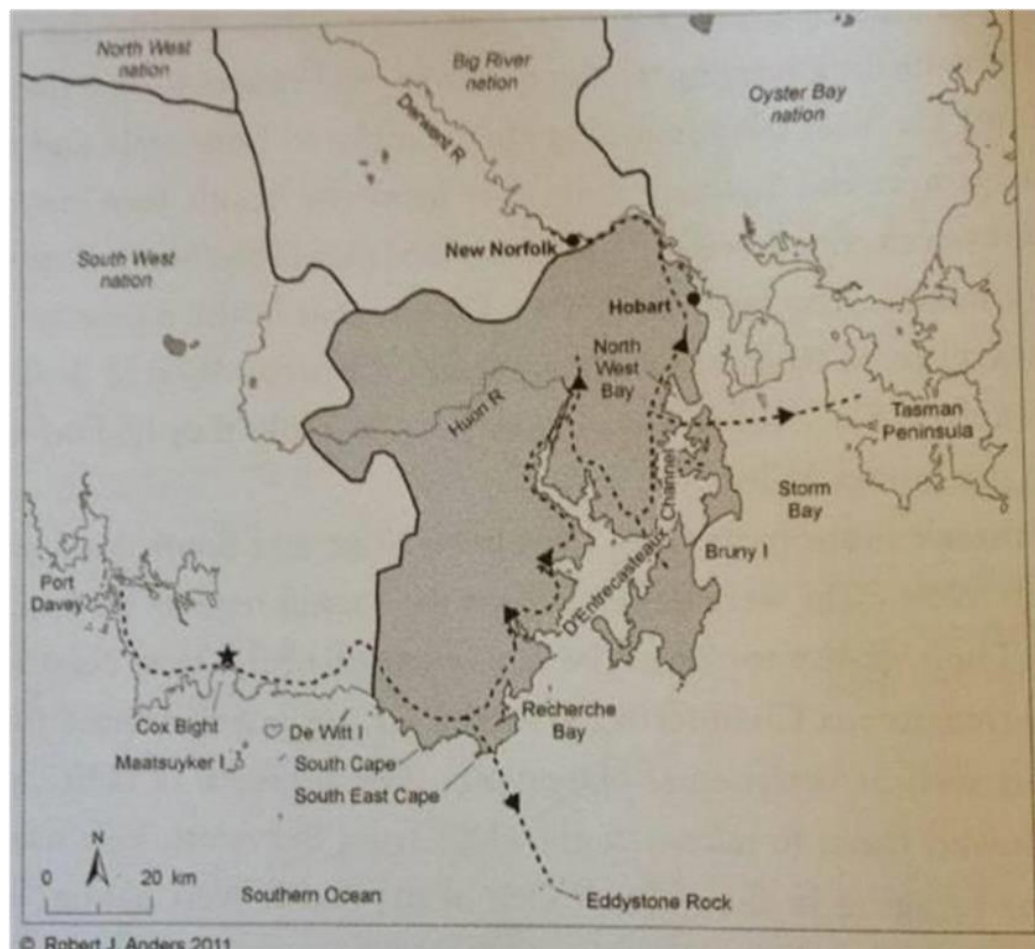


Figure 7: Seasonal movement of the South East Nations (after Ryan 2012:40)

The Subsistence Economy of the South East People

Information gleaned from the variety of ethnographic and historical sources for South East Tasmania provides some illustration of the subsistence economy in this region.

There are a number of ethno-historic accounts that comment on the prevalence of shellfish and crustaceans in the diet of the local inhabitants (see Plomley 1966 and

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1983). The archaeological evidence (in the form of midden sites) provides testimony to this.

In contrast, archaeological evidence for the consumption of fish is comparatively very sparse. This has led to some suggestions that fish was not a component of the diet of the Tasmanian Aborigines (see Jones 1974). At Adventure Bay in 1777 Cook reported how Aboriginal people refused a gift of fish (AT 2010:10). Robinson also recorded an instance of trying to convince his Aboriginal companions to eat fish, and the strong reluctance which they demonstrated (Plomley 2008:59).

Ethnographic accounts also indicate that terrestrial fauna was an important component of the Aboriginal diet. This is particularly the case with kangaroos and wallabies, which appear to have been hunted *en masse* at certain times of the year. McGowan (1985:92), for example reports that in May 1804 a large group of Aborigines, variously estimated to be up to 500 individuals, including men women and children were observed hunting kangaroo near the first European settlement at Risdon Cove. Robinson provides an account of the 'chief' Mannalargennana of the Oyster Bay tribe cooking wallaby:

...The animal is first thrown on the fire whole as is their custom with all animals, and when the hair is singed they take the carcass off the fire and rub off the scorched hair with their hands. This practice is tenaciously observed with all animals except the possum; the fur of this animal is first pulled off previous to its being placed on the fire. After the chief has rubbed the hair off the wallaby, he broke the fore leg by twisting it with his hands...He then cut the hind legs, after which he made a hole in the belly with his fingers and pulled out the entrails and then thrust in some hot ashes, the animal being previously roasted outside. (Plomley 1966:548-549).

Possum also seems to have been frequently hunted. Plomley (1966:533) describes possums being knocked down out of trees with waddies, or people climbed trees to reach possum holes. Women again are recorded as hunting possum. Robinson records how foot and hand holes were cut in trees to assist climbing and the women used fibre ropes to pull themselves up the trunk (Plomley 1966:533).

Unfortunately, there are very few accounts available for the hunting of other terrestrial fauna. It is likely that a much wider range of species were targeted, including echidna and smaller marsupials.

In the midlands region, birds and eggs appear to have also formed a major component of the diet of the local inhabitants, with swans, ducks and red bills being some of the main species targeted (Plomley 1966: 217). However, there are very few historical accounts available for South East Tasmanian regarding the hunting of birds and gathering of eggs. Nonetheless, it is reasonable to assume that this also was carried out at certain times of the year.

Only a few plant foods are documented in the ethnohistoric accounts as having been eaten. This includes a bulbous plant known as 'native bread' and a plant that has the

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appearance of asparagus which was found by the roots of peppermint trees (Plomley 1966). It is very likely that many more plant foods were eaten by the local Aboriginal population. Jones (1971:91-95) for example lists 70 edible plant species that are available in Tasmania, and are likely to have been consumed at times of seasonal availability. This would include tree ferns, fern roots, pig face and a variety of sea weeds.

Material Culture

The ethnographic observations of early European explorers provide a valuable snapshot into aspects of the material cultural and social customs of the Aboriginal people of South East Tasmania. These observations are especially valuable where they describe to those items and practices that do not survive in the archaeological record. Clothing, shelter, weapons and hunting tools are all aspects of material culture described in ethnographic sources.

While the early European explorers generally recorded the people of South East Tasmania as being mostly naked, there are references to kangaroo skin being used for capes, slings and binding for wounds. Both William Anderson (Cook's surgeon in 1777 when he anchored briefly in Adventure Bay) and Labillardiere (the 1793 expedition anchored in Recherche Bay) recorded seeing kangaroo skin used to bind injured feet (Dyer 2005:25). This was very effective it would seem as the people were able to keep up with their companions (Dyer 2005:26). Cook also recorded women using kangaroo skin slings to carry children, and there are several illustrations of this in the paintings by Petit and Lasueur from the Baudin expedition (Bonnemains *et al* 1988). Baudin's diaries suggest that women wore kangaroo skins slung across their shoulders, which provided both warmth and a means of carrying children and other items (Cornell 1974:329).

Ethnographic sources document a range of shelters used in Tasmania. The most common in the South East were simple windbreaks of thick strips of bark woven together and supported on vertical wooden poles, as seen in the artwork from the Baudin expedition (Bonnemains *et al* 1988). These shelters were often built facing west, offering protection against the cold winds off the Channel to the east (AT 2010:16). The other major type of shelter in South Eastern Tasmania was a durable, weatherproof structure made from bending leafy branches together to form a 'beehive' looking hut (AT 2010:15).

Robinson reported seeing huts that were decorated with symbols he recognised as similar to those observed in rock engraving sites at Cape Grim (Plomley 2008:17). In June 1804 Lieutenant Governor Collins made contact with Aboriginal people living on the Huon River (Plomley 2008:18). He recorded an 'Aboriginal village' with about twenty families congregated at the site. Labilliere similarly documented seeing a group of 5-6 huts made of 'leafy branches' and surrounded by a single fire, suggesting communal cooking, and piles of shellfish (AT 2010:16).

Plomley (1983:185-194) provides a comprehensive account of the weapons and hunting implements used by the Tasmanian Aborigines, based on the ethnographic accounts. It appears that the two main weapons used by the local inhabitants were

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the spear and the club. The spear was a simple flexible rod with a point at one end, the length of which appears to have varied significantly from between 6-12 feet. Spears in South East Tasmania do not seem to have been hafted with points, nor were they barbed (AT 2010:17). The waddie or club is described as a piece of wood about 60cm long, 2.5cm in diameter and slightly tapered toward the gripping end. This item is reported to have been used as a throwing stick as well as a club. In addition, Labillardiere records women at Recherche Bay collecting shellfish using a small chisel like wooden implement to prise the shellfish from the rocks (Plomley 1983:22).

In many of the early ethnographic accounts for the South East region, there is reference to the baskets carried by the Aboriginal people. The ethnographic sources indicate at least four different types of basket making in South East Tasmania. There are a number of reports of water vessels constructed from the fronds of giant kelp which could hold up to five to ten litres of water (see Labillardiere 1800:190). Other types include braided baskets made from bark and dried seaweed, woven rush baskets and grass baskets made from a grass called an iris that grew on Bruny Island (AT 2010:17). One of the more detailed descriptions of basket manufacture comes from Robinson while he was on Bruny Island:

The native basket is made of rushes of a species of grass called iris. In preparing them for use they place the same on a slow fire which gives them a tenacity that enables the manufacturer to twist them into threads. These are plaited together and then formed into a basket which in shape is somewhat semiglobular. (Plomley 1966:58)

There are numerous ethnographic accounts for the South East region describing the watercraft used by the local inhabitants. From these accounts it appears that the South East people were active in their travels between the mainland and the numerous offshore islands.

One of the most detailed descriptions of these watercraft comes from Louis Freycinet, an officer on the *Naturalist* in 1802:

We have seen them and have measured several. They had the same dimensions and were constructed in exactly the same way. Three rolls of the bark of the eucalypt made up its whole structure...These bundles when taken separately, resemble in a way the yard of a vessel, were joined at their ends, and this caused them to stick up in a point and make up the whole of the canoe. The assemblage was made quite firm with a sort of grass or sedge. In this state, the craft had the following dimensions-

- Length inside 2.95m
- Breadth outside 0.89m
- Total height 0.65m
- Depth inside 0.22m
- Size at the ends 0.27m

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The savages can put five or six peoples in these canoes; but more commonly only three or four are taken at a time. Their paddles are plain pieces of wood... Usually they sit down to manoeuvre their canoes; in that case they place bundles of grass to serve as seats. At other times they stand up. We have seen them cross the Channel only in fine weather. One can imagine that such a fragile and imperfect craft would never be able to make their way, let alone keep afloat, in a rough sea... It is to be noted that they always put a fire at one end of their canoes, and to prevent the fire from spreading they place under it a bed of earth or ashes of sufficient thickness. (Plomley 1983:119-120).

Interestingly, although stone artefacts dominate the archaeological record for Tasmania (and Australia generally), there are few ethnographic accounts in Tasmania documenting their use. Those observations that are made, primarily relate to the finding of stone implements at camp sites. Frustratingly, there are virtually no accounts regarding the form of the implements, how they were made and used. Robinson reports that he:

Obtained a stone from one of the Bruny natives with which they sharpen their waddies...It has the resemblance of flint and is found at the Isthmus of Brune [sic] (Plomley 1966:113)

One of the very few descriptions of Aboriginal people carrying out quarrying activity comes from Raynor who recounted that his father had come across about 20-30 Aborigines, men, women and children, at a quarry near Plenty on the southern side of the middle Derwent Valley:

Noisily chatting, they were breaking the stone into fragments, either by dashing them on the rocks or by striking them with other stones, and picking up the sharp edged ones for use... (Raynor in Roth 1899:151)

This quarry was subsequently visited by Rhys Jones, who noted that the quarried material was an indurated cherty hornfel and that the quarry extended over an area of about 2 ½ hectares (Jones 1971:456).

Aboriginal people of South East Tasmania are described as frequently bearing tattoos and cicatrices. The ethnographers generally describe these as decorative, although it is likely that they held a range of other meanings as well. Robinson described the process of cutting the skin with a sharp stone and rubbing the wound with charcoal or red ochre mixed with animal fat (Plomley 2008:137). The scarring was observed on both men and women and typically was either in the form of a series of short lines, or straight, concentric or circular lines across the chest (AT 2010:25). At Rocky Bay Labillieire noted that people rubbed their bodies with powdered charcoal and records one man whose cropped hair was 'plastered with ochre' (AT 2010:25).

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Burial Practices

Burial customs were also observed by the ethnographers. Cremation was the usual form of disposing of a deceased person (Plomley 2008:17). The cremated remains were observed by Robinson to sometimes be wrapped in kangaroo skins and carried as an amulet by members of the deceased person's clan (AT 2010:21). Robinson reports on a funeral pyre built by both men and women of branches and twigs. The body was placed on the pyre with bound arms and legs. This was left to burn for a day, with the relatives returning the following day. The remains were collected and burnt a second time, after which the ash was scattered through the grass (Plomley 2008:17).

Other burial practices in the South East region include interment and burial in hollow trees. Illustrations from the Baudin expedition show 'tombs' at Maria Island (Bonnemains *et al* 1988:131). These were bark tepee-like constructions built over remains that have been covered in fibres or leaves weighted down by rocks (Bonnemains *et al* 1988:131). The practice of placing remains in hollow trees in the South East region is reported by Robinson (Plomley 2008; Austral Tasmania (AT) 2010:21). Hollow tree burials are perhaps associated with violent deaths, as occurred in the Central Highlands (AT 2010:20).

Land Management

Aboriginal people across South Eastern Tasmania appear to have actively managed their environment. Historical sources provide numerous references to burning vegetation. AT (2010:9) suggest that this had a range of applications, including modifying the environment, attracting terrestrial game, encouraging edible plant regrowth and maintaining pathways used to travel across the country. Robinson recorded that Aboriginal people in the South East would travel along 'well beaten paths' and leave abalone shells at drinking places along rivers (Plomley 2008:59). Aboriginal pathways were also utilised by the first European settlers to the area.

The Aboriginal people of the South East greatly valued fire and there are several first-hand accounts of fire being transported by means of burning torches or 'fire brands'. In 1777 Bligh recorded seeing a basket of white 'flint like stones' at Adventure Bay (AT 2010:12). These are likely to have been fire brands.

Baudin in 1802 reported seeing a 'multiplicity of fires' burning in 'on all sides' from where his ship was anchored in North West Bay (AT 2010:12). Captain Hamlin reported to Baudin watching two Aboriginal men pull up their canoe at North West Bay and walk into the scrub, setting fire to the undergrowth as they walked (AT 2010:12).

3.2 Contact History

It appears that outside the initial settlements at Risdon and Sullivan's Cove, there was a brief period of amicable relations between Aboriginal people and the European settlers. For the most part, the Mouheneener would not visit British camp at Sullivan's Cove, and were friendly to small groups of Europeans met in the bush.

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In 1804, Colonial chaplain Robert Knopwood records observing 'a great many native huts and fires they made' on the western shore of the Derwent, north of Hobart (Nicholls 1986). He also recorded that Aboriginal people were around the camp at Sullivans Cove but could not be persuaded to enter (Nicholls 1986). By 1805, Aboriginal people were visiting outlying huts in areas near now Kingston, Taroona and New Town, with trades systems established in which Aboriginal people would exchange kelp and crayfish in return for bread and potatoes (AT 2013:8).

However, these friendly relations were relatively short-lived. Conflicts over food resources triggered a deterioration in these relationships as European settlers sought to augment their meagre resources with freshly caught game. Hobart and the surrounding areas became vital hunting grounds supplying kangaroo meat to the struggling colony on the brink of starvation (Alexander 2006:5).

The economic importance of the kangaroo hunters to the success of the colony cannot be over emphasised. Without the supply of kangaroo meat, the government would have been unable to meet the rations and maintain the settlement (Boyce 2009:52). The European consumption of kangaroo was so great that by late 1808 they had been largely exhausted from the immediate surrounds of Hobart – causing hunting parties to venture further afield. The reliance of the colonisers on kangaroo brought them into direct conflict with the Aboriginal people.

At first, the Europeans were at an advantage as they had hunting dogs that greatly increased the numbers of kangaroo that a hunter could kill (Boyce 2009:52). But, Aboriginal people quickly adapted to the use of dogs, an example of rapid cultural and economic adaptation. This brought the two groups onto a more even par (Boyce 2009:66). This period of parity only lasted while the European population was small; as early as 1806 the kangaroo populations around Hobart had been decimated and the hunters were being forced to move further north, towards the Brighton district (Boyce 2009:54). The British settlement was literally starving, and there was a strong economic imperative for hunters to extend to the north in search of fresh sources of game. As the settlement continued to expand, both the colonists need for a meat supply, and their transformation of the hunting grounds into cleared, pastoral farms set the scene for an escalation in conflict (Boyce 2009).

As the population of Van Diemen's Land increased, farms gradually spread out along the shores of the Derwent, the agricultural economy grew and land grants increased in number.

Isolated relationships between Aboriginal people and European settlers have been recorded during this time. For example, Knopwood, who was granted land at Battery Point, records having a 17 year old Aboriginal girl come to his home seeking fire (1806), and several years later a group of seven Aboriginal people coming to his home and camping in the garden to gather oysters and mussels from the nearby shore (now Salamanca Place) (Nicholls 1986).

Of William Collins, a settler at Macquarie Point, Knopwood records 'He see many of the natives and was conducted to the town by some of them. Where there were about 20 families, he stayed all night with them; they were very friendly. He see 3 of

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their cattermerans or small boats made of bark that will hold about 6 of them' (Nicholls 1986 cited in AT 2013).

A more prolonged relationship existed between Edward Lord and an Aboriginal man named 'Musquito' whom Lord employed as a stock keeper. In 1816, Musquito accompanied Lord on a cattle-buying mission to Mauritius (AT 2013).

Visits by groups of Aboriginal people to Hobart Town continued into the early 1820s; Robinson records Aboriginal people visiting the Town in both 1824 and 1825.

Between 1804-1824 interactions between Aboriginal and Europeans have been classified as 'uneasy co-existence', however things became much more hostile following 1824. By the 1820s the European population of the town had exploded, resulting in a corresponding increase in the issuing of land grants over the most valuable grass plains. This in-turn caused issues relating to access to native game, hunting grounds and the connection of Aboriginal people with their traditional tribal lands (AT 2013). Attempts to forcibly remove Aboriginal people from the areas settled by Europeans failed and unprecedented violence ensued.

Clashes with Aboriginal communities became more frequent and more violent as European settlement expanded. Lieutenant Governor George Arthur proclaimed Martial Law in November 1828, leading to the active pursuit, capture and death of many Aboriginal people. A bounty was introduced in February 1830 of five pounds for every adult captured and two pounds for each child. In the two years between November 1828 and November 1830 some twenty Aboriginal people were captured and a further sixty lost their lives (Ryan 1996:102).

This violence culminated in the declaration in November 1828 of Martial Law against the Aboriginal people in the 'settled areas' (Ryan 1996:101). A series of six 'roving parties' were established for the purposes hunting and capturing the remaining Aboriginal occupants of the settled areas. This military action resulted in a general increase in the scale of violent conflict between Europeans and Aboriginals, and by 1830 it was decided that a full scale military offensive was required in order to quell the Aboriginal uprising.

This operation, termed the 'Black Line', involved the assembly of 2000 men in October 1830. They formed a human chain that swept through the settled districts over a period of three weeks, with the aim of driving the remnant Aboriginal populations from these areas. The Black Line was Governor Arthur's response to repeated insistence from settlers that Aboriginal people should be removed from the midlands (Alexander 2006: 15). This reflects the level which conflict had reached by 1830. Martial Law was finally revoked in 1832 (Ryan 1996:112-113).

The Black Line itself proved to be a dismal failure, with the total capture of two Aborigines and death of another three. However, it was sufficiently distressing to the general Aboriginal community that more than two hundred people subsequently allowed themselves to be persuaded by George Augustus Robinson (the 'Protector of Aborigines') to relocate to Flinders Island in exchange for food, shelter and safety

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(Lines 1991:47). They were further promised that they would be returned to their former homes on the Tasmanian mainland as soon as possible.

By 1835 the majority of the 220 Aborigines who arrived with Robinson at the Wybalenna Aboriginal establishment on Flinders Island had died from inadequate shelter, insufficient provisions and introduced disease. Birth rates were extremely low and few children survived infancy. In 1847 six Aborigines at Wybalenna made a petition to Queen Victoria asking that the promises made to them be honoured. In October 1847, the surviving 47 Aborigines were transferred to their final settlement at Oyster Cove. Only forty four people survived the trip (Lines 1991:47).

The Oyster Cove settlement was located just to the north of Kettering. Conditions at Oyster Cove were only marginally better than at Wybalenna and the Aboriginal population continued to experience high mortality rates. However, throughout the 1850s and 1860s the European settlers recorded numerous anecdotes of Aboriginal people at Oyster Cove maintaining elements of their pre-contact lifestyle (AT 2010:26). The best known example is Fanny Cochrane who married ex-convict William Sawyer. She is reputed to have practiced traditional shellfish gathering, basket making, medicine and religious practices (AT 2010:27).

4.0 Background Archaeology

4.1 Regional Studies

The study area is situated within the South-East region of Tasmania. There have been a number of Aboriginal archaeological studies undertaken within the South-East region over the past two decades. The majority of these have been in the form of survey assessments associated with proposed development activities, and have focused on discreet areas (these are summarised in section 4.2) However, there has also been some broader research based investigations undertaken in the region. Probably the most comprehensive of these and the one most pertinent to the present investigations are that of Officer (1980) and Brown (1986).

Officer (1980)

Iain Officer (1980) carried out an extensive survey of the Derwent Estuary region, as part of his thesis works. The areas covered by the survey investigations extended from Blinking Billy Point (west bank of River) and Trywork (east bank of River), upstream to New Norfolk. The survey assessment in this area involved walking a series of survey transects along the shoreline of the River, with transects in some areas extending up to 1km inland from the River.

In the course of his investigations, Officer recorded a total of 416 midden sites. Of these, 298 were located on the east bank of the River and 118 on the west bank (Officer 1980).

The shell midden sites identified by Officer were predominantly comprised of mussel (*Mytilus planulatus*, *Xenostrobus securus* or *Brachidontes rostratus*) and oyster (*Ostrea angasi*). A wide range of other shell fish species were represented in low numbers at a number of these sites (Officer 1980).

Stone artefacts were observed at 33 of the recorded midden sites (28 artefacts on the east bank and 5 artefacts on the west bank). A wide range of stone material types were represented in these artefact assemblages, including cherty hornfels, silicified breccia, mudstone, chalcedony, quartz, basalt and dolerite (Officer 1980).

Bone material was observed at only four midden site locations, indicating that for whatever reason, bone material in middens on the Derwent River is a rare occurrence (Officer 1980).

One of the areas intensively surveyed by Officer (1980) was Bedlam Walls, which lies on the east side of the Derwent River, between Geilston Bay and Risdon Cove and extends up to 1.2km inland from the shore of the River. Officer (1980) recorded a total of 74 sites in this area (sites AH 1184-1257). The vast majority of sites are classified as middens, however, three stone quarries and one rock shelter was also identified. A large number of the midden sites (28%) are described as being extensive, covering in excess of 1000m², with the largest site being over 8000m² (Officer 1980). The midden sites range from being located immediately on the shore line through to up to 530m inland from the shore. The dominant shell material

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represented in these midden sites was the black mussel (*Mytilus planulatus*) and oyster (*Ostrea angasi*).

Officer (1980) notes that a local resident (Dr Jacklyn) also recorded a large number of Aboriginal sites in the Bedlam Walls area, in the period between 1965-1973. The sites recorded by Officer (1980) included those site identified by Dr Jacklyn. Officer identified an additional 19 midden sites to those identified by Jacklyn. As part of his recording efforts, Dr Jacklyn carried out an extensive salvage of stone artefacts in the Bedlam Walls area. Jennings (1983) subsequently undertook an analysis of this collection. Jennings (1983) reports that of the 1016 pieces of stone material collected by Dr Jacklyn, 991 pieces are determined as being stone artefacts, giving an average artefact density for the area of 381 artefacts/km². The majority of artefacts were collected from the shoreline area between Shag Bay and Geilston Bay (641 artefacts). Of the 991 artefacts, 633 were un-worked and 358 are worked. Stone material types represented in the assemblage include hornfels, quartzites, chalcedony and sub-basaltic hornfels (Jennings 1983).

Brown (1986)

Steve Brown (1986) was engaged to carry out the South East Tasmanian Archaeology Project. This was one of nine regional overview studies, funded through National Estate grants, which were directed at examining the Aboriginal archaeological resources of Tasmania. The aims or duty statement for the South East Tasmanian Archaeology Project was to define the prehistory of the region and to define present and potential future impacts on the Aboriginal heritage resources in the region.

As part of his research design, Brown (1986:49-50) divided the landscape of the south-east region into landform unit types. Five major landform unit divisions were identified. These were;

- small offshore islands,
- Bruny Island,
- coastal and estuarine environments (consisting of coastal margins, coastal plains, river estuaries, lagoons and swamps),
- inland hills, plains and river valleys, and
- inland mountains (alpine plateau).

Brown (1986:49-50) then collated available archaeological data for these landscape units, including the range of site types present, the site components and the distribution and frequency of sites. The data was generated from previous archaeological investigations undertaken in the region, as well as the findings from the field work carried out by Brown.

Of the five landscape units identified by Brown (1986), the most pertinent to the present investigations are the coastal and estuarine environments. The following provides an overview of the findings, as presented by Brown (1986) for this landform unit.

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Coastal and Estuarine Regions

The Coastal and Estuarine Regions consists of coastal margins, coastal plains, river estuaries, lagoons and swamps. It encompasses the River Derwent.

Brown (1986:79) notes that shell middens are by far the most common site type occurring within the coastal and estuarine environmental zone. A number of trends were observed in relation to the distribution of this site type within the coastal and estuarine environmental zone, and the composition of materials at these sites. These are summarised as follows.

- Middens are generally not present in areas with steep shore profiles.
- The greatest number of middens was identified on coast lines which contain a mixture of rocky headlands and short sandy beaches (mixed coast areas).
- On long sandy beaches the volume of midden material was found to decline with distance from a rocky coast.
- Middens are essentially comprised of two types; rocky coastal and bay estuarine, reflecting different landscape settings. However, middens with shell species common to both these types occur in intermediate zones such as estuary and lagoon mouths.
- The largest rocky coastal shell middens occur on rocky headlands and points, with associated rock platforms, where abalone, turbo, mussels and limpets occur.
- The bay estuarine type middens are generally composed predominantly of mussel and oyster shellfish species. The largest middens are found immediately adjacent to the shoreline, near to the shell fish resources. A few sizeable middens have been noted up to 500m inland, with smaller middens having been identified up to 1km inland.
- Shell middens in South-east Tasmania are comprised almost entirely of shell, and rarely contain large numbers of stone artefacts or faunal remains (Brown 1986:79-82).

Overview for the South-East Tasmanian Region

In summary, Brown (1986:99-102) has identified the following broad patterns of site type distribution in South-East Tasmania.

- Aboriginal archaeological sites occur in all parts of the landscape.
- The coastal margins (including off shore islands), coastal plains and river estuaries are very rich in archaeological resources and contain a high density of sites with large quantities of archaeological remains. The Derwent Estuary in particular was an area of rich archaeological resources.
- Inland sites are dominated by open artefact scatters and isolated artefacts. Artefact densities are highest along the river, rivulet and creek valley floors and adjacent to lower hill slopes, particularly where the hill slopes are gently inclined, with a north aspect, and have sandy well drained soils.
- Shell middens most frequently occur in close proximity to shellfish resources, particularly on cliff tops or headlands where there is easy access to these resources.
- Stone artefact quarries most frequently occur where there is a surface expression of geological contact zones, in particular between Jurassic dolerite and Triassic or Permian strata.

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As a general statement, Brown (1986:102) summarises that site numbers and densities in South-east Tasmania are greatest within 300m of the present coastline and in the immediate vicinity of coastal lagoons.

In terms of environmental factors determining site location, Brown (1986:103) is of the opinion that topography is perhaps the most consistent and important factor. Sites in general, but particularly the larger ones (in terms of artefact numbers) are very seldom found on steep gradient slopes.

In terms of duration of Aboriginal occupation, Brown (1986:99-100) believes that the South-eastern Tasmanian region has probably been occupied by Aboriginal people for the past 20 000 years. However, he acknowledges that there are no conclusive dates for sites beyond 6000 years old for the region. Pleistocene dates have however been obtained for sites in close proximity to the region (Beginners Luck Cave and a cave on the Weld River).

4.2 Registered Aboriginal Sites in the Vicinity of the Study Area

As part of Stage 1 of the assessment process, a search was undertaken of the Aboriginal Heritage Register (AHR) to determine whether any registered Aboriginal heritage sites are located within or in the general vicinity of the study area.

The search shows that there are a total of 29 registered Aboriginal sites that are located within an approximate 2km radius of the study area (search results provided by Kate Moody from AHT on the 14-8-2019).

The vast majority of these sites are classified as shell middens (26 sites). These shell midden sites are predominantly concentrated along the foreshore margins of the River Derwent, with most of them having been recorded by Officer (1980), as part of his extensive survey assessment of the River Derwent Estuary (see section 4.1 for details). Of the remaining three registered sites, one is classified as an artefact scatter (AH9000), one is classified as an isolated artefact (AH10477), and the third site is classified as not being a site (AH10466). This is discussed in more detail below.

Table 1 provides the summary details for these 29 sites, with Figure 8 showing the reported location of the 29 sites, in relation to the study area boundaries (based on information generated from the AHR).

Four of these registered Aboriginal sites appear to be situated either within, or in a 50m radius of the study area boundaries (sites AH1026, AH10466, AH10476 and AH10477). These sites are highlighted in red in Table 1.

Site AH1026 is classified as a shell midden, which was originally recorded by Officer (1980). The AH site recording form for this site provides very little descriptive information. The grid reference location provided on the AHR places the site on the southern foreshore margins of the River Derwent, immediately to the east of Wilkinsons Point. This is right on the northern boundary of the study area.

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Site AH10466 is classified on the AHR as "not a site". The site was originally recorded by Maynard in 2007, as part of the Wilkinson Point and Elwick Bay Masterplan study. The site is described as being a shell midden deposit around 2-3m in length, which was identified on the foreshores of the River Derwent, at the north tip of Wilkinsons Point. The site was identified in a bare area associated with the construction of a wharf and jetty, and was noted to have been impacted by bulldozer activity. The midden was reported to comprise mud oyster shell (Maynard 2007). The site was subsequently revisited by Mike Jones from AHT in 2010. Jones assessed that the shell material was enclosed within historically deposited fill material, and was most likely spoil from dredged material. On this basis, the site was re-evaluated as not being of Aboriginal origin, and re-classified as not being a site. Maynard (2007) only identified one other Aboriginal site during his survey assessment, this being AH1025 (a shell midden). This site is located to the east of the bounds of the current study area.

Site AH10476 and AH10477 were both recorded by Everett (2007) as part of the Brooker Highway Transport study. Both sites appear to be located just outside the eastern boundary of the study area, within the Elwick Racecourse. The survey area looked at by Everett (2007) took in the south-west portion of the current study area.

Site AH10476 is classified as a shell midden. The site is described as a deflated shell midden deposit across a 1m x 1m area, under a tree. The midden material was reported to comprise mutton fish (abalone) shell and chiton shell.

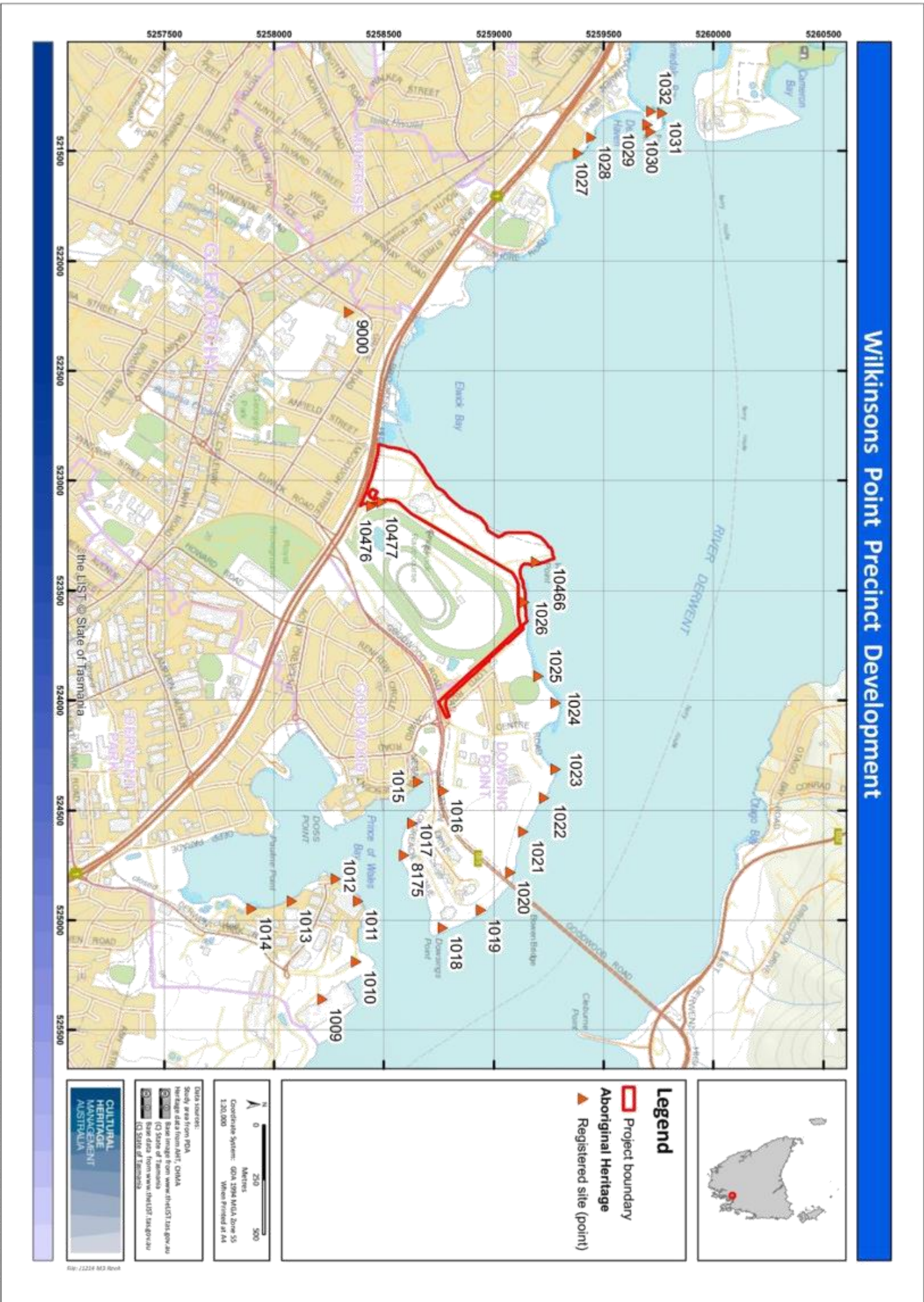
Site AH10477 is classified as an Isolated artefact. The AH site recording form provides very little descriptive information for the site, other than to note that the artefact is manufactured from silcrete.

Table 1: Summary details for registered Aboriginal sites in the general vicinity of the Wilkinsons Point study area (Based on the results of the AHR search dated 14/8/2019)

AH Site Number	Site Type	Locality	Grid Reference (GDA94) Easting	Grid Reference (GDA94) Northing
1009	Shell Midden	Derwent Park	52 5360	52 58219
1010	Shell Midden	Derwent Park	52 5190	52 58375
1011	Shell Midden	Derwent Park	52 4912	52 58382
1012	Shell Midden		52 4812	52 58282
1013	Shell Midden	Derwent Park	52 4912	52 58082
1014	Shell Midden	Derwent Park	52 4947	52 57899
1015	Shell Midden	Goodwood	52 4370	52 58656
1016	Shell Midden	Dowsing Point	52 4411	52 58771
1017	Shell Midden		52 4558	52 58629
1018	Shell Midden		52 5035	52 58767
1019	Shell Midden		52 4955	52 58942
1020	Shell Midden	Dowsing Point	52 4782	52 59075
1021	Shell Midden	Dowsing Point	52 4598	52 59135
1022	Shell Midden	Dowsing Point	52 4444	52 59228

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AH Site Number	Site Type	Locality	Grid Reference (GDA94) Easting	Grid Reference (GDA94) Northing
1023	Shell Midden		524312	5259282
1024	Shell Midden	Dowsing Point	524012	5259282
1025	Shell Midden	Dowsing Point	523890	5259202
1026	Shell Midden	Glenorchy	523553	5259139
1027	Shell Midden	Rosetta	521512	5259382
1028	Shell Midden	Rosetta	521437	5259444
1029	Shell Midden	Rosetta	521380	5259700
1030	Shell Midden	Rosetta	521412	5259715
1031	Shell Midden	Rosetta	521327	5259765
1032	Shell Midden	Rosetta	521319	5259718
10466	Not a Site	Glenorchy	523369	5259192
10476	Shell Midden	Glenorchy	523115	5258444
10477	Isolated Artefact	Glenorchy	523097	5258490
8175	Shell Midden	Dowsing Point	524704	5258590
9000	Artefact Scatter	Glenorchy	522232	5258341



5.0 Predictive Modelling

5.1 Introduction to Predictive Modelling

Predictive modelling, in an archaeological context, is a fairly straightforward concept and has been utilised by archaeologists in Australia for a number of years as a tool for undertaking research into Aboriginal heritage sites. In summary, predictive modelling involves the collation of information generated from previous archaeological research in a given region, and using this information to establish patterns of Aboriginal site distributions within the landscape of that particular region. On the basis of perceived patterns of site distribution, archaeologists can then make predictive statements regarding the potential for various Aboriginal site types to occur within certain landscape settings, and can make preliminary assessments regarding the potential archaeological sensitivity of landscape types within a given region.

5.2 Predictive Models; Strengths and Weaknesses

It should be acknowledged that most, if not all predictive models have a number of potential inherent weaknesses, which may serve to limit their value. These include, but may not be limited to the following:

- 1) The accuracy of a predictive model is directly influenced by the quality and quantity of available site data and information for a given region. The more data available and the greater the quality of that data, the more likely it is that an accurate predictive model can be developed.
- 2) Predictive modelling works very well for certain types, most particularly isolated artefacts and artefact scatters, and to a lesser extent scarred trees. For other site types it is far more difficult to accurately establish distribution patterns and therefore make predictive modelling statements. Unfortunately, these site types are generally the rarer site types (in terms of frequency of occurrence) and are therefore generally the most significant sites.
- 3) Predictive modelling (unless it is very sophisticated and detailed) will generally not take into account micro-landscape features within a given area. These micro features may include (but is certainly not limited to) slight elevations in the landscape (such as small terraces) or small soaks or drainage depressions that may have held water. These micro features have been previously demonstrated to occasionally be focal points for Aboriginal activity.
- 4) Predictive modelling to a large extent is often predicated on the presence of watercourses. However, in some instances the alignment of these watercourses has changed considerably over time. As a consequence, the present alignment of a given watercourse may be substantially different to its alignment in the past. The consequence of this for predictive modelling (if these ancient water courses are not taken into account) is that predicted patterns of site distributions may be greatly skewed.

5.3 A Predictive Model of Site Type Distribution for the Study Area

The findings of previous archaeological investigations undertaken in the general vicinity of the study area and the information generated from the AHR search, shows that shell midden sites and Artefact scatters/isolated artefacts are by far the most commonly encountered site types in this general area. On this basis, it is assessed that these are the site types that will most likely be encountered within the study area.

Other site types such as Aboriginal stone quarries and Aboriginal rock shelters have also been previously recorded in the broader surrounds of the study area. It is therefore possible, although far less likely, that these site types may also be encountered in the study area, given the nature of the underlying geology across the study area and surrounds.

The following provides a description of these site types, and a predictive statement with regards to their possible distribution across the study area.

Shell Midden Sites

Definition

Middens range in thickness from thin scatters to stratified deposits of shell and sediment up to 2m thick. In addition to shell which has accumulated as food refuse, shell middens usually contain other food remains such as bone from fish, birds and terrestrial animals and humus from the decay of plant and animal remains. They also commonly contain charcoal and artefacts made from stone, shell and bone.

Predictive Statement

In the South-East Tasmanian region, the bay estuarine type middens are generally composed predominantly of mussel and oyster shellfish species. The largest middens are found immediately adjacent to the shoreline, near to the shellfish resources, and are on elevated, generally gently sloping or level terrain. A few sizeable middens have been noted up to 500m inland, with smaller middens having been identified up to 1km inland. These shell middens are comprised almost entirely of shell, and rarely contain large numbers of stone artefacts or faunal remains.

The AH register search results show that there are 26 recorded shell midden sites located within a 2km radius of the study area. These sites are predominantly clustered along the immediate foreshore margins of the River Derwent. Only one site (AH10476) is located more than 100m inland from the foreshore margins.

Shell middens are the most likely site type to be encountered within the study area. If present, these sites are likely to be situated immediately adjacent to the estuarine foreshores. As noted in section 2 of this report, the Wilkinsons Point study area has been very heavily modified in the past, and the foreshore margins have been almost entirely covered in fill material, and fortified with rubble and boulders. This level of modification will mean that the potential for shell midden sites to still survive in this landscape is limited.

Artefact Scatters and Isolated artefacts

Definition

Isolated artefacts are defined as single stone artefacts. Where isolated finds are closer than 50 linear metres to each other they should generally be recorded as an Artefact Scatter. Artefact scatters are usually identified as a scatter of stone artefacts lying on the ground surface. For the purposes of this project, artefact scatters are defined as at least 2 artefacts within 50 linear metres of each other. Artefacts spread beyond this can be best defined as isolated finds. It is recognised that this definition, while useful in most instances, should not be strictly prescriptive. On some large landscape features for example, sites may be defined more broadly. In other instances, only a single artefact may be visible, but there is a strong indication that others may be present in the nearby sediments. In such cases it is best to define the site as an Isolated Find/Potential Archaeological Deposit (PAD).

Artefact scatters can vary in size from two artefacts to several thousand, and may be representative of a range of activities, from sporadic foraging through to intensive camping activity. In rare instances, campsites which were used over a long period of time may contain stratified deposits, where several layers of occupation are buried one on top of another.

Predictive Statement:

Previous archaeological research in the region has identified the following pattern of distribution for this site type:

- Stone artefact scatters are numerous within the larger river valley systems;
- The largest open artefact scatters tend to be situated on well-drained sandy soils, in slightly elevated positions above river and creek floodplains, with a north aspect;
- Site and artefact densities on the lower lying flood plains of watercourses tend to be comparatively lower. This may be reflective of the fact these low lying areas were less favoured as camp locations, due to such factors as rising damp and vulnerability to flooding; and
- Site and artefact densities also tend to be comparatively lower in areas away from watercourses, and on moderate to steeply sloping terrain.

Applying this broad pattern of site distribution described above to the study area, it would be anticipated that site and artefact densities within this type of landscape setting are likely to be generally low to moderate. However, once again, the heavily disturbed nature of the study area means that it is very unlikely that these site types will have survived in this landscape.

Stone Procurement/Quarry Sites

Definition

A stone procurement site is a place where stone materials were obtained by Aboriginal people for the purpose of manufacturing stone artefacts. Quarry sites on the other hand have some evidence of the stone being actively extracted using knapping and/or digging. Stone procurement sites are often pebble beds in water courses (where there may be little or no evidence of human activity) or naturally

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occurring lag deposits exposed on the surface. Quarry sites are usually stone outcrops, with evidence of knapping and pits dug to expose the rock. Concentrations of hammer stones and a thick layer of knapping debris are often present.

Predictive Statement

Previous archaeological research in the South East Tasmanian region has shown that the most common source of raw materials for making stone artefacts are outcrops of stone materials such as silcrete, cherty hornfels, quartzites, quartz, and fined grained volcanics. These tend to occur along prominent landscape features, such as the spines of ridges or on hills.

As noted in section 2 of this report, the underlying geology across Wilkinsons Point is dominated by Undifferentiated Quaternary sediments. These rock types are typically not suited for artefact manufacturing. This factor, together with the heavily disturbed nature of the study area means that it is very unlikely that this site type will be present in the study area.

Rock Shelters and Rock Art Sites

Definition

As the name implies, these sites are formed under rocky outcrops which may either be escarpments hollowed by erosion, or in the case of rocks such as granite shelters, may be located under boulder overhangs. Such sites may contain deposit and/or art. Rock art consists of paintings, drawings and/or engravings on rock surfaces. Some of the art may have had a ceremonial or ritual purpose, while other art may have been produced for more secular purposes.

Predictive Statement

Obviously, rock shelters will only occur in areas where there are rock formations of a suitable size and scale to provide potential shelter for human habitation. In the River Derwent Valley system, the most common form of rock shelters are sandstone caves/overhangs.

There is no sandstone occurring within the study area, nor does there appear to be any sizable outcroppings of dolerite or other stone materials. It is therefore very unlikely that rock shelter sites or art sites will be present in the study area.

6.0 Survey Coverage of the Study Area

Survey Coverage

Survey coverage refers to the estimated portion of a study area that has actually been visually inspected during a field survey.

The study area encompasses a total of approximately 16.5ha. The field team walked a series 5.3km of survey transects across the study area, with the average width of each transect being 10m. This equates to a survey coverage of 53 000m². The survey transects were aligned to cover those parts of the study area where natural ground surfaces and original soil deposits were still present. The survey avoided those areas where there were built surfaces such as carparks, roads, and existing buildings. Figure 10 shows the alignment of the transects walked by the field team.

Surface Visibility

Surface Visibility refers to the extent to which the actual soils of the ground surface are available for inspection. There are a number of factors that can affect surface visibility, including vegetation cover, surface water, built structures and the presence introduced gravels or materials.

Surface visibility across the Wilkinsons Point study area was virtually not existent, and is estimated at 0% (see Figure 9 for visibility guidelines). Built surfaces in the form of roads, carparks and buildings cover much of the study area. Introduced fill material has been deposited across the remainder of the study area, obscuring the natural soil deposits. In areas, these introduced deposits are exposed to the surface. However, in most instances the areas have been landscaped and planted with grasses and other forms of vegetation cover (see Plates 8-10).

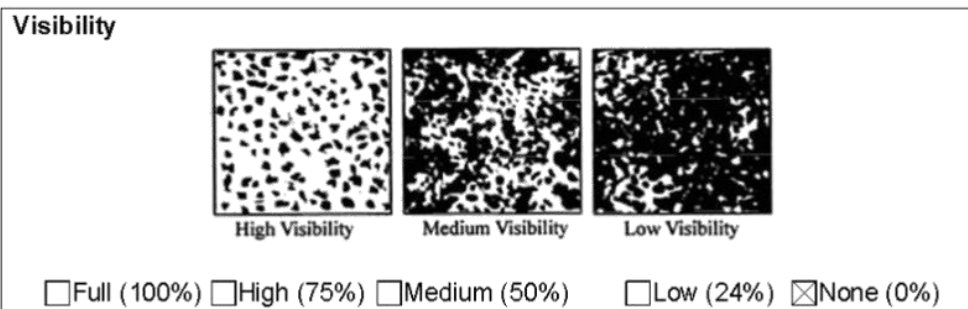


Figure 9: Guidelines for the estimation of surface visibility

Effective coverage

Variations in both survey coverage and surface visibility have a direct bearing on the ability of a field team to detect Aboriginal heritage sites, particularly site types such as shell middens, isolated artefacts and artefact scatters. The combination of survey coverage and surface visibility is referred to as effective survey coverage.

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Although the field survey assessment achieved survey coverage of 53 000m², the effective survey coverage is deemed to have been negligible (0%), given that the natural soil deposits were not visible anywhere across the study area.

The implications of this poor surface visibility is discussed in more detail in section 7.2 of this report.



Plate 8: View south-west, showing a sealed carpark within the central portion of the study area

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Plate 9: View east along Loyds Lane in the northern portion of the study area, obscuring the natural soil deposits



Plate 10: View north-east showing extensive fill deposits and introduced gravels across the north-west portion of the study area

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Plate 11: view north at landscaped and grassed area within the south-west portion of the study area



Plate 12: View west at extensive fill deposits along the fringes of Wilkinsons Point in the northern portion of the study area



7.0 Survey Results and Discussion

7.1 Summary Survey Results

No Aboriginal heritage sites, suspected features, or areas of elevated archaeological potential were identified during the survey assessment of the Wilkinsons Point study area.

As noted in section 4.2 of this report, the results of the AHR search shows that there are four registered Aboriginal sites that appear to be situated either within, or in a 50m radius of the study area boundaries (sites AH1026, AH10466, AH10476 and AH10477). As part of the field survey assessment, the field team attempted to relocate each of these four sites.

Site AH1026 is classified as a shell midden, which was originally recorded by Officer (1980). The grid reference location provided on the AHR places the site on the southern foreshore margins of the River Derwent, immediately to the east of Wilkinsons Point. This is right on the northern boundary of the study area (see Figure 11). The field team carried out a detailed inspection along the Derwent foreshore margins, in the general area where the site was reported to be located. The foreshores at the high tide mark along this section of Wilkinsons Point has been fortified with large rocks and rubble, in an effort to stabilise the steep embankment against erosion. The embankment leading down to the foreshores is covered in loosely consolidated fill material. Despite an extensive search, this site was not re-located. It seems most likely that the foreshores were fortified subsequent to the original recording of the site in 1980, and the site is now covered with introduced rock material (see Plate 13).



Plate 13: View north-east along the foreshores of Wilkinsons Point, where site AH1026 was reported to be located

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Site AH10466 is classified on the AHR as “not a site”. The site was originally recorded by Maynard in 2007, and was described as being a shell midden deposit which was identified on the foreshores of the River Derwent, at the north tip of Wilkinsons Point (see Figure 11). The site was subsequently revisited by Mike Jones from AHT in 2010. Jones assessed that the shell material was enclosed within historically deposited fill material, and was most likely spoil from dredged material. On this basis, the site was re-evaluated as not being of Aboriginal origin, and re-classified as not being a site.

The field team re-inspected this area in order to generate a first-hand impression of the site context. The inspection confirmed that the area where AH10466 is located is massively disturbed. An embankment cutting adjacent to the jetty, in the immediate vicinity of AH10466 shows fill material to a depth of over 1m (see Plate 14). The observations made during the assessment supports the contention of Mike Jones that AH10446 is not an Aboriginal site.



Plate 14: Embankment cutting at the north end of Wilkinsons Point, showing a deep deposit of fill material in the area where non-site AH10466 was located

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Figure 11: Aerial image showing the location of registered Aboriginal sites AH1026 and AH10466 on the northern edge of the study area boundaries

Site AH10476 (a shell midden) and AH10477 (an isolated artefact) were both recorded by Everett (2007) as part of the Brooker Highway Transport study. Both sites appear to be located just outside the eastern boundary of the study area, within the Elwick Racecourse (see Figure 12).

As part of the current field assessment, the field team inspected the reported location of these two sites. Although neither site was relocated during the inspection, it was confirmed that both sites are situated within the Elwick Racecourse grounds, just outside the south-east boundary of the study area (based on the descriptions provided by Everett 2007). The area along the south-west boundary of the Wilkinsons Point study area, in close proximity to these two sites, is covered with fill

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material and covered with gravels and grass. There was no evidence to indicate that these two sites may extend to within the study area (see Plates 15 and 16).



Plate 15: View south-west at the reported locations of registered Aboriginal sites AH10477



Plate 16: View south-west at the reported locations of registered Aboriginal sites AH10476

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Figure 12: Aerial image showing the location of registered Aboriginal sites AH10476 and AH10477 just to the south-west of the study area boundaries

7.2 Further Discussions

As described in sections 2 and 5 of this report, The Wilkinsons Point study area has been subject to very high levels of historic disturbances. The entire Point has been artificially levelled, with fill material introduced across virtually the entire study area, with the depth of this fill material varying from around 0.5m to up to 3m. The foreshores of Elwick Bay and Wilkinsons Point have been fortified with rubble and large boulders, in an effort to stabilise the banks against the effects of erosion. Built structures at Wilkinsons Point include the Derwent Entertainment Centre, with its associated bitumen carparks and access roads, the GASP Pavilion, and a series of jetties at the northern end of the Point, and Loyd Lane, which provides access to the Waterloo Barracks.

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These historic disturbances have implications for the effective survey coverage achieved by the field team across the study area, and for the interpretations of the survey findings. As described in section 6 of this report, the field team walked a series 5.3km of survey transects across the study area, with the average width of each transect being 10m. This equates to a survey coverage of 53 000m². However, there was really nowhere across the study area where the natural soils were available for inspection, due to the presence of built surfaces, fill material, landscaping etc. As such, the effective coverage achieved by the field team was basically nil. Clearly this is a major constraint to field assessment.

In this instance it is necessary to rely on the ethno-historic information and archaeological research collated for the region, in order to generate a general impression as to the likely extent and nature of Aboriginal occupation at Wilkinsons Point. This in-turn can be used as a basis for predicting the likely extent of Aboriginal sites that may once have been present across the study area.

Based on the available ethnographic information, it appears that the Wilkinsons Point study area is situated within the range of the Mouheneenner Band from the South East Nation who occupied the land around present day Hobart. The ethnographic accounts for the region, together with the archaeological evidence indicates that the River Derwent Valley was a major seasonal focal point for the Mouheneenner Band. The lower estuary system provided reliable and easily obtainable marine resources including shell fish were an important part of the traditional diet. The hills fringing the River Derwent would have been frequented for hunting and foraging activities, as well as for obtainable stone materials for artefact manufacturing, from known stone resource areas.

Wilkinsons Point is part of the larger Dowsings Point peninsula system, and is a prominent landscape feature on the southern shores of the Derwent Estuary. The terrain across most of Wilkinsons Point is comparatively flat to gently undulating, and the side slopes leading down to the foreshores are quite moderately inclined, providing easy access to the resource rich intertidal rock platforms that surround the Peninsula, which would have hosted abundance of shell fish species. Given this topographic setting, it is very likely that Wilkinsons Point and the surrounding peninsula was a significant focal point of seasonal occupation for the local Mouheneenner people. It is likely that the area was visited on a regular seasonal basis by family groups from the Mouheneenner Band, with the main focus of activity being the shell fish resources (specifically mud oyster and black mussels) that were in abundance along the foreshores, and easily accessible. The presence of a reliable source of fresh water, in the form of the Humphrey Rivulet, which empties into Elwick Bay, means that the duration of occupation in this area could have extended out to several days at a time.

The regular seasonal occupation of Wilkinsons Point over several thousand years would have resulted in the deposition and build up archaeological deposits, including shell midden deposits, stone artefacts and hearths (cooking fires). Given the underlying geology of the study area, there is no potential for other site types such as rock shelters or stone quarries being present.

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The subsequent historic occupation and development of Wilkinsons Point appears to have resulted in massive impacts to the Aboriginal heritage that once would have been present in this area. Sites AH1026, AH10476 and AH10477 are likely to be the remnant deposits of much more extensive Aboriginal sites that were once present across Wilkinsons Point. Site AH1026 now appears to have also been destroyed or covered by fill material. Sites AH10476 and AH10477 are confirmed as being located outside the study area, in the Elwick Racecourse grounds. Any other Aboriginal heritage sites that may once have been present across the study area will have been largely destroyed by the extensive vegetation clearing, earthworks and development activity. Any surviving Aboriginal cultural deposits will have been covered in deep deposits of fill material.

In light of these massive disturbances, the Wilkinsons Point study area is now assessed as being of low archaeological sensitivity.

8.0 Consultation with Aboriginal Communities and Statement of Aboriginal Significance

The designated Aboriginal Heritage Officer (AHO) for this project is Rocky Sainty. One of the primary roles of the Aboriginal Heritage Officer is to consult with Aboriginal community groups. The main purpose of this consultation process is:

- to advise Aboriginal community groups of the details of the project,
- to convey the findings of the Aboriginal heritage assessment,
- to document the Aboriginal social values attributed to Aboriginal heritage resources in the study area,
- to discuss potential management strategies for Aboriginal heritage sites, and
- to document the views and concerns expressed by the Aboriginal community representatives.

Aboriginal Heritage Tasmania (AHT) has recently advised that there have been some changes to the accepted approach to Aboriginal community consultation, based on recommendations made by the AHC on 28 April 2017. These changes relate to cases where the AHC consider it may be sufficient for a Consulting Archaeologist (CA) or Aboriginal Heritage Officer (AHO) to consult only with the Aboriginal Heritage Council.

The Council recommended that consultation with an Aboriginal community organisation is not required for a proposed project when:

There are less than 10 isolated artefacts that are not associated with any other nearby heritage; or

The impact of the project on Aboriginal heritage:

- is not significant; or
- will not destroy the heritage; or
- affects only part of the outer approximately 20% of a buffer around a registered site

The CA and AHO will need to demonstrate in Aboriginal heritage reports including map outputs:

- that the proposed impact on the Aboriginal heritage within the project area is not significant and why;
- that the project activity will not destroy the heritage;
- that the proposed impact to the site buffer is not adjacent to a significant component of the registered site polygon.

One Aboriginal site appears to be located within the bounds of the study area. This is site AH1026, which is classified as a shell midden. The site could not be relocated during the current survey, and it appears that the site has been destroyed or covered with fill material.

Besides AH1026, no other Aboriginal sites, suspected features, or specific areas of elevated archaeological potential were identified in the Wilkinsons Point study area. Given the very high levels of historic disturbances, it is assessed that the

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archaeological sensitivity of the study area is low. On this basis, the decision has been made not to circulate this report for Aboriginal community consultation. The report has been provided to AHT for review. Rocky Sainty (the AHO for this project) has provided a statement of cultural significance for the study area. This is presented below.

Statement of Cultural/Social Significance by Rocky Sainty

Aboriginal heritage provides a direct link to the past, however is not limited to the physical evidence of the past. It includes both tangible and intangible aspects of culture. Physical and spiritual connection to land and all things within the landscape has been, and continues to be, an important feature of cultural expression for Aboriginal people since creation.

Physical evidence of past occupation of a specific place may include artefacts, living places (middens), rock shelters, markings in rock or on the walls of caves and/or rock shelters, burials and ceremonial places. Non-physical aspects of culture may include the knowledge (i.e. stories, song, dance, weather patterns, animal, plant and marine resources for food, medicines and technology) connected to the people and the place.

*While so much of the cultural landscape that was **lutruwita** (Tasmania) before invasion and subsequent colonization either no longer exists, or has been heavily impacted on, these values continue to be important to the Tasmanian Aboriginal community, and are relevant to the region of the project proposal.*

There is no doubt in my mind that Wilkinsons Point would have been a focal point of seasonal occupation for my people. The Point is situated on the margins of the River Derwent, where there was (and still is) an abundance of marine resources, and there was fresh water available in the form of the nearby rivulet. This combination of easily available resources would have meant that our people camped in this area on a regular basis.

Unfortunately, the archaeological evidence for this occupation now appears to have been destroyed by European occupation and development of the area. Based on my observations, I believe there is little to no potential for Aboriginal sites to still survive in the study area.

9.0 Statutory Controls and Legislative Requirements

The following provides an overview of the relevant State and Federal legislation that applies for Aboriginal heritage within the state of Tasmania.

9.1 State Legislation

In Tasmania, the *Aboriginal Heritage Act 1975* (the Act) is the primary Act for the treatment of Aboriginal cultural heritage. The Act is administered by the Minister for Aboriginal Affairs through Aboriginal Heritage Tasmania (AHT) in the Department of Primary Industries, Parks, Water and the Environment (DPIPWE). AHT is the regulating body for Aboriginal heritage in Tasmania and '[n]o fees apply for any application to AHT for advice, guidance, lodgement or permit application'.

The Act applies to 'relics' which are any object, place and/or site that is of significance to the Aboriginal people of Tasmania (as defined in section 2(3) of the Act). The Act defines what legally constitutes unacceptable impacts on relics and a process to approve impacts when there is no better option. Aboriginal relics are protected under the Act and it is illegal to destroy, damage, deface, conceal or otherwise interfere with a relic, unless in accordance with the terms of a permit granted by the Minister. It is illegal to sell or offer for sale a relic, or to cause or permit a relic to be taken out of Tasmania without a permit (section 2(4) qualifies and excludes 'objects made, or likely to have been made, for purposes of sale').

It should be noted that with regard to the discovery of suspected human skeletal remains, the *Coroners Act 1995* takes precedence. The *Coroners Act 1995* comes into effect initially upon the discovery of human remains, however once determined to be Aboriginal the *Aboriginal Relics Act* overrides the *Coroners Act*.

In August 2017, the Act was substantively amended and the title changed from the *Aboriginal Relics Act 1975*. As a result, the AHT *Guidelines to the Aboriginal Heritage Assessment Process* were replaced by the *Aboriginal Heritage Standards and Procedures*. The Standards and Procedures are named in the statutory *Guidelines* of the Act issued by the Minister under section 21A of the Act. Other amendments include:

- An obligation to fully review the Act within three years.
- Increases in maximum penalties for unlawful interference or damage to an Aboriginal relic. For example, maximum penalties (for deliberate acts) are 10,000 penalty units (currently \$1.57 million) for bodies corporate other than small business entities and 5,000 penalty units (currently \$785,000) for individuals or small business entities; for reckless or negligent offences, the maximum penalties are 2,000 and 1,000 penalty units respectively (currently \$314,000 and \$157,000). Lesser offences are also defined in sections 10, 12, 17 and 18.
- Prosecution timeframes have been extended from six months to two years.
- The establishment of a statutory Aboriginal Heritage Council to advise the Minister.

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Section 21(1) specifies the relevant defence as follows: "It is a defence to a prosecution for an offence under section 9 or 14 if, in relation to the section of the Act which the defendant is alleged to have contravened, it is proved ... that, in so far as is practicable ... the defendant complied with the guidelines".

9.2 Commonwealth Legislation

There are also a number of Federal Legislative Acts that pertain to cultural heritage. The main Acts being; *The Australian Heritage Council Act 2003*, *The Aboriginal and Torres Strait Islander Heritage Protection Act 1987* and the *Environment Protection and Biodiversity Conservation Act 1999*

Australian Heritage Council Act 2003 (Comm)

The *Australian Heritage Council Act 2003* defines the heritage advisory boards and relevant lists, with the Act's Consequential and Transitional Provisions repealing the Australian Heritage Commission Act 1975. The Australian Heritage Council Act, like the Australian Heritage Commission Act, does not provide legislative protection regarding the conservation of heritage items in Australia, but has compiled a list of items recognised as possessing heritage significance to the Australian community. The Register of the National Estate, managed by the Australian Heritage Council, applies no legal constraints on heritage items included on this list.

The Aboriginal and Torres Strait Islander Heritage Protection Act 1987.

This Federal Act is administered by the Department of Sustainability, Environment, Water, Populations and Communities (SEWPaC) with the Commonwealth having jurisdiction. The Act was passed to provide protection for the Aboriginal heritage, in circumstances where it could be demonstrated that such protection was not available at a state level. In certain instances, the Act overrides relevant state and territory provisions.

The major purpose of the Act is to preserve and protect from injury and desecration, areas and objects of significance to Aborigines and Islanders. The Act enables immediate and direct action for protection of threatened areas and objects by a declaration from the Commonwealth minister or authorised officers. The Act must be invoked by, or on behalf of an Aboriginal or Torres Strait Islander or organisation.

Any Aboriginal or Torres Strait Islander person or organization may apply to the Commonwealth Minister for a temporary or permanent 'Stop Order' for protection of threatened areas or objects of significant indigenous cultural heritage.

The Commonwealth Act 'overrides' State legislation if the Commonwealth Minister is of the opinion that the State legislation (or undertaken process) is insufficient to protect the threatened areas or objects. Thus, in the event that an application is made to the Commonwealth Minister for a Stop Order, the Commonwealth Minister will, as a matter of course, contact the relevant State Agency to ascertain what protection is being imposed by the State and/or what mitigation procedures have been proposed by the landuser/developer.

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In addition to the threat of a 'Stop Order' being imposed, the Act also provides for the following:

- If the Federal Court, on application from the Commonwealth Minister, is satisfied that a person has engaged or is proposing to engage in conduct that breaches the 'Stop Order', it may grant an injunction preventing or stopping such a breach (s.26). Penalties for breach of a Court Order can be substantial and may include a term of imprisonment;
- If a person contravenes a declaration in relation to a significant Aboriginal area, penalties for an individual are a fine up to \$10,000.00 and/or 5 years gaol and for a Corporation a fine up to \$50,000.00 (s.22);
- If the contravention is in relation to a significant Aboriginal object, the penalties are \$5,000.00 and/or 2 years gaol and \$25,000.00 respectively (s.22);
- In addition, offences under s.22 are considered 'indictable' offences that also attract an individual fine of \$2,000 and/or 12 months gaol or, for a Corporation, a fine of \$10,000.00 (s.23). Section 23 also includes attempts, inciting, urging and/or being an accessory after the fact within the definition of 'indictable' offences in this regard.

The Commonwealth Act is presently under review by Parliament and it is generally accepted that any new Commonwealth Act will be even more restrictive than the current legislation.

Environment Protection and Biodiversity Conservation Act 1999 (Comm)

This Act was amended, through the Environment and Heritage Legislation Amendment Act (No1) 2003 to provide protection for cultural heritage sites, in addition to the existing aim of protecting environmental areas and sites of national significance. The Act also promotes the ecologically sustainable use of natural resources, biodiversity and the incorporation of community consultation and knowledge.

The 2003 amendments to the *Environment Protection and Biodiversity Conservation Act 1999* have resulted in the inclusion of indigenous and non-Indigenous heritage sites and areas. These heritage items are defined as:

'indigenous heritage value of a place means a heritage value of the place that is of significance to indigenous persons in accordance with their practices, observances, customs, traditions, beliefs or history';

Items identified under this legislation are given the same penalty as actions taken against environmentally sensitive sites. Specific to cultural heritage sites are §324A-324ZB.

Environment and Heritage Legislation Amendment Act (No1) 2003 (Comm)

In addition to the above amendments to the *Environment Protection and Biodiversity Conservation Act 1999* to include provisions for the protection and conservation of heritage, the Act also enables the identification and subsequent listing of items for the Commonwealth and National Heritage Lists. The Act establishes the *National Heritage List*, which enables the inclusion of all heritage, natural, Indigenous and

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non-Indigenous, and the *Commonwealth Heritage List*, which enables listing of sites nationally and internationally that are significant and governed by Australia.

In addition to the *Aboriginal and Torres Strait Islander Heritage Protection Act 1987*, amendments made to the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* enables the identification and subsequent listing of indigenous heritage values on the Commonwealth and/or National Heritage Lists (ss. 341D & 324D respectively). Substantial penalties (and, in some instances, gaol sentences) can be imposed on any person who damages items on the National or Commonwealth Heritage Lists (ss. 495 & 497) or provides false or misleading information in relation to certain matters under the Act (ss.488-490). In addition, the wrongdoer may be required to make good any loss or damage suffered due to their actions or omissions (s.500).

10.0 Aboriginal Cultural Heritage Management Plan

Heritage management options and recommendations provided in this report are made on the basis of the following criteria.

- Background research into the extant archaeological and ethno-historic record for the study area and the surrounding region (see sections 3 and 4 of the report).
- The results of the investigation as documented in section 7 this report;
- The legal and procedural requirements as specified in the *Aboriginal Heritage Act 1975* (The Act), as presented in section 9; and
- Consultation with Rocky Sainty (Aboriginal Heritage Officer), and the Aboriginal community consultation program, as documented in section 9.

Recommendation 1

Site AH1026 (a shell midden) is reported to be situated on the northern boundary of the study area. The site could not be relocated during the current survey, and it appears that the site has been destroyed or covered with fill material. As specified in section 9.1 of this report, all Aboriginal relics are protected under the *Aboriginal Heritage Act 1975* (The Act). It is illegal to destroy, damage, deface, conceal or otherwise interfere with a relic, unless in accordance with the terms of a permit granted by the Minister. However, AHT has advised that if a site could not be relocated, providing that an extensive search has been undertaken, then works may proceed at the recorded site location, then no Permit is required. It is recommended that any future works in this area should proceed in strict guidance of the Unanticipated Discovery Plan (see Appendix 1).

Recommendation 2

Sites AH10476 and AH10477 are confirmed as being located outside the study area boundaries, within the Elwick Racecourse grounds. It is advised that there are no further requirements for these sites.

Recommendation 3

No other Aboriginal sites were identified in the study area, and this area has been assessed as being of low archaeological sensitivity. This is based on the absence of identified Aboriginal sites, the very high levels of historic disturbances, and the low potential for undetected Aboriginal sites to be present. On this basis it is recommended that there are no further archaeological requirements for the project.

Recommendation 4

If previously undetected archaeological sites or objects are located during the course of development works, the processes outlined in the Unanticipated Discovery Plan should be followed (see Appendix 1). A copy of the Unanticipated Discovery Plan should be kept on site during all ground disturbance and construction work, and construction personnel to be made aware of the Unanticipated Discovery Plan and their obligations under the *Aboriginal Heritage Act 1975* (the Act).

Recommendation 5

Copies of this report should be submitted to AHT for review and comment.

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Glossary of Terms

Aboriginal Archaeological Site

A site is defined as any evidence (archaeological features and/or artefacts) indicating past Aboriginal activity, and occurring within a context or place relating to that activity. The criteria for formally identifying a site in Australia vary between States and Territories.

Artefact

A portable object that has been humanly made or modified (see also stone artefact).

Assemblage (lithic)

A collection of complete and fragmentary stone artefacts and manuports obtained from an archaeological site, either by collecting artefacts scattered on the ground surface, or by controlled excavation.

Broken Flake

A flake with two or more breakages, but retaining its area of break initiation.

Chert

A highly siliceous rock type that is formed biogenically from the compaction and precipitation of the silica skeletons of diatoms. Normally there is a high percentage of cryptocrystalline quartz. Like chalcedony, chert was valued by Aboriginal people as a stone material for manufacturing stone tools. The rock type often breaks by conchoidal (shell like) fracture, providing flakes that have hard, durable edges.

Cobble

Water worn stones that have a diameter greater than 64mm (about the size of a tennis ball) and less than 256mm (size of a basketball).

Core

A piece of stone, often a pebble or cobble, but also quarried stone, from which flakes have been struck for the purpose of making stone tools.

Core Fragments

A piece of core, without obvious evidence of being a chunky primary flake.

Cortex

The surface of a piece of stone that has been weathered by chemical and/or physical means.

Debitage

The commonly used term referring to the stone refuse discarded from knapping. The manufacturing of a single implement may result in the generation of a large number of pieces ofdebitage in an archaeological deposit.

Wilkinsons Point Precinct Plan
Aboriginal Heritage Assessment Report CHMA 2019

Flake (general definition)

A piece of stone detached from a nucleus such as a core. A complete or substantially complete flake of lithic material usually shows evidence of hard indenter initiation, or occasional bending initiation. The most common type of flake is the 'conchoidal flake'. The flake's primary fracture surface (the ventral or inside surface) exhibits features such as fracture initiation, bulb of force, and undulations and lances that indicate the direction of the fracture front.

Flake fragment

An artefact that does not have areas of fracture initiation, but which displays sufficient fracture surface attributes to allow identification as a stone artefact fragment.

Flake portion (broken flake)

The proximal portion of a flake retaining the area of flake initiation, or a distal portion of a flake that retains the flake termination point.

Flake scraper

A flake with retouch along at least one margin. The character of the retouch strongly suggests shaping or rejuvenation of a cutting edge.

Nodules

Regular or irregular cemented masses or nodules within the soil. Also referred to as concretions and buckshot gravel. Cementing agents may be iron and/or manganese oxides, calcium carbonate, gypsum etc. Normally formed in situ and commonly indicative of seasonal waterlogging or a fluctuating chemical environment in the soil such as; oxidation and reduction, or saturation and evaporation. Nodules can be redistributed by erosion. (See also 'concretion').

Pebble

By geological definition, a waterworn stone less than 64 mm in diameter (about the size of a tennis ball). Archaeologists often refer to waterworn stones larger than this as pebbles though technically they are cobbles.

Quartz

A mineral composed of crystalline silica. Quartz is a very stable mineral that does not alter chemically during weathering or metamorphism. Quartz is abundantly common and was used by Aboriginal people throughout Australia to make light-duty cutting tools. Despite the often unpredictable nature of fracture in quartz, the flakes often have sharp cutting edges.

Quartzite

A hard silica rich stone formed in sandstone that has been recrystallised by heat (metaquartzite) or strengthened by slow infilling of silica in the voids between the sand grains (Orthoquartzite).

Wilkinsons Point Precinct Plan
Aboriginal Heritage Assessment Report CHMA 2019

Retouch (on stone tools)

An area of flake scars on an artefact resulting from intentional shaping, resharpening, or rejuvenation after breakage or blunting of a cutting edge. In resharpening a cutting edge the retouch is invariably found only on one side (see also 'indeterminate retouched piece', 'retouch flake' etc).

Scraper

A general group of stone artefacts, usually flakes but also cores, with one or more retouched edges thought to have been used in a range of different cutting and scraping activities. A flake scraper is a flake with retouch along at least one margin, but not qualifying for attribution to a more specific implement category. Flake scrapers sometimes also exhibit use-wear on the retouched or another edge.

Silcrete

A hard, fine grained siliceous stone with flaking properties similar to quartzite and chert. It is formed by the cementing and/or replacement of bedrock, weathering deposits, unconsolidated sediments, soil or other material, by a low temperature physico-chemical process. Silcrete is essentially composed of quartz grains cemented by microcrystalline silica. The clasts in silcrete bear most often quartz grains but may be chert or chalcedony or some other hard mineral particle. The mechanical properties and texture of silcrete are equivalent to the range exhibited by chert at the fine-grained end of the scale and with quartzite at the coarse-grained end of the scale. Silcrete was used by Aboriginal people throughout Australia for making stone tools.

Site Integrity

The degree to which post-depositional disturbance of cultural material has occurred at a site.

Stone Artefact

A piece (or fragment) of stone showing evidence of intentional human modification.

Stone procurement site

A place where stone materials is obtained by Aboriginal people for the purpose of manufacturing stone artefacts. In Australia, stone procurement sites range on a continuum from pebble beds in water courses (where there may be little or no evidence of human activity) to extensively quarried stone outcrops, with evidence of pits and concentrations of hammerstones and a thick layer of knapping debris.

Stone tool

A piece of flaked or ground stone used in an activity, or fashioned for use as a tool. A synonym of stone tool is 'implement'. This term is often used by archaeologists to describe a flake tool fashioned by delicate flaking (retouch).

Use wear

Macroscopic and microscopic damage to the surfaces of stone tools, resulting from its use. Major use-wear forms are edge fractures, use-polish and smoothing, abrasion, and edge rounding bevelling.

Wilkinsons Point Precinct Plan
Aboriginal Heritage Assessment Report CHMA 2019

Appendix 1

Unanticipated Discovery Plan

Unanticipated Discovery Plan

Procedure for the management of unanticipated discoveries of Aboriginal relics in Tasmania

For the management of unanticipated discoveries of Aboriginal relics in accordance with the *Aboriginal Heritage Act 1975* and the *Coroners Act 1995*. The Unanticipated Discovery Plan is in two sections.

Discovery of Aboriginal Relics other than Skeletal Material

Step 1:

Any person who believes they have uncovered Aboriginal relics should notify all employees or contractors working in the immediate area that all earth disturbance works must cease immediately.

Step 2:

A temporary 'no-go' or buffer zone of at least 10m x 10m should be implemented to protect the suspected Aboriginal relics, where practicable. No unauthorised entry or works will be allowed within this 'no-go' zone until the suspected Aboriginal relics have been assessed by a consulting archaeologist, Aboriginal Heritage Officer or Aboriginal Heritage Tasmania staff member.

Step 3:

Contact Aboriginal Heritage Tasmania on **1300 487 045** as soon as possible and inform them of the discovery. Documentation of the find should be emailed to **aboriginal@heritage.tas.gov.au** as soon as possible. Aboriginal Heritage Tasmania will then provide further advice in accordance with the *Aboriginal Heritage Act 1975*.

Discovery of Skeletal Material

Step 1:

Call the Police immediately. Under no circumstances should the suspected skeletal material be touched or disturbed. The area should be managed as a crime scene. It is a criminal offence to interfere with a crime scene.

Step 2:

Any person who believes they have uncovered skeletal material should notify all employees or contractors working in the immediate area that all earth disturbance works cease immediately.

Step 3:

A temporary 'no-go' or buffer zone of at least 50m x 50m should be implemented to protect the suspected skeletal material, where practicable. No unauthorised entry or works will be allowed within this 'no-go' zone until the suspected skeletal remains have been assessed by the Police and/or Coroner.

Step 4:

If it is suspected that the skeletal material is Aboriginal, Aboriginal Heritage Tasmania should be notified.

Step 5:

Should the skeletal material be determined to be Aboriginal, the Coroner will contact the Aboriginal organisation approved by the Attorney-General, as per the *Coroners Act 1995*.

Aboriginal Heritage Tasmania
Department of Primary Industries, Parks, Water and Environment



Guide to Aboriginal site types

Stone Artefact Scatters

A stone artefact is any stone or rock fractured or modified by Aboriginal people to produce cutting, scraping or grinding implements. Stone artefacts are indicative of past Aboriginal living spaces, trade and movement throughout Tasmania. Aboriginal people used hornfels, chalcedony, spongelite, quartzite, chert and silcrete depending on stone quality and availability. Stone artefacts are typically recorded as being 'isolated' (single stone artefact) or as an 'artefact scatter' (multiple stone artefacts).

Shell Middens

Middens are distinct concentrations of discarded shell that have accumulated as a result of past Aboriginal camping and food processing activities. These sites are usually found near waterways and coastal areas, and range in size from large mounds to small scatters. Tasmanian Aboriginal middens commonly contain fragments of mature edible shellfish such as abalone, oyster, mussel, warrenner and limpet, however they can also contain stone tools, animal bone and charcoal.

Rockshelters

An occupied rockshelter is a cave or overhang that contains evidence of past Aboriginal use and occupation, such as stone tools, middens and hearths, and in some cases, rock markings. Rockshelters are usually found in geological formations that are naturally prone to weathering, such as limestone, dolerite and sandstone.

Quarries

An Aboriginal quarry is a place where stone or ochre has been extracted from a natural source by Aboriginal people. Quarries can be recognised by evidence of human manipulation such as battering of an outcrop, stone fracturing debris or ochre pits left behind from processing the raw material. Stone and ochre quarries can vary in terms of size, quality and the frequency of use.

Rock Marking

Rock marking is the term used in Tasmania to define markings on rocks which are the result of Aboriginal practices. Rock markings come in two forms; engraving and painting. Engravings are made by removing the surface of a rock through pecking, abrading or grinding, whilst paintings are made by adding pigment or ochre to the surface of a rock.

Burials

Aboriginal burial sites are highly sensitive and may be found in a variety of places, including sand dunes, shell middens and rock shelters. Despite few records of pre-contact practices, cremation appears to have been more common than burial. Family members carried bones or ashes of recently deceased relatives. The Aboriginal community has fought long campaigns for the return of the remains of ancestral Aboriginal people.

Further information on Aboriginal Heritage is available from:

Aboriginal Heritage Tasmania
Natural and Cultural Heritage Division
Department of Primary Industries, Parks, Water and Environment
GPO Box 44 Hobart TAS 7001

Telephone: **1300 487 045**

Email: **aboriginal@heritage.tas.gov.au**

Web: **www.aboriginalheritage.tas.gov.au**

This publication may be of assistance to you but the State of Tasmania and its employees do not accept responsibility for the accuracy, completeness, or relevance to the user's purpose, of the information and therefore disclaims all liability for any error, loss or other consequence which may arise from relying on any information in this publication.





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Structural, Civil and Traffic Engineering

Structural and Civil Engineering

Project Design and Management
Forensic Engineering and Structural Inspections
Research and Development Facilitators

Traffic Engineering

Traffic Management Studies and Traffic Impact Assessment
Expert Witness Representation
Road Safety Audits

Wilkinsons Point

Traffic Impact Assessment and Sustainable Transport Strategy



Prepared for

LK Property

Date

September 2019

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Appendix A Development Plans

Appendix B aaSidra modelling

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		Name	Signature	Date
Authorised by:	Joanne Fisher			16th September 2019



1. Introduction

1.1 Client Details

This document has been prepared for the following:

Client Name: LK Property

Address: Level 13

10 Queens Road

Melbourne

Victoria

3004

Telephone: 03 8391 6000

Client Contact: Steven Kleytman

1.2 Project Details

The report is undertaken for the site at Wilkinsons Point, Glenorchy, for LK Property, the proponent of the Wilkinsons Point development.

A copy of the proposed development plans can be found at **Appendix A**. For the purposes of this report a base plan showing road reservation, accesses and location of proposed land uses in the context of the site has been attached. A full set of drawings will be submitted as part of the masterplan process as a separate document.



2. Scope of Consultancy

The scope of consultancy involves the following:

- Undertake a site visit.
- Assess existing conditions.
- Obtain background information (traffic volume counts), accident and plans (including ballpark floor areas).
- Obtain development details – concept plans for the five proposed precincts.
- Consult with State Growth on the Brooker Highway Frontage and general development options to obtain preliminary feedback.
- Assess trip generation rates for the proposed land uses on the site (Liaise with developer on maximum event demand). Undertake surveys as required on similar land uses, where required.
- Obtain SCATS traffic data for the traffic signal-controlled intersections of Wilkinsons Point Access Road, Brooker Highway, Goodwood Road and Loyd Road.
- Assign the proposed trips associated with the new development to the existing intersection.
- Model the existing and proposed flows on the intersection using aaSIDRA modelling including sensitivity testing.
- Assess any further concept upgrade work at intersections which may be required to accommodate the proposed development.
- Assess parking requirement based on GCC Interim Planning Scheme (or new planning scheme as per meeting discussion).
- Allocate shared parking requirement(s) associated with the new development land uses.
- Assess bicycle parking and accessible parking.
- Assess access requirements for new parking areas.
- Assess servicing requirements for the proposed development options.
- Assess park and ride development and impact on removing traffic off the network.
- Assess capacity on ferry and liaise with Navigators (ferry operators) on revised timetable /capacity issues relating to car parking site.
- Assess remedial measures which may need to be introduced to restrict parking on the surrounding residential road network.
- Assess bus accessibility to the Wilkinsons Point Site.
- Assess scope to improve connectivity with the Intercity Bicycle Track for bicycle and pedestrian linkages.
- Assess scope to improve connectivity with Wilkinsons Point via sustainable transport modes.
- Provide Draft and Final Report.
- Liaise with client, FK and Irene Inc as appropriate.
- Assess options to improve integrated transport linkages to Wilkinsons Point.
- Document findings in a report.



3. Location of the Development

Figure 1 shows the location of the Wilkinsons Point site in the context of the surrounding street network.



Figure 1: Location (source: Google Maps)



4. Existing Situation

4.1.1 Site Details

Highway access to the site is via the Brooker Highway and Goodwood Road.

The Brooker Highway is located on the western side of the site and Goodwood Road is on the southern boundary of the site.

Both the Brooker Highway and Goodwood Road are limited access roads managed by the Department of State Growth. Brooker Highway is part of the national highway network providing a linkage to Hobart in the south and to the suburbs north of Glenorchy, thus Berriedale, Claremont, Chigwell, Granton and onto the Midland Highway, providing a link north to Launceston, to the Lyell Highway and west to Strahan. As important arterial roads their main function is to provide for through traffic movements. Access is limited and controlled predominantly by traffic signal-controlled intersections or by grade separation.

Goodwood Road links via the Bowen Bridge to the suburbs sited on the Eastern shore of the River Derwent.

There are two signalised intersections. One at the intersection of the Brooker Highway and one at Goodwood Road. Loyd Road provides access to the Wilkinson's Point site. The Loyd Road access provides limited, presently gated access, and is only intermittently used during events. At times of major events, the intersection at the Derwent Entertainment Centre (DEC) with the Brooker Highway is operating beyond its capacity when the Loyd Road access is closed.

Loyd Road has a cross section width of approximately 7 metres and there is no footpath. There are geometric constraints at the intersection of Centre Road and Loyd Road that does not enable a bus to turn within the geometric parameters of an intersection. It has been advised that buses are required to cross onto the wrong side of the road to undertake the left turn from Centre Road into Loyd Road to access the Wilkinson Point site.

In addition, there is a slip lane out, providing egress only from the Derwent Entertainment Centre Car Park which forms a through lane on the Brooker Highway.

A jetty has been constructed at Wilkinsons Point with the capacity for ferry access. Currently a regular commercial ferry service has the potential to operate between Brooke Street Pier and Wilkinsons Point (although it is advised by The Glenorchy City Council that modification may be required to the sea wall.) The ferry has previously operated from and utilised this jetty.

The Wilkinsons Point site is in the immediate vicinity of several existing facilities, notably, the Elwick Racecourse, Derwent Barracks (Department of Defence),



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Technopark, Montrose Bay High School, the commercial centre of Glenorchy, the City's aquatic centre, the King George V Oval and the Intercity Bike Track are also located nearby.

4.2 Road Width and Intersection Configuration

4.2.1 Brooker Highway / Wilkinsons Point Access Road

The existing access to the site is via Brooker Highway / Wilkinsons Point Access Road intersection and Goodwood Road / Loyd Road intersection.

The Brooker Highway in the vicinity of the Wilkinsons Point site is 23 metres wide. Wilkinsons Point Access Road is typically 9 metres wide and widens to 14 metres within the vicinity of the intersection.



Photograph 1: Showing the Wilkinsons Point intersection with the Brooker Highway

There are two southbound through lanes at the intersection of the Brooker Highway and Wilkinsons Point Access Road and a 180-metre-long left turn slip lane into the Wilkinsons Point site. There are three northbound through lanes and a short 190metre right turn lane into the site from the Brooker. The traffic signals incorporate a pedestrian controlled crossing. The intersection operates on the SCATS system and the traffic signals are operated in a demand responsive manner to maximise the length of green time to the highway through traffic.



4.2.2 Slip Lane Egress / Brooker Highway

There is a slip lane out of the Wilkinsons Point site which forms a separate through lane as it merges into the Brooker Highway. The typical 4-metre-wide slip lane enters the Brooker Highway 100metres north of Elwick Road.



Photograph 2: Showing the slip lane taken towards the Brooker Highway



Photograph 3: Showing the slip lane taken towards the Wilkinsons Point site

Goodwood Road, in the vicinity of the Wilkinsons Point site, is typically 18 metres wide widening to 26 metres at the intersection. Goodwood Road comprises two through lanes and a short left and right turn lane in both directions providing access to Centre Road and onto Loyd Road in the north, and Howard Road to the south.



Photograph 4: Showing the intersection of Goodwood Road and Centre Road / Loyd Road taken from the western leg of Goodwood Road.

4.3 Footpaths

There is a network of segregated footpaths located within the Wilkinsons Point site which are typically 4 metres wide.

4.4 Traffic Volumes

The traffic volumes along the Brooker Highway in the vicinity of the Wilkinsons Point site are approximately 43,000 vehicles per day, based on the SCATS traffic signal data provided by the Department of State Growth, dated July 2019. The morning peak movements on the Brooker Highway / Wilkinsons Point Access Road were in the order of 3,400 vehicles per hour, the morning peak occurred between 7.20am - 8.20am (but subject to variation) the evening peak flows of approximately 4,200 in the evening peak hour which occurs between approximately 4pm and 5.30pm.

The traffic volumes along Goodwood Road are approximately 31,000 vehicles per day based on the SCATS traffic signal data provided by the Department of State



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Growth, July 2019. The morning peak hour traffic volumes occurred between 7.45am and 8.45am and were in the order of 3,100 vehicles per hour and the afternoon peak hourly flow typically occurred between 15.55 and 16.55 and were in the order of 3,778 vehicles per hour.

4.5 Posted Speed Limits

The speed limit along the Brooker Highway in the vicinity of the Derwent Entertainment Centre is 80 km/hr.

The speed limit along Goodwood Road in the vicinity of the Loyd Road access is 80 km/hr.

Wilkinsons Point Access Road and Loyd Road are subject to the standard urban speed limit of 50km /hr.

4.6 Accident History

In line with standard traffic engineering practice the accident history for the past five years has been obtained from the Department of State Growth.

There have been seventeen accidents at the intersection of the Brooker Highway and the Wilkinsons Point Access Road in the past five years. Nine of the accidents were rear end accidents, three were side swipe/ accidents, one was classified as a cross traffic accident, one was defined as other straight, one involved a left turning vehicle and two were unclassified.

Eleven accidents were defined as property damage only, one required first aid at the scene, two were defined as minor accidents and three were categorised as serious.

There have been six accidents at the Loyd Road / Goodwood Road intersection. There were two right through accidents, one right off carriageway accident, one other vehicle in same lane, one right nearside accident.

Four of these accidents were property damage only, one was a first aid at the scene and the other was a minor accident.

4.7 Proposed Development

The proposed development comprises the redevelopment of the Wilkinsons Point Site with the Derwent Entertainment Centre for use by the National Basketball League.



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There are five distinct precincts proposed as part of the Wilkinsons Point masterplan. These include,

- Precinct A – Sports and Entertainment Precinct
- Precinct B – Highway Precinct
- Precinct C – Derwent Entertainment Precinct
- Precinct D – Landscape Precinct
- Precinct E – Elwick Bay Public Open Space Precinct

There is also the opportunity to create a Park and Ride facility, with multi modal linkages to Wilkinsons Point and the City. A car park located at Wilkinsons Point would allow drivers to park and ferry, or take a bus, to either Brooke Street Pier at Salamanca or take a short ferry trip to Mona. In any event, the facility would have the benefit of facilitating modal shift away from cars, thereby reducing congestion on the Brooker Highway and encouraging drivers to park and use sustainable transport modes.

This would also act as a catalyst for the integration of other sustainable transport modes into the site, notably pedestrian and bicycle linkages and possibly the integration of feeder bus services from Goodwood Road and the Brooker Highway servicing the ferry.

Another opportunity exists for the development to create an extension of the boardwalk from the Wilkinsons Point site to Mona along Berriedale Bay potentially integrating two key attractions in the municipality of Glenorchy.



5. Assessment of Trip Generation

5.1 Existing Trip Rates

Traffic volume counts were obtained via SCATS¹ data, provided by the Department of State Growth, on a typical weekday (morning and evening peak periods) at the two traffic-controlled intersections servicing the site.

Notably,

- At the Wilkinsons Point Access Road and the Brooker Highway and
- At Loyd Road / Goodwood Road.



Photograph 5: Intersection of Wilkinsons Point Access Road and the Brooker Highway

¹ SCATS data is provided from traffic signals and provides volumes count detail from each individual traffic lane.



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Photograph 6: Intersection of Loyd Road and Goodwood Road access the Wilkinsons Point site

Events are currently held at the Derwent Entertainment Centre on a regular basis. The Derwent Entertainment Centre is an indoor entertainment venue hosting concerts, trade shows, exhibitions, sporting events and conferences. There is a maximum capacity of 4,875 people at the Derwent Entertainment Centre². There is currently on-site capacity for 900 vehicles to park. GASP (Glenorchy Park and Sculpture Park) is also located on the Wilkinsons Point site.

SCATS Traffic Volume Count data was obtained in July 2019 from the Department of State Growth. Howarth Fisher and Associates, used one of the highest daily traffic

² Based on information provided in the DEC website



volumes for their modelling to represent worst case scenario conditions. These traffic volumes were input into the SIDRA software model and shown in the detail in movement summary outlined in Appendix B.

5.2 Proposed Trip Generation

5.2.1 Ball Park Figures

Given this is a master planning process, the land uses are subject to continual change. Several iterations of trip generation rates have already been modelled, based on evolving plans for the site. Notwithstanding this, the proponent has advised of the following figures as a ballpark design standard for the site, which have been considered in the modelling.

Events

It is proposed that there will be 5000 people on the site for a major NBL sporting event.

These events will typically occur at the weekend when vehicle volumes are lower and occasionally in the weekday evening when a game will start approximately between 7pm – 7.30pm.

Given that an event traffic management plan will be in operation there will be a significant number of people (aiming for 60%) accessing the site via public transport services. It is proposed that chartered bus services (similar to those provided at Blundstone Arena) will be used as well as special event ferry services to the Wilkinsons Point Jetty.

Based on average occupancy rates of 2.2 people per vehicle this equates to a demand for 909 car spaces and vehicle trips to and from the site. If 50% sustainable transport was achieved during events there would be a demand for 1136 car park spaces and trips to and from the site associated with the sports events.

Daily weekday trip generation

As a ballpark figure the proponent has advised that approximately 1000 people travelling to the site per day, plus 300 vehicles using the park and ride site and those staying on the site at the hotel. Based on 1.5 people car occupancy for the park and ride, this equates to 450 people arriving at the site in the morning and returning in the evening peak period. The commuter park and ride will operate between 7am – 9am and 4pm- 6pm (resulting in flows being distributed to approximately 150 in the morning and evening peak hour).



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Based on average 2.2 people per car³, there will be a daily trip generation of 454 trips to the site spread over the course of a day. There will be a temporal distribution of trips throughout the day.

Morning peak trip generation will be mainly associated with park and ride, staff trips, take away food stores serving breakfast, gym, some on site cafes serving breakfast, some limited hotel access, administrative office function.

Interpeak for the most part the retail and entertainment land uses will open around 9.30am and close between 5.30pm and 10pm. These include the sports retail outlets, some of the cafes associated with the retail use will close (typically close at 5 - 5.30pm), whilst the climbing gym, latitude, gym, some restaurants, bars and cafes, indoor ski centre, skating, cafes bars and other sports facilities, and some takeaway food shops will remain open.

Afternoon

There may be some afternoon demand associated with children from local schools (such as Montrose High School) adjacent to the site and local residential areas using the sports and active recreation facilities as well as families using the site with children after school. It is envisaged that for a large part these will be pedestrian and cycle trips as well as school bus trips to the site.

Evening peak

There will be demand for people to leave the site, during the evening peak. However, there will be some peak hour spreading as different retail, café land uses close at different times of the late afternoon and evening. Some people returning from park and ride will leave the site, whilst others may choose to use the sporting facilities, gym, netball, basketball, climbing gym and or entertainment / restaurants and bars and leave later when the evening peak hour flows have passed.

Later Evening

It is envisaged that there will be increased demand for trips into the site later in the evening, between 6.15pm and 7pm when people will access the site for entertainment, hotel functions, as well as the sporting and leisure land uses.

5.3 Detailed Trip Generation Rates

Notwithstanding the approximate figures outlined above, a more detailed trip generation rate assessment has been undertaken of the site.

³ NSW, RTA Guide to Traffic Generating Developments - Car parking occupancy rates – section 3.7.2



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The New South Wales, Road Traffic Authority Guide to Traffic Generating Developments, 2002, is a national recognised reference document for determining trip generation rates. This guide has been used in the development of this table. Where the guide is silent on a land use, Howarth Fisher and Associates have sought to undertake peak hour trip generation surveys of similar land uses. Where this has not been achievable, as in the case with the more unusual leisure activities, estimates based on the car parking supply have been used.

Land Use	Trip Generation Rates	Total
Park and Ride facility	300 maximum car park capacity 7am - 9am inbound morning peak hours 4pm - 6pm outbound	600 per day 150 per morning peak hour
Accommodation Assumed Hotel⁴ 280 rooms	NSW RTA Guide to Traffic Generating Development Daily vehicle rates – 3 per unit Evening peak hour trips – 0.4 per unit	600 per day 112 during the evening peak hour
4 x Fast food 2340m²	McDonald's Assess 230 veh / hr KFC Assess 120 /hr Banjos Subway (assumed similar to KFC)	230 vehicles during the evening peak hour 120 vehicles during the evening peak 17 vehicles based on evening peak trip generation 120 vehicles during evening peak
Promenade Food and beverage 6975m²	Evening peak hour trip generation Cafes / restaurants Based on NSW RTA Guide to Traffic Generating	349 trips during the evening peak hour

⁴ Accommodation could potentially be student accommodation – however worst case scenario of hotel has been assumed



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	Developments Evening peak trip generation 5 per 100m ²	
Active rock climbing Active Recreation	Based at surveys undertaken at Rock Climbing gym - Bathurst Street ⁵	Evening peak 12 trips during evening peak hour
Indoor Skiing Active Recreation	Assumed like Bowling evening peak generation	Evening peak 23 trips
Indoor skydiving Active Recreation	Assumed like Bowling (active recreation) evening peak generation	Evening peak 23 trips
Bowling Active Recreation	Based on surveys of Moonah Zone Bowl, Main Road by HFA ⁶	Evening peak hour 23 trips
Latitude Active Recreation	Based on Latitude Adelaide – 44 spaces	Evening peak hour 22 trips
Indoor 4 x Basketball courts Active Recreation	Assumed 50% basketball and 50% netball and 2 x 10 trips based 2 x 7 people on each side and 4 umpires	Evening peak hour 38 trips
Gymnastics Zone 1200m²	Assumed similar to Rock Climbing gym – Bathurst Street	Evening peak 12 trips
TOTAL ACTIVE SPORT RECREATIONS -12,742m²		

⁵ Based on advice of regular user of the Bathurst Street rock climbing gym

⁶ Based in trip generation survey – by HFA to Moonah Zone Bowl – Friday 23rd August 4.30pm - 5.30pm



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Shopping Specialist Retail Shops 8820m²	Sports / Retail A(F) Larger specialist shops – similar to Cambridge Park NSW, RTA Guide to Traffic Generating Developments Based on average of Thursday and Friday evening peak ⁷ A(F) = larger specialist stores 37 x 8.82	326 trips evening peak trips
NBL amenities 657m²	Ancillary use will not in themselves generate any trips Used exclusively by the NBL squad	0
NBL basketball courts 1879m²	2 courts 10 players 2 umpires	12
NBL gym 501m²	Used exclusively by the NBL squad Additional Staff 2	2
NBL hydro 501m²	Used exclusively by the NBL squad Additional staff 1	1
NBL office 344m²	NSW RTA Guide to Traffic Generating Developments Evening peak hour 2 per 100m ² gross floor area	7

⁷ As discussed with Department of State Growth



<i>Elite Sports Facility for NBL⁸</i> <i>5000 people x 13 times per year.</i> <i>Plus other frequent community events / school / exhibitions concerts typically to a lesser extent</i>	5000 average capacity 60% by sustainable transport modes (to major events) 2000 people accessing by car Average car occupancy 2.2 per vehicle refer NSW, RTA Guide 909 vehicles Based on typical daily usage ~ 150 people	909 vehicles trips at weekends and predominantly after the evening peak for events Subject to Event Traffic Management Plan. 70 evening peak hour trips
<i>Typical evening peak trip generation</i>		1669
<i>25% reduction for multi-purpose trips where more than one land use is visited</i>		<u>1252 trips into and out of site in the evening peak</u>
<i>30% reduction for access by ferry and Mona bus walking and cycling and subsequently Metro</i>		<u>Typical Evening Peak 876 trips to and from the site</u> <u>438 to the site</u> <u>438 out of the site.</u>

Table 1: Additional Trip Generation for the Wilkinsons Point Site

5.4 Multi-Purpose Trips

The incidence of multi-purpose trips can reduce overall trip generation rates. Given the mixed-use development proposed at the Wilkinsons Point site the incidence of

⁸ Advised by LK Property that basketball matches will typically be in the afternoon at the weekend. Some games will start at 7pm during weekday.



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multi-purpose trips is likely to be high. A multi-purpose trip is where more than one facility is visited. In this case people staying at the hotel are also likely to be visitors to the event at the refurbished DEC, retail, sporting facilities and restaurants. It is likely that most people staying at the hotel would also use other land uses on the site for example the sports facilities, venues and food and retail outlets. Similarly, users of the park and ride site may visit more than one land use, a takeaway or an onsite café or restaurant, gym or a sports facility on their way to or from the park and ride car park. The number of total trips to each land use, must be discounted to account for this.

A 25% deduction in trips has been used in modelling to reduce the likelihood of an over calculation. This is considered a conservative estimate as it is anticipated that more than a quarter of people, when visiting the site, will go to more than one of the land uses.

The calculation reflects the fact that all uses will be operating at or near capacity and therefore reflects worst case scenario conditions. It should also be noted that the trip rates are based on 100% capacity of the hotel, park and ride, the maximum sensitivity test for MacDonalds and fast food and all the basketball courts / netball courts being fully utilised.

This is also based on the 2.2 car occupancy figures as provided in section 3.7.2 of the NSW, RTA Guide to Traffic Generating Developments, 2002, for restaurant land uses as it is likely that given the leisure component of the development, car occupancy rates will be similar. Comparably, commuter car occupancy is typically calculated at 1.5 people, per vehicle, as people are less likely to travel to the same workplace together and will be more relevant for the access to the park and ride site. The 2.2 car occupancy rate has been adopted, as it is assumed to be a more accurate reflection of travel patterns to a leisure-based site. This assumptions is based on the introduction of behavioural changes, such as the introduction of random breath testing, and the tendency for people to travel together when attending social events, such as sports events and musical performances, (especially where alcohol is served), and there is limited parking availability.

5.5 Discount for Sustainable Transport

LK Property is working in collaboration with Mona to ensure that the site will be served by high frequency sustainable transport linkages in the form of bus and ferry. The proponent proposes to ensure the Mona owned and funded ferry and bus services also operate to the Wilkinsons Point site and given that the Mona funded public transport services currently account for 48% of the trips to the site, the developer is working to ensure that 33% of the trips to the Wilkinsons Point site, in the first instance, are made by sustainable transport modes and 66% are made by private car.

This will be achievable given that Mona are proposing to provide a new 20-minute frequency bus linkage from the airport to the City of Hobart to Mona (and it is proposed providing a drop off at the Wilkinsons Point site). Visitors to the hotel will get a direct sustainable transport link to the site from the airport and the city.



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Visitors will have a choice to either utilise the ferry or bus from the City of Hobart. Similarly, people staying at the Wilkinsons Point Hotel can easily travel to either Salamanca, Hobart and /or Mona by ferry or bus reducing the number of car-based trips to the site.

There are a significant number of visitors to Tasmania many of whom stay in the City of Hobart in the vicinity of the Brooke Street pier. These visitors and locals residing in the inner-city suburbs of Hobart, North Hobart, the Glebe, Battery Point can all readily use the ferry or bus services from Brooke Street Pier to access the Wilkinsons Point site.

Users of some of the sports uses, such as basketball and netball courts, are likely to be utilised by school groups, typically accessing the site by school bus services, whilst other visitors to the site may be people travelling to Mona and drop off at the site for leisure purposes, before either taking the ferry onwards to Mona or walking and / or cycling along the proposed foreshore connection.

The Mona Roma transport service can move 1470 passengers to the Mona site at any one time. Given this transport capacity, even the infrequent major events can be accommodated without over dependence on the private car and parking provision.

The developer will also be working to increase the public transport access to the site, once The Department of State Growth have made a reassessment, post construction, of the demand for public transport trips to be established or diverted to the Wilkinsons Point site. The Department of State Growth has advised that it is standard practice to wait until the development is fully operational in order to assess the need and potential demand for new public transport linkages (as was the case at Cambridge Park).

5.5.1 Event Traffic Management Plan

It is proposed an event traffic management plan will be undertaken to cater for the major basketball games and major events and concerts at the Wilkinsons Point site,

An 'in principle' agreement has been reached between LK Property and Mona to divert the previously exclusively Mona funded bus and ferry services to the site.

The developer will seek to negotiate a charter arrangement with Metro or another service provider to service the site, in a similar way to major cricket and AFL matches at Blundstone Arena. Different buses would service different areas, for example, the Eastern shore, the northern suburbs, Kingborough and Hobart, to reduce the reliance of the private car to access the major events. It is acknowledged that at peak event times, the supply of public transport services to the Wilkinsons Point site will need to increase to cater for the increased demand. Ticketing will be sold for these events which includes the public transport cost, as an integrated ticket.

The existing ferry and bus services can move 1470 passengers to the site at any one time, (and 2940 within a one-hour period). Given this public transport capacity, even the infrequent major events can be accommodated without over dependence on the private car and parking provision.



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The major basketball events, which are likely to occur after 7pm weekdays and predominantly at the weekends are not likely to conflict with the standard weekday evening peak period (typically 4.30pm - 5.30pm). The impact of event trip generation on the surrounding road network can therefore be mitigated by timetabling events outside evening peak traffic periods. It should also be noted that some of the land uses are not likely to be operating when there is a major event at the site, typically at 7pm many of the retail outlets will be closed as will the Latitude play centre and some of the smaller cafes.

Furthermore, in line with standard practice, Wilkinsons Point will provide an event traffic management plan to detail how these services will be managed, operated and marketed, to ensure that there is minimal impact on the surrounding residential street network in terms of parking.

Local trips in and around the area can be served by the Metro bus services, which provide a link from Hobart City via North Hobart, New Town, Moonah and Glenorchy as well as between Claremont and Moonah. Noting, however, that this would require diversion of existing services or the creation of new services, subject to demand. Shorter distance trips may be undertaken by bicycle; along the existing footpath track between the Glenorchy CBD and the Wilkinson Point site (shown at figure 1 of this report) or along the network of footpaths which exist in the area. For residents living in and around the Wilkinsons Point, who cannot access the site on foot, Uber pool, Uber and taxi services, may prove to be the most cost-effective way to access the site during events. An internal drop off and pick up layby is proposed within the Wilkinson Point site to facilitate access via taxi and Uber.

Car based trips to the site to events have been based on the 2.2 car occupancy figure as provided in section 3.7.2 of the NSW, RTA Guide to Traffic Generating Developments, 2002, for restaurant land uses as it is likely that given the leisure component of the development, car occupancy rates will be similar. Comparably, commuter car occupancy is typically calculated at 1.5 people, per vehicle, as people are less likely to travel to the same workplace together and will be more relevant for the access to the park and ride site. The 2.2 car occupancy rate has been adopted, as it is assumed to be a more accurate reflection of travel patterns to a leisure-based site. This assumptions is based on the introduction of behavioural changes, such as the introduction of random breath testing, and the tendency for people to travel together when attending social events, such as sports events and musical performances, (especially where alcohol is served), and there is limited parking availability.

The developer has advised that all the NBL events will occur predominantly at the weekend and sometimes during the evening starting at approximately 7pm -7.30pm. These performance events are unlikely to conflict with the standard weekday evening peak period which occurs typically somewhere between 4pm and 5.30pm. Hence the impact of these major events on the surrounding road network can be mitigated.

Furthermore, in line with standard practice, Wilkinsons Point will provide an event traffic management plan to detail how these services will be managed, operated and marketed, to ensure that there is minimal impact on the surrounding residential street network in terms of parking.



Summary

Incentives to travel to the site by sustainable transport modes

- Integrated ticketing to major events which combines the price of the transport with the sporting event.
- A proposed high frequency 20-minute scheduled bus service, providing links between the airport and the Motown site via Wilkinsons Point the ferry and half hourly ferry services (currently operating as from December 2018).
- New Mona ferry being introduced, (which with agreement has the potential to service the Wilkinsons Point site) with an overall capacity to move 1470 people an hour, which is compatible with utilisation by large visitor groups and or event / function groups.
- The ferry service departs from the Brooke Street Pier which is near high density hotel and visitor accommodation in the centre of Hobart and Battery Point. This reduces the requirement for tourists and visitors to require a vehicle whilst staying in Hobart. The Brooke Street pier is a stopping point for the tourist buses, taxis and is described as a tourism transport hub.
- The ferry provides a fast, frequent and reliable mode of transport, which is not impacted by traffic congestion, common within the City of Hobart and along the Brooker Highway, especially at peak times.
- The proposed bus service will provide a twenty-minute frequency service, providing a link between the airport and the Motown site between 7.30am to ~ 7.30pm.
- Provides visitors and users of the Wilkinsons Point site with the opportunity to combine a mode of transport with the experience of seeing the River Derwent by ferry.
- Utilisation of the sustainable transport modes allows people to drink alcohol at the Wilkinsons Point site without the concern and implications of driving.
- The uber and taxi pick up and drop off points as well as the proximity of the footpath and bicycle track to the centre of Glenorchy provide cost effective options for local people to access the site safely and conveniently (especially when travelling in groups).
- The Brooke Street pier is in walking distance of the bus mall which provides a bus interchange linking to several suburbs to the east, west, north and south of the city. It is also near several multi storey car parks located in the city of Hobart.
- The Brooke Street pier is on the route of the free Salamanca shuttle bus which runs a continuous loop between the Hobart City Centre, City Centre hotels and Salamanca Market, Saturdays from 9am to 2pm.



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- The ferry operators are testing several packages which seem to make the ferry and bus services more attractive. For example, these have included \$5 flat fare, one way, evening tickets; a flexi ticket which allows visitors to come and go on any ferry service. (These tickets have been introduced following the introduction of the higher capacity ferries).
- The Hobart City Council has recently given Mona the backwall of the Visitor and Tourism Building located on Davey Street for communication and marketing purposes, which outlines the sustainable transport options to the Mona site. This can be readily adapted to incorporate access to the Wilkinsons Point site. This is often the first point of call for inbound tourists and will seek to convert inbound tourists into ferry / bus passengers.
- The NBL and typical events which will operate at the new sports venue have and utilises social media to target users. This social media platform can encourage and market access to the site by ferry. The NBL are a very powerful brand and can use social media channels to influence users and provide information on transport and ticketing packages.
- All elements of the Wilkinsons Point website and marketing materials, including booking tickets, booking accommodation, booking restaurants and events have the capacity to expose users to the visit by ferry with both messages and imagery.
- The ticketing system can be adapted to provides an automatic pathway to buying a ferry ticket with associated imagery of the ferry experience.
- It is proposed with the lead up to the development of the site Wilkinsons Point will further increase their marketing reach and provide resources to encourage access to the site by bus and ferry and reduce the access to the site by private car.

Disincentives

- Marketing Campaign should outline there is an already congested road network. Given Wilkinsons Pont is supporting and funding a range of sustainable transport services (collaboratively with Mona) to the site, they do not want to (or should they provide a full complement of parking). By limiting the amount of parking, they are discouraging visitors to drive to the site.
- Limiting the supply of parking is a well-recognised trip end control measure.
- With increased car ownership, increased traffic volumes and reduced or static network capacity, congestion is prevalent on the Brooker Highway and on other parts of the arterial and collector road network on route to Wilkinsons Point from key points of origin. This acts as a deterrent to visitors to drive, especially when visitors and tourists must be at a sporting event at a specific time of the day.



6. Assessment of Parking

6.1 Existing Situation

There are currently 900 parking spaces on the Wilkinsons Point site. The car parking provision is located around the Derwent Entertainment site.

6.1.1 Proposed Parking

Land Use	Use Class	Parking Requirement
Park & Ride facility (Ferry to Wilkinsons Point/City/Mona)		300 spaces
Hotel (280 room)	Visitor accommodation	1 space per room and 1 space for manager's dwelling 281 spaces
Fast food / drive through 4 facilities TOTAL 2340m²	Food Services	Take away food premises 15 for each 100m ² of floor area or 1 space for each 3 seats, whichever is greater. 351 spaces + drive through Queuing area for 5-12 cars 5 x 4 = 20 drive through spaces
Latitude / children's playcentre or similar	Based on assessment of parking provision at the Latitude in Adelaide	45 spaces
Rock Climbing or similar	Assumed 42 people climbing at any one time ⁹	20 spaces

⁹ Based on maximum number of people surveyed at the Climbing gym in Hobart



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Indoor Skiing or similar Indoor skydiving or similar	Subject to traffic and parking assessment Assumed 66 skiing any one time and assessment of Melbourne skiing facility Assumed similar to above	30 spaces 30 spaces
Bowling Assumed 15 alleys	Based on NSW RTA Guide to Traffic Generating Developments 3 spaces per alley	45 spaces
Indoor Basketball Courts / netball courts x 4 Assumed 2 x basketball courts and 2 x netball courts	Subject to traffic and parking assessment	(5 players/ 5 subs each side) 1 umpire 22 spaces x 2 44 spaces maximum 7 players each side 1 Umpire x 2 = 30 spaces 74 spaces maximum
Gymnastics Zone	16 spaces provided at gymnastics gym facility at Hurst Street Bridgewater	20 spaces
Gym 1491m²	Glenorchy City Council Interim Planning Scheme Fitness centre 4.5 per 100m ²	67 spaces
TOTAL ACTIVE RECREATION 12,742m²	These land uses are indicative only and subject to potential change	
Promenade/Cafes/Restaurants 6538m²	Food Services RTA Guide to Traffic Generating Developments 15 for each 100m ² of floor area or 1 space per 3 seats	981 spaces
Retail shops 8820m²	General retail and hire 1 for each 30m ² of floor area	294 spaces



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NBL Amenities 657m ²	Assumed ancillary and will not in itself generate any parking	0 spaces
NBL basketball courts 1879m ²	1 team based on site 10 players plus coach	11 spaces
NBL Gym 501m ²	Assumed ancillary - except for staff trips it will not generate any parking	2 spaces
NBL hydro 501m ²	Ancillary use Will not generate any parking in itself	0 spaces
NBL office 344m ²	1 for each 30m ² of floor area	12 spaces
NBL team lounge 1002m ²	Ancillary use Will not in itself generate any parking	0 spaces
DEC Elite Sports facility for NBL team (5000 people x 13 times per year) plus major concerts Daily – community events/ / school/ dance concerts	Work on 60% to the site by sustainable transport for major events – ferry and coach services	2000 by car Average car occupancy rate 2.2 people per car 909 car spaces (most events take place 100 car spaces typical daily use
Total		3719 events - 2683 typical
Reduction for shared parking, where more than one land use is visited	25%	2789 events 2012 typical
Reduction for public transport access to the site	30%	1952 events 1251 typical
PROPOSED ESTIMATED PARKING PROVISION		1842 spaces

Table 2: Showing the Car Parking Requirements Based on the requirements of the Glenorchy Interim Planning Scheme, 2015



6.2 Shared Parking

The above figures are based on unrestrained demand for parking. Consideration needs to be given to the prevalence of common usage. Is it unlikely that all visitors will only go to one of the land uses, visitors to the cinema or basketball are also likely to visit a café, restaurant or bar, reducing the total demand for parking. 25% reduction in overall parking is a conservative estimate and has been applied. There will also be some temporal changes in demand throughout the day with the park and ride being used during the weekday between 9am and 6pm and the event demand at the DEC being predominantly at the weekend and during the evening.

6.3 Sustainable Transport Access

The privately funded bus and ferry transport access to the site will also reduce the onsite parking demand. Mona has successfully attracted nearly 50% of its visitors to use sustainable transport to access their site. It is anticipated that given the proposed ferry and bus connection as well as the potential for new metro bus services and cycling and walking facilities through and to the Wilkinsons Point site, a 30% modal split in favour of these alternative transport modes will be achieved. This will further reduce the on-site parking demand.

6.4 Proposed Parking Provision

The proposed layout of the parking can be found in **Appendix A**. It is proposed to provide 1842 spaces on the site, which more than adequately caters for the parking demand associated with the typical proposed land uses. There is seen to be a slight shortfall of parking associated with major events. This can be managed by increasing the public transport provision, approaching the owners of surrounding land uses for an agreement to use, for example, the Tasmanian Racing Club, for supplementary parking provision if required.

The onsite Wilkinsons Point car parks are dispersed throughout the site, to service each of the local precincts and land uses proposed within the site.

6.5 Dimensions and Manoeuvring

In line with Australian Standards 2890.1: Off street parking 2004 the parking requirement is for user class 2 facilities, notably long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium – term parking).

In line with this requirement bays will be 2.5metres wide x 5.4metres long with a 5.8metre aisle width.



6.6 Performance Criteria

In line with the objective of the Glenorchy Interim Planning Scheme, 2015, of section E6.6.1 Number of Car Parking Spaces notably to ensure that

- a) There is enough car parking to meet the reasonable needs of all users of a use or development, considering the level of parking available on or outside of the land and the access afforded by other modes of transport.
- b) A use or development does not detract from the amenity of users or the locality by:
 - i) Preventing regular parking overspill;
 - ii) Minimising the impact of car parking on heritage and local character.

Performance Criteria

P1

The number of on-site parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:

a) Car parking demand

The parking supply based on the calculation for the individual land uses is based on unrestrained demand for parking. Consideration needs to be given to the prevalence of common usage reducing the total demand and / or the parking demand associated with the various land uses occurring at different times of the day and week.

It is extremely likely that most of the users (if not all), staying in one of the rooms of the hotel for example will also be attending a sporting event or going to the entertainment, restaurant, bars and cafes, retail facilities at the Wilkinsons Point site. Therefore, there will be some double, or even triple counting of parking provision, if all the land uses are calculated separately.

Free and readily available parking can act as an incentive to drivers even when there are other transport options available, therefore perpetuating car parking supply and demand pressures, impacts and costs to the Wilkinsons Point site and the local community. In developing the Wilkinsons Point transport strategy, the proponent does not restrict parking without actively providing, funding and supporting alternative transport options to the site.

There is also going to be a charge for on-site parking to further discourage access by car.



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Ultimately, the developer is actively pursuing a sustainable transport strategy. *'Ultimately sustainability is all about looking after the future today and doing things smarter for a range of interrelated environmental, social and economic reasons while thinking about how to manage development more sustainably. It makes good business sense to improve efficiencies and transport operation and travel practices. The benefit of sustainable transport therefore reaches throughout the community from individuals and households to organisations and government institutions.'*¹⁰

Wilkinsons Point is undertaking a strategic integrated approach to sustainable transport improvement, notably:

By specifically providing information on transport services to the Wilkinsons Point site, and /or integrating transport into the accommodation or event price when booking, will lead to a shift towards utilisation of sustainable transport services.

It can be argued that the reasonable expectation of those visiting a major sporting facility is not to have parking located on the doorstep of the site but to investigate options for transport access. This is in line with the expectation of visitors to other major sports facilities, notably Blundstone Arena which typically provides chartered bus services to major cricket and AFL events. By comparison to the onsite parking provision provided on the Wilkinsons Point site, the Blundstone Arena provides parking exclusively for staff and players, and all spectators to major sporting events, who choose to drive, rely solely on the surrounding residential street network.

b) The availability of on street and public car parking in the locality.

There is land available for overflow parking at the Elwick Racecourse should events be coordinated so as not to conflict with major race meetings. The proponent could enter into an agreement with TRC to supplement parking supply at major event times, if required.

However, there is limited on street parking in the vicinity of the site nor is the on-street parking conveniently located. This further encourages visitors to look at other Wilkinsons Point controlled and funded transport modes to provide more convenient access to the site.

The proposed development will include the park and ride car park which will be utilised during the working day, but not at the weekend or not after 7pm in the evening when the major NBL events, or other entertainment events occur. This parking supply will be largely available for utilisation by visitors to these events.

¹⁰ UTAS Sustainable Transport Strategy document



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There is a large Council owned supply of parking located in the City of Glenorchy which could also be advertised and used for major events. There is a pedestrian /cycle path linking the Wilkinsons Point site and the centre of Glenorchy as indicated at figure 2 of this report. Alternatively, as part of an event traffic management plan a shuttle bus service could link the City Centre Council car parks to the site via Elwick Road. Other options would be to seek an agreement with the Tasmanian Racing Club at Elwick Road to utilise their on site parking at event times.

- c) *The availability and frequency of public transport within a 400metres walking distance of the site.*

There are several general access bus services which operate in the vicinity of the site with stops at Elwick Road and on Goodwood Road within walking distance of the site.

- The X22 service provides a link between Glenorchy Interchange, Elwick Road, Lutana and Hobart City.
- The X30 provides a link between Gagebrook, the Racecourse, Lutana and Hobart City.
- The X11 provides a Claremont Express service via the Brooker Highway, Elwick Road and Glenorchy.

It is acknowledged that these services stops are currently located at some distance from the main site. However, the Department of State Growth has indicated that they will review the need to re-route or create bus services (and consequently the location of bus stops) post construction and once demand/need is established.

The ferry services are also set to increase in number and frequency with a proposed half hourly return frequency service between Hobart and Mona which can readily accommodate the Wilkinsons Point site. The ferry services have capacity to move 1470 passengers at any one time. The proponent is working collaboratively with Mona to ensure that sustainable transport services can also provide a link to the site.

Two water taxis (motoscafis), will provide services to further increase access to the site by modes other than the private car, (each water taxi will have a capacity of 25 people). Navigators (who operate the ferry) are proposing to operate a 24/7 water taxi service to transport visitors to and from the city, at any time of the day and night. This seeks to provide visitors with a more timely, convenient and private means of accessing both Wilkinsons Point, Mona and the City.

There are twenty bicycles available for hire from the Hobart waterfront and it is envisaged that there will be opportunities for bicycle hire facilities to be



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provided at the proposed Wilkinsons Point ferry terminal. This would in turn allow visitors to the Wilkinsons Point site to cycle to Mona (potentially via the proposed Boardwalk) and or the City of Hobart after visiting the Wilkinsons Point site and to the main Glenorchy Central area via the existing segregated footpath linkage. The Intercity Cycle track can be accessed via a segregated shared pedestrian / cycle linkage between Wilkinsons Point and the centre of Glenorchy.

Mona currently provides 4 coaches undertaking a loop and providing a link between the Airport / Hobart / and Wilkinsons Point from 0830 to 1730. The frequency of these bus services will increase to one bus service every 20 minutes, departing the airport, linking to the ferry in the City of Hobart as one option and onto Wilkinsons Point, and Mona at the other. The proponent, LK Property, is working collaboratively with Mona to provide and fund these services.

Wilkinsons Point will investigate ways to promote a combined transport / NBL sport / event package returning from Hobart, either by ferry or coach.

Similarly, it is proposed that visitors to Wilkinsons Point receive a package which includes a return 3 or 4 day / ferry / coach pass, during major sporting tournaments at the site. This package should be included in the price of the ticket to encourage and facilitate access to the site by sustainable transport modes.

It is also proposed that the inclusion of transport services be incorporated into the ticket purchases for the various guest experiences. The range of transport options available could all be provided as part of the ticket price, notably the:

- Inclusive Ferry / event / accommodation / price;
- Inclusive bicycle hire / event price;
- Inclusive bus or coach / event / accommodation price.

The provision of the boardwalk is another existing infrastructure facility which exists on Wilkinsons Point to provide a pedestrian link between the Wilkinsons Point site to the Mona and the Montrose bay foreshore.

d) The availability and suitability of alternative arrangements for car parking provision.

The proximity of the Racecourse near to the site, could provide additional parking provision if an agreement was reached with the Elwick Racecourse (subject to events being held on days when racing events do not occur).

There is a significant supply of Council owned and operated parking within the city of Glenorchy. There is also a segregated walking / cycling track between



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the site (as shown in figure 2 below) and the Centre of Glenorchy which could be used by able bodied visitors to the site, who could park and walk, especially in the evening when typical parking demand in the CBD is lower. Alternatively, shuttle bus services could operate between the centre of Glenorchy and the Wilkinsons Point site.



Figure 2: Showing the existing pedestrian and cyclist route to the site from the car parks located in the centre of Glenorchy.

- e) Any reduction in car parking demand due to car sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared parking spaces;

It is also extremely likely that people who are guests in one of the hotel rooms will also be attending a sporting event, and / or one of the entertainment land uses and using one of the eateries or restaurants proposed on the Wilkinsons Point Site. Similarly, people going to the NBL event or other entertainment event on the site are also likely to go to one of the cafes, bars and or restaurants whilst at the site. Also, people going to a retail outlet may go to a sporting facility and or a bar / café or restaurant proposed at the site. These multi-purpose trips will result in an overall reduction in total parking demand.



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The presence of a commuter park and ride facility linked to a Wilkinsons Point ferry / bus service would be used during the day for commuters and visitors and be used by people attending the sporting events at other times.

- f) *Any parking deficiency or surplus with the existing use of the land;*

N/A

- g) *Any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site;*

Not applicable given this is a substantial redevelopment of the site.

- h) *The appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities, where such facilities exist or are planned in the vicinity.*

Not applicable

- i) *Any verified prior payment of a financial contribution in lieu of parking for the land.*

Not applicable.

- j) *Any relevant parking plan for the area adopted by Council.*

Not applicable.

- k) *The impact of the historical cultural heritage significance of the site if subject to the Local Heritage Code.*

Not applicable.

- l) *Whether the provision of the parking would result in the loss, directly or indirectly of one or more significant trees listed in the Significant Trees Schedule.*

Not applicable.

6.7 Bicycle Parking

As stated in the Glenorchy City Council Interim Planning Scheme, 2015:

Objective:



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To encourage cycling as a healthy and environmentally friendly mode of transport for commuter, shopping and recreational trips by providing secure, accessible and convenient bicycle parking spaces.

Bicycle parking provision will be calculated at the development application stage and addressed in line with the acceptable solution or the performance criteria as appropriate.

In line with the requirements of the Glenorchy Interim Planning Scheme 2015, the minimal provision for employees is a communal compound with communal access using duplicate keys. The minimum provision for visitors is a facility to which the bicycle frame and wheels can be locked.

Wilkinsons Point has sought to meet the requirements of the acceptable solution with regards bicycle parking for both employees and visitors.

6.8 Accessible Parking

In line with the Glenorchy City Council Interim Planning Scheme, 2015 requirements as outlined in section E6.6.2: Number of Accessible Car Parking Spaces for People with a Disability.

Objective

To ensure that a use or development provides sufficient accessible car parking for people with a disability.

Acceptable Solutions

A1

Car parking spaces provided for people with a disability must:

- a) Satisfy the relevant provisions of the Building Code of Australia;*
- b) Be incorporated into the overall car park design;*
- c) Be located as close as practicable to the building entrance.*

Performance Criteria

P1

No performance criteria.



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In line with the requirements of the BCA

The building surveyor has advised of the following accessible bay parking requirements. Essentially 1 for every 50 up to 1000 car parking spaces then one for every 100 over 1000.

Based on the parking provision there is a requirement of 29 accessible bays. However, this may change at the Development Application stage depending on the final land use provision.

Furthermore, the ferry service provides an accessible access from the ferry to the development site providing a means of travel to the site other than by private car.

6.9 Motorcycle Parking

In line with the performance criteria outlined in section E6.6.3 of the Glenorchy Interim Planning Scheme, 2015.

The acceptable solution states

‘The number of on-site motorcycle spaces provided must be at a rate of 1 space to each 20 car parking spaces after the first 19 spaces.’

Given there are ~ 1842 bays proposed there is a requirement for ~ 92 motorcycle spaces.

6.10 Proposed Parking Provision

The layout of the parking can be found in Appendix A.

6.11 Dimensions and Manoeuvring

In accordance with the requirements for the Glenorchy City Council Interim Planning Scheme, 2015 which states:

Parking spaces manoeuvring areas and circulation aisles shall be in accordance with AS2890. 1.

The bays will be designed to comply with the requirements of user class 2 for hotel parking which requires bays to be 2.5 metre and the disabled bays 2.4 metre with a 2.4 metre shared zone in accordance with the design standards of AS2890.1: *Off street parking 2004* and the AS2890.6: *Parking for people with disabilities – 2009* respectively.



7. Assessment of Access

7.1 Existing Situation Access Width

There are currently two accesses into the site, one is located at the intersection of Wilkinsons Point Access Road. The other is located at the intersection of Loyd Road and Goodwood Road. Both accesses are controlled by traffic signals.



Figure 3: Showing the existing traffic signal-controlled access provision to the Wilkinsons Point site from the Brooker Highway in addition to the slip lane

In addition, there is a left turn slip lane out of the site from the Wilkinsons Point site which forms a through lane on the Brooker Highway.



Figure 4: Showing the existing traffic signal-controlled access provision to the Wilkinsons Point site from Goodwood Road

7.2 Planning Scheme Access Widths Requirement

The design of the internal accesses to car parking and service areas will be designed in accordance with the requirements of the Glenorchy City Council Interim Planning, 2015 (either in line with the acceptable solution or the performance criteria).

7.3 Australian Standard Requirement

7.3.1 Classification of Off-Street Car Parking Facility

In line with Australian Standard AS2890.1 Off-street car parking facilities the class of the proposed parking facility is determined from the table 1.1 below:



TABLE 1.1
CLASSIFICATION OF OFF-STREET CAR PARKING FACILITIES

User class	Required door opening	Required aisle width	Examples of uses (Note 1)
1	Front door, first stop	Minimum for single manoeuvre entry and exit	Employee and commuter parking (generally, all-day parking)
1A	Front door, first stop	Three-point turn entry and exit into 90° parking spaces only, otherwise as for User Class 1	Residential, domestic and employee parking
2	Full opening, all doors	Minimum for single manoeuvre entry and exit	Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking)
3	Full opening, all doors	Minimum for single manoeuvre entry and exit	Short-term city and town centre parking, parking stations, hospital and medical centres
3A	Full opening, all doors	Additional allowance above minimum single manoeuvre width to facilitate entry and exit	Short term, high turnover parking at shopping centres
4	Size requirements are specified in AS/NZS 2890.6 (Note 2)		Parking for people with disabilities

From the Table 1.1 the type of the proposed parking facility is a user class 2 medium term for a sports facility, hotels and entertainment centre. All parking spaces will be designed in accordance with this standard, notably 2.5metres wide x 5.4metres long with a minimum aisle width of 5.8metres

7.3.2 Category of Access Driveway

In line with AS2890.1 - to determine access driveway widths and restrictions on their location along frontage road table 3.1 categorizes driveways according to –

- a) the class of parking facility as shown in table 1.1;
- b) the frontage road type, either arterial (including sub-arterial) or local (including collector); and
- c) the number of parking spaces served by the access driveway



TABLE 3.1
SELECTION OF ACCESS FACILITY CATEGORY

Class of parking facility (see Table 1.1)	Frontage road type	Access facility category				
		Number of parking spaces (Note 1)				
		<25	25 to 100	101 to 300	301 to 600	>600
1,1A	Arterial	1	2	3	4	5
	Local	1	1	2	3	4
2	Arterial	2	2	3	4	5
	Local	1	2	3	4	4
3,3A	Arterial	2	3	4	4	5
	Local	1	2	3	4	4

NOTES:

- 1 When a car park has multiple access points, each access should be designed for the number of parking spaces effectively served by that access.
- 2 This Table does not imply that certain types of development are necessarily suitable for location on any particular frontage road type. In particular, access to arterial roads should be limited as far as practicable, and in some circumstances it may be preferable to allow left-turn-only movements into and out of the access driveway.

From table 3.1 above it can be shown that the proposed driveway of the user class 2 parking facility, with over 600 parking spaces and accessing onto an arterial frontage road, falls into a Category 5 access. The AS2890. 1 requires that access be provided as an intersection, not an access driveway and shall be designed as for a public roadway, with all traffic control devices and intersection geometric design requirements.

7.4 Access Provision

The location of the access and egress points can be found on the plan at **Appendix A**.

7.5 Internal Road Layout and Access Provision

All internal road layouts including on street pick up and drop off facilities in terms of cross section widths are to be designed in accordance with the Municipal Standard Specifications (MSS). It is proposed that the road network will be adopted and maintained by the Council and form part of the Glenorchy City Council's local road network.

MSS road cross sections for local roads, commensurate with the size of the development, have been adopted for the internal development road design. In addition, the design will incorporate right turn lanes, notably at car park accesses and access into the main service roads. Given that the MSS has been adopted cross section width can accommodate turning movements for light and heavy vehicles.



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The road reservation widths are a maximum of 24 metres wide at the intersection of the Brooker Highway and the Wilkinsons Point Access Road, reducing to 18metres for the main local through road which runs through the site, connecting through to Goodwood Road. The smaller local side roads which provide access to a limited number of land uses have a proposed road reservation width of 15metres (as advised by GCC officers).



8. aaSIDRA Analysis

8.1 Background

Given the Wilkinsons Point development has frontage onto two state roads the intersection modelling has been undertaken collaboratively with the Department of State Growth. The Department of State Growth provided Howarth Fisher and Associates, with the SCATS lane traffic volume data, traffic phasing, timing information, green time allowances, in light of the priority which has to be given to the through traffic movement on the Brooker Highway and Goodwood Road during peak times.

The aaSIDRA model has been run during the morning and evening peak period on a weekday when traffic flows are highest. As is typical in traffic engineering, worst case scenarios are modelled. In this instance the worst-case scenario coincides with the weekday morning and evening peak.

During the morning peak hour (approximately 7.30am – 8.30am) the existing intersection of Brooker Highway and the Wilkinson Point Access Road is at capacity, given the high demand for through traffic especially southbound, the demand for many of the internal land uses proposed within the Wilkinsons Point site is very low. Notably, many of the land uses (typically the retail and some of the sports leisure facilities, such as climbing gym, skating ring and indoor skiing, latitude centre) will be closed as will many of the restaurants and bars in the morning peak period. The NSW, RTA, Guide to Trip Generating, 2002, only provides evening peak hour trip rates for many of the proposed land uses, given trip rates would be so insignificant in the morning peak.

The main demand in the morning peak will be for park and ride and the service road land uses (to a limited extent the takeaway food shops, hotel, some cafes and some of the ancillary administrative office land uses on the site). It is proposed to provide a continuous left turn slip lane from the north (which is not subject to traffic signal control) which then forms its own lane into the Wilkinsons Point Access Road. Park and ride access from vehicles originating to the west and south of the site would be directed to the Loyd Road / Goodwood Road intersection.

During the evening peak, most of the land uses will be operating within the Wilkinsons Point site and evening peak hour flows on the State Road Network are also significant. Thus, the evening peak hour reflects worst case scenario conditions in terms of on-site trip generation.

It has been advised by the Department of State Growth that given the intersection of Goodwood Road and Loyd Road has spare capacity, where possible this intersection should be utilised and promoted for accessing the Wilkinsons Point site. Directional signage for vehicles approaching from the south should direct traffic to the Loyd Road access given there is little spare capacity at the Brooker Highway Access. Good destination signage, as well as marketing and social media, could assist in directing users of the hotel for example, from the airport to the Bowen Bridge and to the Loyd Road access. Similarly, vehicles travelling from the south could be directed to use this access.



Green time at the Intersection of the Wilkinson Point Access Road is severely restricted in the morning and evening peak period, with most of the green time being provided to the through traffic movement. It has been advised by DSG that 40 seconds of green time is provided to the right turn in and right and left turn out of the Wilkinsons Point Access Road in the morning and evening peak period. This equates to just 14 seconds of green time for each of these movements, enabling approximately 14 vehicles (7 in each lane) to enter at the two proposed right lanes and approximately 21 vehicles to egress from the site in a 180 second overall cycle time during the morning and evening peak period.

The slip lane out of the site provides a direct link into a through traffic lane linking up to the intersection of Elwick Road. DSG did not require this to be modelled.

Given these restrictions any opportunity for access to be directed to Loyd Road where more capacity is available needs to be realised.

Howarth Fisher and Associates has also modelled a lead right turn phase from the Brooker Highway into the Wilkinsons Point site which clearly provides an improved level of service for right turn movements into the site (given there is another green phase proposed in the overall cycle).

Another option would be to operate a lead and lag green phase to increase the capacity of right turning movements at the intersections, when demand is high and through traffic demand reduced.

The design principal of the development is to design the access arrangements to integrate with the current traffic flows. This ensures that any traffic generated does not have any adverse impact to the surrounding network performance.

8.2 Proposed Intersection Layout onto the Highway Network

In collaboration with DSG Howarth Fisher and Associates has sought to design an intersection which will maximise turning movement capacity into and out of the Wilkinsons Point site.

The main proposed features of the intersections include

Wilkinsons Point Access Road / Brooker Highway

- A continuous extended left turn slip lane from the Brooker Highway northern approach which then forms its own through lane within the site.
- An increase from one to two right turn lanes from the Brooker Highway Southern Approach into the Wilkinsons Point Access Road each forming their own lane to enter the site. This additional turn lane will increase the number of vehicles that can enter the site in a limited green phase allocated to turning traffic.
- Three lanes into the site are proposed at the intersection with the Brooker Highway (one formed by the continuous left turn slip lane and two from the two right turn lanes.) This eventually narrows to two lanes after the service road and from two lanes to one lane following the car park associated with main refurbished DEC building. (The building used for main events on the Wilkinsons Point site).



Southbound Service Road / Brooker Highway via the slip lane

- It is proposed to link the service road to the existing slip lane forming a link out onto the Brooker Highway. This will have the advantage of dispersing trips out of the site and away from the two main intersections. The slip lane has the advantage of forming its own through lane onto the Brooker Highway and therefore has significant benefits in minimising delay for egressing vehicles from the Wilkinsons Point site.

Goodwood Road / Loyd Road

- It is proposed to extend the length of the right turn slip lane to increase capacity for storage of right turning vehicles at the site from Goodwood Road (eastern approach).
- It is proposed to construct a new left turn slip lane from the western approach of Goodwood Road directly into Loyd Road. This would remove the requirement for left turning vehicles being delayed at the existing traffic signal-controlled intersection and remove the issues involved in accommodating the swept path of the left turn movement from Centre Road into Loyd Road. The swept path of larger truck and buses cannot be accommodated without encroaching on the outbound Loyd Road leg of the intersection.



Figure 5: Showing the location of a possible left turn slip lane to provide direct access from Goodwood Road into the Wilkinson Point site which would facilitate the manoeuvre for buses and trucks.

- A direct entry from Goodwood Road would minimise delay and improve the capacity for vehicles wanting to enter the site from the south and the west of the Wilkinsons Point site given the limitations (especially at peak times) of



the right turn storage capacity of the Wilkinsons Point Access Road and the Brooker Highway.

- It is proposed that vehicles are directed through signage and marketing strategies to use the Goodwood Road access.

8.3 Operational Improvements

- It is proposed that vehicles are directed through signage and land use marketing strategies from the south, west and east use the Goodwood Road / Loyd Road access as the main access to the site. For example, the hotel / NBL sports venue could provide information directing vehicles to the Loyd Road entrance for those trips originating in Hobart, Glenorchy and the airport.
- The traffic signals at interpeak times will increase the amount of green time provided to the right and left turn movements into the site. The system can be overridden at the weekend and evening times to cater for demand associated with turning traffic into the site.
- Howarth Fisher and Associates have modelled the effect of a lead green turn phase into the site, which would significantly improve the right turn movement into the site at peak times. A lead and lag right turn phase is another option which could be considered given the high right turn demand into the site at event times.

8.4 aaSIDRA model

aaSIDRA analysis (Signalised and Unsignalised Intersection Design Research Aid) has been developed as an aid for the design and evaluation of the following intersection types.

- Signalised intersection
- Roundabouts
- Give Way Control

aaSIDRA uses detailed analytical traffic models coupled with an iterative approximation method to provide estimates of capacity and performance statistics (delay, queue length and stop rate, etc).

aaSIDRA is endorsed by Parts 2, 5, 6 and 7 of the Guide to Traffic Engineering Practice, a major publication of Austroads.¹¹

¹¹ aaSIDRA Manual - Akcelik and Besley



8.5 Definitions of aaSIDRA Outputs

8.5.1 Degree of Saturation

The degree of saturation (DOS) is defined as the ratio of demand flow to capacity, also known as the volume / capacity ratio. The movement degree of saturation is the largest degree of saturation for any lane or movement. If there is no lane underutilisation the degrees of saturation for all lanes and the movement lane group are the same. Movements in shared lanes will have the same degree of saturation except in the case of de facto exclusive lanes.

The approach degree of saturation is the largest value for any movement (or any lane) in the approach, and the intersection degree of saturation.

8.5.2 Level of Service

Level of service is a standardised performance measure used in the US Highway Capacity Manual (Transportation Research Board, 1985; Austroads 1988a) to assess changes in the operating speed with various factors. The original procedures were used to determine the maximum service flow that can be carried at a given level of service, or the level of service given for the given flow road and traffic conditions. The latest procedures are based primarily on traffic bunching, through speed, capacity and safety and are used in the determination of adjustment factors.

Level of service definitions based on delay (HCM method).

Level-of-service definitions based on delay (HCM method)

Level of Service	Control delay per vehicle in seconds (d) (including geometric delay)	
	Signal and Roundabouts	Stop Signs and Give-Way (Yield) Signs
A	$d \leq 10$	$d \leq 10$
B	$10 < d \leq 20$	$10 < d \leq 15$
C	$20 < d \leq 35$	$15 < d \leq 25$
D	$35 < d \leq 55$	$25 < d \leq 35$
E	$55 < d \leq 80$	$35 < d \leq 50$
F	$80 < d$	$50 < d$



8.5.3 Control Delay

This is the sum of the stop line and geometric delay thus it includes all deceleration and acceleration delays experienced in negotiating the intersection.

The default delay definition in aaSIDRA is the intersection control delay (overall delay with geometric delay).

8.5.4 Volume Data

Base data has been obtained from SCATS data, collected from each traffic lane of the intersections of Wilkinsons Point Access Road and Brooker Highway and Goodwood Road and Loyd Road.

8.5.5 Assumptions

The following assumptions have been made for the aaSIDRA analysis.

- As is typical with traffic volume data, there is a propensity for the volumes to change daily with some variation experienced in peak hour periods and volumes. DSG supplied the SCATS data for July 2019 and a worst-case scenario of highest weekday volumes was chosen for modelling purposes.
- Given the land uses associated with the Wilkinsons Point development, modelling has assumed 50% of people will arrive at the site during the evening peak hour 4.30pm – 5.30pm and 50% will leave.

8.5.6 Scenarios Modelled

- Existing Situation for morning and evening peak
- With traffic growth and the proposed development - the intersection operating with 10-year post construction (14 year) 1.5% compound growth on Brooker Highway and Goodwood Road during the peak period. It should be noted that the compound growth rate was agreed for modelling purposes with the Department of State Growth as a long-term trend.
- The typical worst-case morning and evening peak periods have been modelled.
- As is standard practice an event traffic management plan, to cater for the major sporting events and concerts will be provided and will be heavily reliant on access to the site by public transport modes.



8.5.7 Wilkinsons Point Access Road / Brooker Highway – AM PEAK (~7.30am- 8.30am)

It is assumed that there will be ~ 80% of people arriving and ~20% leaving the site in the morning peak. (300 movements have been modelled, at each intersection given many of the land uses will not be operating before 9am).

- It was assumed that 220 vehicles would enter the site from the north approach via the continuous slip lane during the 7.30am- 8.30am peak hour
- It was assumed that 20 vehicles would enter the site from the south. (Drivers would be encouraged to use the Loyd Road access for vehicles entering from the south and west).
- It was assumed 20 would exit the site to the north
- It was assumed 20 would exit the intersection site to the south (of which 20 would use the intersection and the remaining the slip lane to Elwick Road)
- It was assumed any remaining exiting traffic would utilise the slip lane which forms its own through lane onto the Brooker Highway.

The main traffic movements in the morning peak will be to access the park and ride car park (which has capacity for 300 vehicles). Many uses, notably retail and leisure / entertainment lane, restaurants and bars use will not be open during the morning peak period and typically open between 9am – 9.30am.

The likely trip generators which will be open during the period are the hotel, some cafes and take-aways, gym and some of the sporting facilities. There will also be some staff trip generation associated with land uses on the site during the morning peak period.

8.5.8 Wilkinson Point Access Road / Brooker Highway PM PEAK

It has been assumed 50% of people would be arriving at the site and 50% would be leaving the site. A total of 450 peak hour trips are modelled at this intersection

- It was assumed that 200 vehicles would enter the site from the north during the evening peak.
- 25 would enter the site from the south.
- 130 would exit the site via the slip lane and



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- 20 would turn left at the traffic signals.
- 75 vehicles would turn right at the Wilkinsons Point / Brooker Highway intersection.

It is also assumed that some people, for example using the site for park and ride purposes would also stay at the site for a meal, a drink, or use the leisure and sporting, gym facilities and then undertake their trips onto the highway network after the evening peak flow.

8.6 aaSIDRA Results

All the output files of the aaSIDRA analysis modelling can be found at Appendix B of this report.

The existing traffic signal-controlled situations has been modelled to reflect the current and proposed situation. The results of the aaSIDRA analysis for the give way intersection during the lunchtime and evening peak are outlined below.

The Department of State Growth has provided SCATS traffic volume data. Given that the Brooker Highway and Goodwood Road are part of the National Highway Network, there is a reluctance to provide additional capacity to side road access as the key function of the road is to provide for efficient through traffic movements

8.6.1 Brooker Highway / Wilkinsons Point Access Morning Peak Results

The summary of results of the intersection operation during the morning peak are tabulated below:

MOVEMENT SUMMARY

Site: 101 [Wilkinsons Point Access Road / Brooker Highway - AM Peak Existing with 3 phases]

Wilkinsons Point Access Road AM Peak Existing
Signals - Fixed Time Isolated Cycle Time = 180 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%				v/c	sec			
South: Brooker Highway											



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2	T1	867	4.0	0.186	3.7	LOS A	5.3	38.3	0.23	0.20	56.6
3	R2	9	4.0	0.157	101.7	LOS F	0.9	6.2	1.00	0.67	22.3
Approach		877	4.0	0.186	4.8	LOS A	5.3	38.3	0.24	0.21	55.7
East: Wilkinsons Point Access Road											
4	L2	9	2.0	0.024	41.2	LOS D	0.5	3.8	0.65	0.68	35.6
6	R2	9	2.0	0.022	80.8	LOS F	0.4	2.6	0.91	0.65	25.6
Approach		19	2.0	0.024	61.0	LOS E	0.5	3.8	0.78	0.67	29.8
North: Brooker Highway Northern Approach											
7	L2	4	4.0	0.002	5.9	LOS A	0.0	0.1	0.07	0.56	53.9
8	T1	2589	4.0	0.909	18.5	LOS B	86.9	629.1	0.86	0.83	46.1
Approach		2594	4.0	0.909	18.4	LOS B	86.9	629.1	0.86	0.83	46.1
All Vehicles		3489	4.0	0.909	15.2	LOS B	86.9	629.1	0.70	0.67	48.0

Table 3: SIDRA Lane Summary Existing – AM PEAK Wilkinsons Point Access Road

Even with only 9 left and right turning movements out of the Wilkinsons Point Access Road the level of service is poor. This is because of the priority given by the Department of State Growth to the through traffic movement in the peak periods. It should also be noted that in the morning peak the through traffic movement southbound is also operating at capacity. There may be some benefits associated with the park and ride facility in reducing traffic from these through lanes and left into the Wilkinsons Point site (via the proposed continuous slip lane).

MOVEMENT SUMMARY

Site: 101 [Wilkinsons Point Access Road / Brooker Highway - AM Peak with 300 trips - 3 phases - 14 year]

Wilkinsons Point Access Road AM Peak with 300 trips in am peak
 Signals - Fixed Time Isolated Cycle Time = 180 seconds (Practical Cycle Time)
 Design Life Analysis (Final Year): Results for 14 years

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%				v/c	sec			
South: Brooker Highway											
2	T1	1068	4.0	0.239	5.4	LOS A	8.1	58.3	0.29	0.25	55.1



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3	R2	31	4.0	0.254	102.6	LOS F ¹¹	1.4	10.0	1.00	0.69	22.2
Approach		1099	4.0	0.254	8.1	LOS A	8.1	58.3	0.31	0.27	53.0
East: Wilkinsons Point Access Road											
4	L2	31	2.0	0.068	62.5	LOS E ¹¹	2.1	15.3	0.80	0.67	29.5
6	R2	31	2.0	0.056	75.6	LOS E ¹¹	1.1	8.1	0.89	0.69	26.6
Approach		61	2.0	0.068	69.0	LOS E ¹¹	2.1	15.3	0.84	0.68	28.0
North: Brooker Highway Northern Approach											
7	L2	257	4.0	0.142	5.7	LOS A	0.0	0.0	0.00	0.53	54.8
8	T1	3190	4.0	1.222	256.4	LOS F ¹¹	301.1	2180.3	1.00	1.77	11.4
Approach		3446	4.0	1.222	237.7	LOS F ¹¹	301.1	2180.3	0.93	1.68	12.1
All Vehicles		4606	4.0	1.222	180.7	LOS F ¹¹	301.1	2180.3	0.78	1.33	15.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

¹¹ Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue		Prop. Queued	Effective Stop Rate
					Pedestrian	Distance		
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	69	84.3	LOS F ¹²	0.3	0.3	0.97	0.97
P2	East Full Crossing	69	12.1	LOS B	0.1	0.1	0.37	0.37
All Pedestrians		139	48.2	LOS E ¹²			0.67	0.67

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



¹² Level of Service is worse than the Pedestrian Level of Service Target specified in the Parameter Settings dialog.

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Table 4: SIDRA Lane Summary Existing – AM PEAK Wilkinsons Point Access Road with 300 trips at the Wilkinsons Point Access Road 14 year design life and 1.5% growth on Brooker Highway

The results show that there will be oversaturation at this intersection for the through traffic movement travelling south, (as is currently the case) as well as the left and right turning movements out (as currently occurs for the right turning movement out). Drivers will be aware of the situation and traffic will be encouraged to enter and exit via the Loyd Road intersection or using the slip lane which forms a through lane at the Brooker Highway/ Elwick Road intersection.

8.6.2 Brooker Highway / Wilkinsons Point Access Road Evening Peak Hour Flows

The results of the existing and proposed evening peak flows are tabulated below:

MOVEMENT SUMMARY



Site: 101 [Wilkinsons Point Access Road / Brooker Highway 3 phases existing]

Wilkinsons Point Access Road PM Peak Existing

Signals - Fixed Time Isolated Cycle Time = 180 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Brooker Highway											
2	T1	2513	4.0	0.540	5.6	LOS A	23.3	169.0	0.36	0.33	54.9



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3	R2	17	4.0	0.280	102.8	LOS F	1.5	11.1	1.00	0.70	22.2
Approach		2529	4.0	0.540	6.3	LOS A	23.3	169.0	0.36	0.34	54.4
East: Wilkinsons Point Access Road											
4	L2	20	2.0	0.042	11.1	LOS B	0.4	3.1	0.29	0.62	50.1
6	R2	51	2.0	0.118	82.5	LOS F	2.0	14.2	0.93	0.72	25.3
Approach		71	2.0	0.118	62.2	LOS E	2.0	14.2	0.75	0.69	29.4
North: Brooker Highway Northern Approach											
7	L2	43	4.0	0.026	5.9	LOS A	0.2	1.2	0.08	0.56	53.9
8	T1	1652	4.0	0.579	10.4	LOS B	31.1	225.1	0.48	0.45	51.3
Approach		1695	4.0	0.579	10.3	LOS B	31.1	225.1	0.47	0.45	51.4
All Vehicles		4295	4.0	0.579	8.8	LOS A	31.1	225.1	0.41	0.39	52.4

Table 5: Evening Peak Existing

The existing results show that the right turn in and right turn out operate to a very low level of service (F). People must wait for over 102 seconds to get into the site and 82.5 seconds to turning right out of the site. The Department of State Growth does and will continue to prioritise the through traffic movement on the Brooker Highway.

MOVEMENT SUMMARY

Site: 101 [Wilkinsons Point Access Road / Brooker Highway - with development PM peak - 3 phases - 1.5% growth]

Wilkinsons Point Access Road PM Peak 1.5% growth on the Brooker Highway and 14-year design life
Signals - Fixed Time Isolated Cycle Time = 180 seconds (User-Given Cycle Time)
Design Life Analysis (Final Year): Results for 14 years

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Brooker Highway											
2	T1	3095	4.0	0.762	16.5	LOS B	55.3	400.1	0.68	0.64	47.3
3	R2	57	4.0	0.473	104.1	LOS F ¹¹	2.6	19.0	1.00	0.72	22.0
Approach		3152	4.0	0.762	18.1	LOS B	55.3	400.1	0.68	0.64	46.3
East: Wilkinsons Point Access Road											



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4	L2	73	2.0	0.155	30.6	LOS C	4.3	30.4	0.68	0.76	39.6
6	R2	129	2.0	0.236	78.2	LOS E ¹¹	5.0	35.7	0.92	0.76	26.1
Approach		202	2.0	0.236	61.1	LOS E ¹¹	5.0	35.7	0.84	0.76	29.8
North: Brooker Highway Northern Approach											
7	L2	254	4.0	0.140	5.7	LOS A	0.0	0.0	0.00	0.53	54.8
8	T1	2034	4.0	0.774	16.3	LOS B	57.3	414.8	0.67	0.63	47.4
Approach		2288	4.0	0.774	15.1	LOS B	57.3	414.8	0.60	0.62	48.1
All Vehicles		5642	3.9	0.774	18.4	LOS B	57.3	414.8	0.65	0.64	46.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

¹¹ Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue		Prop. Queued	Effective Stop Rate
					Pedestrian	Distance		
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	69	84.3	LOS F ¹²	0.3	0.3	0.97	0.97
P2	East Full Crossing	69	12.1	LOS B	0.1	0.1	0.37	0.37
All Pedestrians		139	48.2	LOS E ¹²			0.67	0.67

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

¹² Level of Service is worse than the Pedestrian Level of Service Target specified in the Parameter Settings dialog.



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Table 6: PM peak proposed with 1.5% compound growth on the Brooker Highway and 14-year Design life

The level of service will remain poor for right turning movements out of the site in the evening peak, drivers may use the slip lane as an alternative option before turning right at the Elwick Road intersection and backtracking north or use the intersection of Loyd Road where capacity is available and turning right at Elwick Road to head north along the Brooker Highway.

8.6.3 Goodwood Road/ Centre - Loyd Road / Howard Road Morning Peak Hour Results - Existing Situation

MOVEMENT SUMMARY

Site: 101 [Goodwood Road / Loyd Road am existing - FINAL]

Goodwood Road / Loyd Road am peak existing
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Howard Road											
1	L2	757	4.0	0.901	29.4	LOS C	21.3	154.0	0.99	1.11	40.1
2	T1	6	0.0	0.097	19.3	LOS B	0.6	4.4	0.86	0.69	43.2
3	R2	53	4.0	0.097	25.0	LOS C	0.6	4.4	0.86	0.70	42.1
Approach		816	4.0	0.901	29.1	LOS C	21.3	154.0	0.99	1.08	40.3
East: Goodwood Road Eastern leg											
4	L2	466	4.0	0.368	7.2	LOS A	2.6	18.8	0.41	0.68	52.7
5	T1	1080	4.0	0.836	22.7	LOS C	14.9	107.9	0.98	1.02	43.7
6	R2	7	4.0	0.034	27.6	LOS C	0.2	1.2	0.91	0.65	40.6



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Approach		1554	4.0	0.836	18.1	LOS B	14.9	107.9	0.81	0.92	46.1
North: Centre Road / Loyd Road											
7	L2	40	4.0	0.042	7.7	LOS A	0.2	1.8	0.39	0.63	52.4
8	T1	15	4.0	0.056	19.0	LOS B	0.4	2.7	0.86	0.62	45.2
9	R2	21	4.0	0.056	24.7	LOS C	0.4	2.7	0.86	0.67	42.4
Approach		76	4.0	0.056	14.6	LOS B	0.4	2.7	0.61	0.64	47.8
West: Goodwood Road (western leg)											
10	L2	9	4.0	0.007	6.4	LOS A	0.0	0.2	0.25	0.58	53.2
11	T1	625	4.0	0.484	14.5	LOS B	6.2	45.0	0.84	0.71	48.5
12	R2	93	4.0	0.428	29.5	LOS C	2.3	16.5	0.97	0.76	39.8
Approach		727	4.0	0.484	16.3	LOS B	6.2	45.0	0.85	0.71	47.2
All Vehicles		3173	4.0	0.901	20.4	LOS C	21.3	154.0	0.86	0.91	44.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue		Prop. Queued	Effective Stop Rate
					Pedestrian	Distance		
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	21	17.7	LOS B	0.0	0.0	0.84	0.84
P2	East Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
P3	North Full Crossing	53	17.7	LOS B	0.1	0.1	0.84	0.84
P4	West Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
All Pedestrians		179	18.7	LOS B			0.87	0.87

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)



Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Table 7: AM Peak Existing Situation

The Loyd Road / Goodwood Road is operating to a high level of service in the morning peak period, there are no issues with operation or level of service.

8.6.4 Goodwood Road/ Centre - Loyd Road / Howard Road Morning Peak Hour Results - Proposed Situation

The following assumptions have been made:

80% of people will arrive at the site in the morning peak and 20% will exit.

A worst-case scenario of 300 trips to the intersection has been made. It is assumed that there will be 180 trips into via the new slip lane and 40 right turning trips from the east and 20 through trips from Howard Road and 20 trips right, through and left out. It is proposed to provide a dedicated left turn slip road which will remove all the left turn movements from the traffic-controlled intersection. However, as agreed with DSG this left turn movement is shown in the existing intersection.

MOVEMENT SUMMARY

Site: 101 [Goodwood Road / Loyd Road am with development and 14-year design life - FINAL]

Goodwood Road / Loyd Road am peak with development and 14-year growth
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Design Life Analysis (Final Year): Results for 14 years

Movement Performance - Vehicles										
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Average Stop Rate
		Total	HV				Vehicles	Distance		
		veh/h	%	v/c	sec		veh	m		km/h
South: Howard Road										



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1	L2	757	4.0	1.006	68.8	LOS E ¹¹	39.2	283.6	1.00	1.30	25.7
2	T1	27	0.0	0.090	20.0	LOS C	1.1	7.7	0.76	0.63	44.1
3	R2	53	4.0	0.090	25.7	LOS C	1.1	7.7	0.76	0.68	42.0
Approach		837	3.9	1.006	64.5	LOS E ¹¹	39.2	283.6	0.98	1.24	26.7
East: Goodwood Road Eastern leg											
4	L2	466	4.0	0.352	7.1	LOS A	3.2	23.5	0.34	0.66	52.8
5	T1	1330	4.0	1.034	92.3	LOS F ¹¹	50.4	365.1	1.00	1.66	23.7
6	R2	49	4.0	0.320	40.5	LOS D	1.7	12.4	0.98	0.74	35.5
Approach		1846	4.0	1.034	69.4	LOS E ¹¹	50.4	365.1	0.83	1.38	27.9
North: Centre Road / Loyd Road											
7	L2	61	4.0	0.066	8.4	LOS A	0.5	3.9	0.38	0.64	51.9
8	T1	36	4.0	0.084	19.9	LOS B	1.1	7.8	0.76	0.60	44.8
9	R2	42	4.0	0.084	25.7	LOS C	1.1	7.8	0.76	0.69	41.9
Approach		139	4.0	0.084	16.6	LOS B	1.1	7.8	0.59	0.64	46.7
West: Goodwood Road (western leg)											
10	L2	199	4.0	0.145	6.5	LOS A	0.9	6.5	0.24	0.62	53.3
11	T1	770	4.0	0.546	18.9	LOS B	10.5	76.2	0.84	0.72	45.8
12	R2	93	4.0	0.599	42.1	LOS D	3.3	24.2	1.00	0.80	35.0
Approach		1062	4.0	0.599	18.6	LOS B	10.5	76.2	0.74	0.71	45.8
All Vehicles		3884	4.0	1.034	52.6	LOS D	50.4	365.1	0.83	1.14	31.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

¹¹ Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

Movement Performance - Pedestrians



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Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue		Prop. Queued	Effective Stop Rate
					Pedestrian	Distance		
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	28	20.1	LOS C	0.0	0.0	0.76	0.76
P2	East Full Crossing	69	29.3	LOS C	0.1	0.1	0.92	0.92
P3	North Full Crossing	69	20.1	LOS C	0.1	0.1	0.76	0.76
P4	West Full Crossing	69	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		236	25.5	LOS C			0.85	0.85

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Table 8: aaSIDRA results - Worst Case Values - Morning Peak - Loyd Road / Goodwood Road with 14 year and 1.5% growth on Goodwood Road

The results show that the westbound through lane would be at capacity, as would the turning movements from Howard Road. This would be the case with or without the development and attributable to natural traffic growth. There would be no issues with the turning movements into and out of the Wilkinsons Point in the morning peak. Indeed the presence of a park and ride site would alleviate some of the issues with the through traffic movements.

8.6.5 Goodwood Road / Loyd Road Evening Peak Hour Results – Existing Situation

Input data was based on July 2019 SCATS data, the 5th July 2019 was used for the input volumes.

MOVEMENT SUMMARY

Site: 101 [Goodwood Road / Loyd Road pm existing - FINAL]

Goodwood Road / Loyd Road pm peak existing
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)



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Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Howard Road											
1	L2	1391	4.0	1.454	440.0	LOS F	215.4	1559.7	1.00	3.64	7.2
2	T1	11	0.0	0.543	21.5	LOS C	4.0	28.3	0.96	0.80	41.8
3	R2	326	4.0	0.543	27.1	LOS C	4.0	28.3	0.96	0.80	40.9
Approach		1727	4.0	1.454	359.4	LOS F	215.4	1559.7	0.99	3.09	8.6
East: Goodwood Road Eastern leg											
4	L2	103	4.0	0.079	6.6	LOS A	0.4	2.8	0.29	0.62	53.1
5	T1	695	4.0	0.538	14.8	LOS B	7.1	51.2	0.86	0.73	48.3
6	R2	3	4.0	0.015	27.4	LOS C	0.1	0.5	0.90	0.62	40.7
Approach		801	4.0	0.538	13.8	LOS B	7.1	51.2	0.78	0.71	48.8
North: Centre Road / Loyd Road											
7	L2	67	4.0	0.087	9.5	LOS A	0.5	3.9	0.54	0.67	51.3
8	T1	11	4.0	0.047	19.0	LOS B	0.3	2.2	0.85	0.62	44.9
9	R2	19	4.0	0.047	24.6	LOS C	0.3	2.2	0.85	0.66	42.5
Approach		97	4.0	0.087	13.5	LOS B	0.5	3.9	0.64	0.66	48.6
West: Goodwood Road (western leg)											
10	L2	17	4.0	0.013	6.4	LOS A	0.1	0.4	0.25	0.59	53.2
11	T1	855	4.0	0.661	16.1	LOS B	9.4	67.9	0.91	0.80	47.5
12	R2	43	4.0	0.199	28.6	LOS C	1.0	7.4	0.93	0.72	40.2
Approach		915	4.0	0.661	16.5	LOS B	9.4	67.9	0.90	0.79	47.2
All Vehicles		3540	4.0	1.454	183.1	LOS F	215.4	1559.7	0.91	1.89	14.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.



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Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue		Prop. Queued	Effective Stop Rate
					Pedestrian	Distance		
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	21	17.7	LOS B	0.0	0.0	0.84	0.84
P2	East Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
P3	North Full Crossing	53	17.7	LOS B	0.1	0.1	0.84	0.84
P4	West Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
All Pedestrians		179	18.7	LOS B			0.87	0.87

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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The results show an atypical high demand for left turn out movements on Howard Road (1391), typical flows are is ~350 hence this leg is oversaturated. This may be caused by a large event or conference at the Techno park. Except for this movement, all the movement at the Loyd Road are working to a good level of service (maximum LOS C) in the existing afternoon peak period.

After further discussion with DSG, they requested that the SIDRA analysis was rerun with a more realistic and typical flow of 391 turning left out of Howard Road. The following results are outlined below:



MOVEMENT SUMMARY

Site: 101 [Goodwood Road / Loyd Road pm existing - FINAL -]

Goodwood Road / Loyd Road pm peak existing

Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Howard Road											
1	L2	338	4.0	0.357	8.7	LOS A	3.0	21.5	0.52	0.71	51.7
2	T1	11	0.0	0.596	22.9	LOS C	4.2	29.4	0.98	0.82	41.1
3	R2	326	4.0	0.596	28.6	LOS C	4.2	29.4	0.98	0.82	40.3
Approach		675	3.9	0.596	18.5	LOS B	4.2	30.8	0.75	0.77	45.3
East: Goodwood Road Eastern leg											
4	L2	103	4.0	0.078	6.6	LOS A	0.4	2.8	0.29	0.62	53.1
5	T1	695	4.0	0.508	13.9	LOS B	6.8	49.5	0.83	0.71	48.9
6	R2	3	4.0	0.015	27.4	LOS C	0.1	0.5	0.90	0.62	40.7
Approach		801	4.0	0.508	13.0	LOS B	6.8	49.5	0.76	0.70	49.3
North: Centre Road / Loyd Road											
7	L2	67	4.0	0.088	9.5	LOS A	0.5	3.9	0.54	0.67	51.3
8	T1	11	4.0	0.053	20.0	LOS C	0.3	2.3	0.87	0.63	44.3
9	R2	19	4.0	0.053	25.6	LOS C	0.3	2.3	0.87	0.67	42.0
Approach		97	4.0	0.088	13.8	LOS B	0.5	3.9	0.64	0.66	48.4
West: Goodwood Road (western leg)											
10	L2	17	4.0	0.012	6.4	LOS A	0.1	0.4	0.25	0.59	53.2
11	T1	855	4.0	0.625	14.7	LOS B	8.9	64.4	0.88	0.76	48.4
12	R2	43	4.0	0.199	28.6	LOS C	1.0	7.4	0.93	0.72	40.2
Approach		915	4.0	0.625	15.2	LOS B	8.9	64.4	0.87	0.75	48.0
All Vehicles		2487	4.0	0.625	15.3	LOS B	8.9	64.4	0.79	0.73	47.6



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Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue		Prop. Queued	Effective Stop Rate
					Pedestrian	Distance		
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	21	16.8	LOS B	0.0	0.0	0.82	0.82
P2	East Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
P3	North Full Crossing	53	16.8	LOS B	0.1	0.1	0.82	0.82
P4	West Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
All Pedestrians		179	18.3	LOS B			0.86	0.86

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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The results show that there are no issues with the operation of the intersection during the afternoon peak period.



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8.6.6 Goodwood Road / Loyd Road Evening - Peak Hour Results – Proposed Situation

In the evening peak a worst-case scenario of 450 trips using the intersection has been made. It is assumed that 50% of people would arrive at the intersection and 50% would leave the site at the intersection in the evening peak.

The following assumptions have been made:

225 arrive at the site through the intersection and 225 leave the site the evening peak.

150 use the left turn slip lane on Goodwood Road.

50 turn right into the site from Goodwood Road

75 turn left out of the site

75 turn right out of the site and

75 travel straight ahead to Howard Road

MOVEMENT SUMMARY

Site: 101 [Goodwood Road / Loyd Road pm - with development and 14 year design life FINAL]

Goodwood Road / Loyd Road pm peak with development and 14 year design life
 Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)
 Variable Sequence Analysis applied. The results are given for the selected output sequence.
 Design Life Analysis (Final Year): Results for 14 years

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Howard Road											
1	L2	446	4.0	0.558	10.6	LOS B	5.0	36.3	0.72	0.78	50.5
2	T1	35	0.0	0.826	27.8	LOS C	6.8	47.7	1.00	1.01	39.2
3	R2	431	4.0	0.826	33.6	LOS C	6.8	47.7	1.00	1.00	38.2
Approach		911	3.8	0.826	22.1	LOS C	6.8	48.4	0.86	0.89	43.4
East: Goodwood Road Eastern leg											



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4	L2	103	4.0	0.084	7.0	LOS A	0.5	3.6	0.33	0.63	52.9
5	T1	856	4.0	0.704	17.8	LOS B	9.9	72.0	0.93	0.85	46.4
6	R2	56	4.0	0.257	28.8	LOS C	1.3	9.7	0.94	0.74	40.1
Approach		1015	4.0	0.704	17.3	LOS B	9.9	72.0	0.87	0.82	46.6
North: Centre Road / Loyd Road											
7	L2	146	4.0	0.226	12.2	LOS B	1.6	11.3	0.73	0.73	49.4
8	T1	89	4.0	0.407	19.9	LOS B	3.1	22.0	0.91	0.75	44.2
9	R2	177	4.0	0.407	25.6	LOS C	3.1	22.0	0.91	0.77	42.1
Approach		413	4.0	0.407	19.6	LOS B	3.1	22.0	0.85	0.75	44.9
West: Goodwood Road (western leg)											
10	L2	148	4.0	0.117	6.9	LOS A	0.6	4.7	0.32	0.63	53.0
11	T1	1053	4.0	0.866	25.8	LOS C	15.5	112.3	1.00	1.09	42.2
12	R2	43	4.0	0.199	28.6	LOS C	1.0	7.4	0.93	0.72	40.2
Approach		1244	4.0	0.866	23.6	LOS C	15.5	112.3	0.92	1.02	43.1
All Vehicles		3583	4.0	0.866	21.0	LOS C	15.5	112.3	0.88	0.90	44.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue		Prop. Queued	Effective Stop Rate
					Pedestrian	Distance		
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	28	18.5	LOS B	0.0	0.0	0.86	0.86
P2	East Full Crossing	69	19.4	LOS B	0.1	0.1	0.88	0.88
P3	North Full Crossing	69	18.5	LOS B	0.1	0.1	0.86	0.86
P4	West Full Crossing	69	19.4	LOS B	0.1	0.1	0.88	0.88



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All Pedestrians	236	19.1	LOS B	0.87	0.87
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Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Table 8: aaSIDRA Results – Worst Case Values - Evening Peak -Loyd Road Goodwood Road with growth and development (14-year)

There will be no issue with the operation of this intersection in the evening peak. The high left turn movement out of Howard Road is not an issue for the development. There is spare capacity at the intersection for turning movements into and out of the site with 1.5% growth on Goodwood Road and 450 movements in and out of this intersection in the evening peak. The Goodwood Road intersection operates to a level of service C.

8.7 Results

Copies of the aaSIDRA files showing lane levels of service and proposed intersection configurations are attached at Appendix B of this report.

With or without the Wilkinson Point development, due to traffic growth, the through traffic movements on the Brooker Highway and Goodwood Road will become saturated. Consequently, the developer is following the strategy adopted successfully by Mona to encourage and support access to the site by sustainable transport modes. Furthermore, the provision of a park and ride site provides one solution to the road capacity issue by actively reducing the through traffic on the state highway network and giving drivers the option of using a park and ride site at Wilkinsons Point site. It is assumed that the Department of State Growth will address the capacity issues by using several transport planning and traffic engineering solutions in the future.



9. Sustainable Transport Strategy

The site provides opportunities for the development and integration of several sustainable transport options to the site and have in principle agreement with Wilkinsons Point to utilise the Mona ferry and bus services.

9.1 Buses

In principle agreement has been received from Mona, to utilise the Mona funded bus services to the site. Mona are proposing to provide a twenty-minute frequency bus service from the airport to Mona (via the Wilkinson Point site).

The Department of State Growth would also consider the diversion or possible implementation of new general access bus services through the Wilkinsons Point site once the travel demands associated with the development are known (in a similar way to the introduction and integration of new bus services at the Cambridge Park site).

With respect to major events, the Department of State Growth has advised that it would be possible to enter into charter arrangements with Metro/or other bus operators to service the site for major events.

It is also possible during major events at the Wilkinsons Point site, Metro will operate a series of buses serving different areas, such as the eastern shore, Kingston, suburbs north of the site, including Berriedale, Claremont, Granton and Brighton, Hobart suburbs, as occurs at Blundstone Arena.

9.2 Ferries

Navigators currently provide and operate a ferry service from Brooke Street Pier in Salamanca to Mona.

The frequency of the ferry service is set to increase with the proposed Motown development. There is a jetty located at the site which has been utilised by the Mona ferries at events at the GASP building.

Preliminary discussions have been held with Navigators by the proponent and Howarth Fisher and Associates and they are keen to work with the developer to divert the ferry to provide a service to Wilkinsons Point.

A new ferry service, working on the Brook Street - Mona route (potentially via Wilkinsons Point) will increase the overall ferry capacity to 1470 people per hour. The ferry provides a fast, frequent and reliable potential mode of transport to the site, which is not impacted by traffic congestion, which is common within the City of Hobart and along the Brooker Highway especially at peak times.



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The ferry service provides visitors and tourists with the opportunity to see the River Derwent adding another dimension to the experience of going to Wilkinsons Point, either to a sporting event or venue located on the site.

9.3 Bicycles

A boardwalk already exists through the Wilkinsons Point site. There is a master plan to extend the boardwalk to Mona providing a sustainable transport linkage between the two venues along the foreshore.

There are also good pedestrian / bicycle connections between the City of Glenorchy and the Wilkinsons Point site which adds another bicycle linkage to the site. There is also scope for cyclists to divert from the Intercity Cycle Way to the site via this link.

9.4 Pedestrians

There is a large residential catchment in the vicinity of the Wilkinsons Point site. There is currently evidence of many residents walking and cycling to the site from the local catchment. There is traffic signal controlled pedestrian crossings at the intersections of Loyd Road and Goodwood Road and Wilkinsons Point Access Road and the Brooker Highway.

9.5 Uber and Taxi

Uber, Uber pool and taxi pick up and drop off points will also be sited in the Wilkinsons Point site at strategic locations. These provide alternative options for local people living in close proximity to the site, especially those travelling to the site as a group.

9.5.1 Ferry Park and Ride

It is proposed that a commuter park and ride facility be provided at the site near the GASP pavilion and the existing jetty.

It is envisaged a car parking facility (providing ~ 300 spaces) will be provided. This will provide commuters/visitors with the option to leave their vehicle and take a ferry service into Hobart or onto Mona.

This would reduce the demand for travel on the State Highway network which is currently operating at or near capacity particularly in the morning peak periods. Average car journey times between the Wilkinsons Point site and Hobart / Salamanca are currently 40 minutes. Commuters then must park their vehicle in the City which has another time component. This journey time could be halved if people took the ferry from Wilkinsons Point, providing a significant time advantage, and a more



attractive travel experience for those commuters working in close proximity to the Brooke Street pier.

The car park will be positioned to provide a convenient and secure means of parking at the site and will encourage and facilitate modal shift from car to ferry. This has the potential to reduce traffic volumes along the Brooker Highway to Hobart and provide commuters and visitors to the site with an opportunity to travel to the city or to Mona by ferry.

In line with national and international best practice, a future hub could be provided at the jetty for buses. Several small buses could provide a link between the Wilkinsons Point jetty and the local residential catchment. In addition, good pedestrian linkages, by means of segregated well-lit footpaths though the site will be available for those people living near the Wilkinsons Point site who wish to walk or cycle to the jetty.

9.6 Event Traffic Management Plan

The development of an event traffic management plan will be an important component of the development. The developer will be responsible for working with all key stakeholders and transport providers to develop an event traffic management plan for the site. This will be an ongoing process and will be reviewed periodically to incorporate refinements and additional provision as and when necessary.



10. Service Vehicle Provision

All land uses will have some servicing requirement. At the detailed design phase autotrack will be used to model the swept path of the largest vehicles to operate within the site.

There may be a requirement for the DEC / NBL sports area to have servicing by a 19 metre semi-trailer for stage shows and other concerts. However, it is anticipated for the most part servicing by a 12-metre heavy rigid truck would appear to be adequate for most of the other land uses proposed on the site. Many of the smaller cafes and restaurant and land uses will be serviced by an 8.8 medium rigid truck and / or a 6.4metre small rigid vehicle. As is standard practice servicing should be managed to occur outside the peak periods.

The proposed deceleration and slip lane into the site from Goodwood Road proposed as part of the road upgrade strategy will facilitate entry and exit to the site for service vehicles.

In line with standard practice a construction traffic management plan will be undertaken once the development approvals have been obtained.



11. Conclusion and Recommendation

The proposed development has been assessed in relation to the following:

Trip Generation

The proposed development has been assessed in relation to the land uses proposed in the master plan. The New South Wales, Road Traffic Authority, Guide to Traffic Generating Developments has been used to assess trip generation rates to the site. In addition, trip generation surveys have been undertaken by Howarth Fisher and Associates to estimate evening peak hour trips which are not included in nationally recognised reference documents.

The incidence of multi-purpose/linked trips at this site is likely to be high. A multi-purpose trip is one in which more than one facility is visited. For example, people going to the leisure facilities are also likely to visit one of the café/ restaurants and bars at the site. People staying at the hotel are likely to visit an event at the redeveloped Derwent Entertainment Centre, go to the retail and leisure facilities located in the site.

It is acknowledged that at peak event times, the supply of public transport services to the Wilkinsons Point site will increase to cater for the increased demand. Ticketing will be sold for these events which includes the public transport cost within an integrated transport / event ticket cost and marketing strategies will focus on ensuring people access the site by ferry and bus, (as has been demonstrated to work successfully at Mona). It is proposed that 900 trips will enter and exit the site in the evening peak and 600 will enter and exit the site in the morning peak hour.

Parking

Parking requirements have been assessed in relation to the requirements of the Glenorchy City Council Interim Planning Scheme, 2015. An assessment against the performance criteria has been made considering the full planning scheme provision not being provided on the site for all land uses. Consideration has been given to the likelihood of multi-purpose trips to the site where one or more of the land uses will be visited, the likelihood of shared parking, based on the temporal demand for parking, and the reduction in trips arising from the site being serviced by the Mona ferry and high frequency bus services which provide a link to the site from Salamanca and the airport as well as Mona.

The inclusion of the park and ride facility on the site, provides another modal choice option for commuters and visitors. There is scope to limit the park and ride facility to both ferries and buses. This facility has the advantage of providing a supplementary parking facility for the major sporting and other events proposed at the site.

Furthermore, bicycle parking, motor bike parking will also be provided in line with the performance criteria of the Glenorchy Interim Planning Scheme. Accessible



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parking will be required as per the mandatory requirement of the Building Code of Australia.

Access

There are two major traffic-controlled intersections into the Wilkinsons Point development site. One is located on the Brooker Highway and is formed by the intersection of Wilkinsons Point Access Road and the other is located on Goodwood Road and the intersection of Centre Road / Loyd Road / and Howard Road.

In addition, there is a left turn slip lane out of the site onto the Brooker Highway frontage from the development site which forms a left out slip lane onto the Brooker Highway, which subsequently forms its own through lane on the approach to the Elwick Road / Brooker Highway traffic signals. Furthermore, a proposed new deceleration lane and left turn slip road is proposed to provide a more direct connection for left turning traffic into Loyd Road. This has the advantage of providing a more convenient manoeuvre for buses and service vehicles accessing the site, whose swept path cannot be readily accommodated at the Centre Road / Loyd Road intersection.

In line with the requirements of the Australian Standard 28900.1 the 'driveway' of a user class 2 parking facility, with over 600 parking spaces and accessing onto an arterial frontage road, falls into a Category 5 access. The AS2890.1 requires that access be provided as an intersection, not an access driveway and shall be designed as for a public roadway, with all traffic control devices and intersection geometric design requirements. The proposal complies with this requirement.

aaSidra analysis

aaSidra has been used to model the existing situation and the situation at the morning and evening peak period when the impact of the development on the existing road network will be greatest and reflect worst case scenario conditions. There are existing recognised constraints on the existing road network, given the site has frontage with two roads which form part of the State Highway Network.

As agreed with the Department of State Growth the following scenarios have been modelled:

Existing situation

Proposed reconfigured intersection arrangement with development traffic in the am and pm peak periods with a 14-year design life (10 year plus 4-year construction period) and a 1.5% compound growth factor on the Brooker Highway and Goodwood Road through traffic movement.

Brooker Highway / Wilkinsons Point Access Road

The existing modelling shows the Brooker Highway intersection operates at capacity levels in the morning peak when there is significant demand for the southbound traffic movement through this intersection. The Department of State Growth provide approximately 140 seconds of the 180 second phase to the through traffic



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movement leaving the remaining ~ 40 seconds to the turning movements in and out of the site.

The analysis and proposed upgrades of the intersection has been undertaken collaboratively with the Department of State Growth and Howarth Fisher and Associates over the past weeks.

Consequently, to maximise turning capacity and improve level of service into the site several modifications have been proposed to the intersection notably:

- A continuous left turn through lane into the site, from the Brooker Highway (northern approach) which forms its own lane within the site.
- Two right turn lanes into the site forming their own lanes from the southern approach.
- The maintenance of the short northbound through lane for the northbound through traffic movement on the Brooker Highway.
- The maintenance and connection of the internal local development service roads into the existing left turn out slip lane.
- During the interpeak period and evening periods there will be increased phasing capacity for turning movements into the site. The DSG will override the existing signal phases during major events (which will occur outside the peak periods) to minimise delay to the Wilkinsons Point traffic.

Goodwood Road / Centre Road / Loyd Road

- It is proposed to extend the length of the right turn slip lane to increase capacity for storage of right turning vehicles at the site from Goodwood Road (eastern approach).
- It is proposed to construct a new left turn slip lane from the western approach of Goodwood Road directly into Loyd Road. This would remove the requirement for left turning vehicles being delayed at the existing traffic signal-controlled intersection and remove the issues involved in accommodating the swept path of the left turn movement from Centre Road into Loyd Road. The swept path of larger truck and buses cannot be accommodated without encroaching on the outbound Loyd Road leg of the intersection.



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- A direct entry from Goodwood Road would minimise delay and improve the capacity for vehicles wanting to enter the site from the south and the west of the Wilkinsons Point site given the limitations (especially at peak times of the right turn storage capacity of the Wilkinsons Point Access Road and the Brooker Highway.
- It is proposed that vehicles are directed through signage, marketing strategies from the south and west to the use of the Goodwood Road access for potential users of the site.
- Signal Phase and timing changes to three phase arrangements allowing each leg of the intersection to operate separately clear may also improve the operation of the intersection especially for the Loyd Road / Centre Road leg.
- Notwithstanding the above, there is spare capacity at this intersection. The intersection can accommodate the proposed additional 300 trips in the morning peak hour and 450 trips in the evening peak hour with the assumed 1.5% growth on Goodwood Road.

Sustainable Transport Strategy

There is scope to provide a high level of public transport services to the site given the scope to work with Mona who privately funded public transport services in the immediate vicinity of the site. The Wilkinsons Point site is well able to take advantage of the potential synergies with Mona. The frequency of the ferry service is set to increase with the proposed Motown development. There is a jetty located at the site which has been utilised by the Mona ferries at events at the GASP building.

- Preliminary discussions have been held with Navigators by the proponent and Howarth Fisher and Associates and they are keen to work with the developer to divert the ferry to provide a service to Wilkinsons Point.
- New ferry services working on the Brooke Street - Mona route (potentially via Wilkinsons Point) will increase the overall ferry capacity to 1470 people per hour. The ferry provides a fast, frequent and reliable potential mode of transport to the site, which is not impacted by traffic congestion, which is common within the City of Hobart and along the Brooker Highway especially at peak times.
- It is envisaged a park and ride car parking facility (providing 300 spaces) will be provided. This will provide commuters/ visitors with the option to leave their vehicle and take a ferry service into Hobart or visitors onto Mona.
- This would reduce the demand for travel on the State Highway network which is currently operating at or near capacity particularly in the morning peak periods. Average car journey times between the Wilkinson Point site and Hobart / Salamanca are currently ~ 40 minutes. Commuters then must park their vehicle in the City which has another time component. This



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journey time could be halved if people took the ferry from Wilkinsons Point, providing a significant time advantage, and a more attractive travel experience for those commuters working in walking distance from the Brooke Street pier.

- Uber, Uber pool and taxi pick up and drop off points will also be sited in the Wilkinson Point site at strategic locations. These provide alternative options for local people living near the site, especially those travelling to the site as a group.
- An event traffic management plan will be undertaken. The developer will be responsible for working with all key stakeholders and transport providers to develop an event traffic management plan for the site. This will be an ongoing process and will be reviewed periodically to incorporate refinements and additional provision as and when necessary.



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Appendix A

DEVELOPMENT PLANS



Appendix B

SIDRA OUTPUT FILES

LANE LEVEL OF SERVICE

Lane Level of Service

 **Site: 101 [Goodwood Road / Loyd Road pm existing - FINAL**

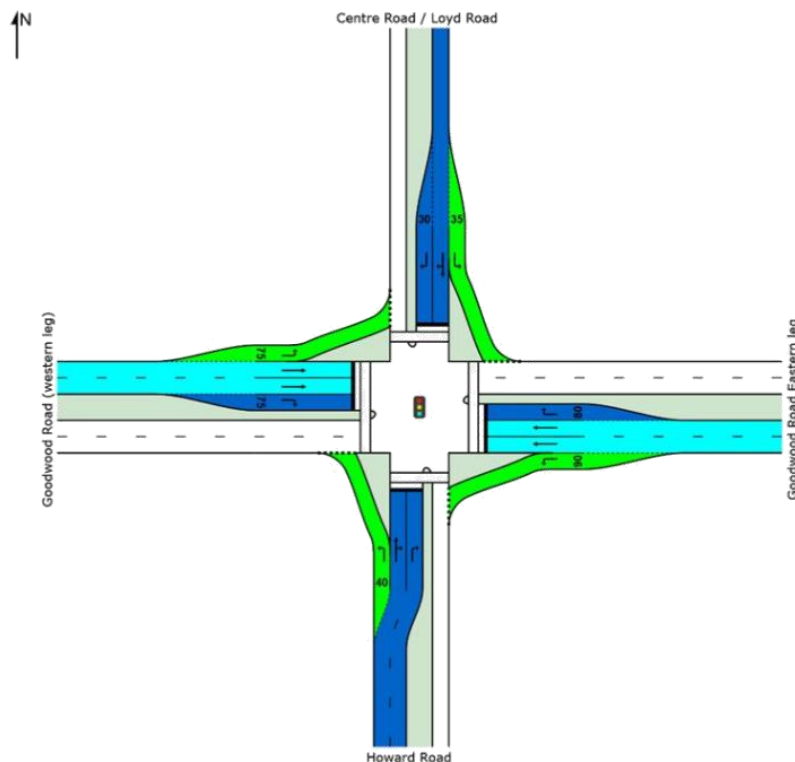
Goodwood Road / Loyd Road pm peak existing

Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

All Movement Classes

	South	East	North	West	Intersection
LOS	B	B	B	B	B



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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LANE LEVEL OF SERVICE

Lane Level of Service

 **Site: 101 [Goodwood Road / Loyd Road am existing - FINAL]**

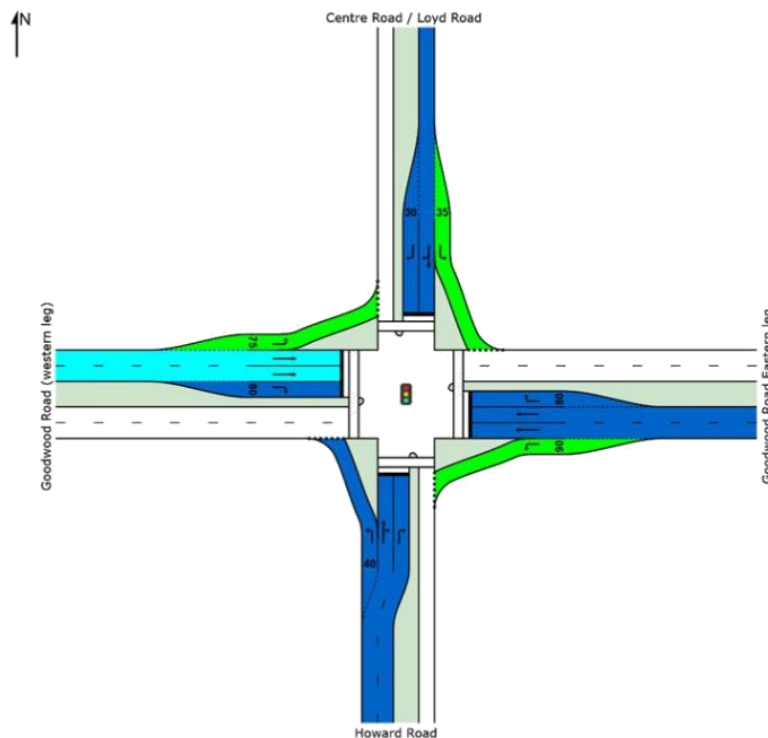
Goodwood Road / Loyd Road am peak existing

Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

All Movement Classes

	South	East	North	West	Intersection
LOS	C	B	B	B	C



Colour code based on Level of Service



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LANE LEVEL OF SERVICE

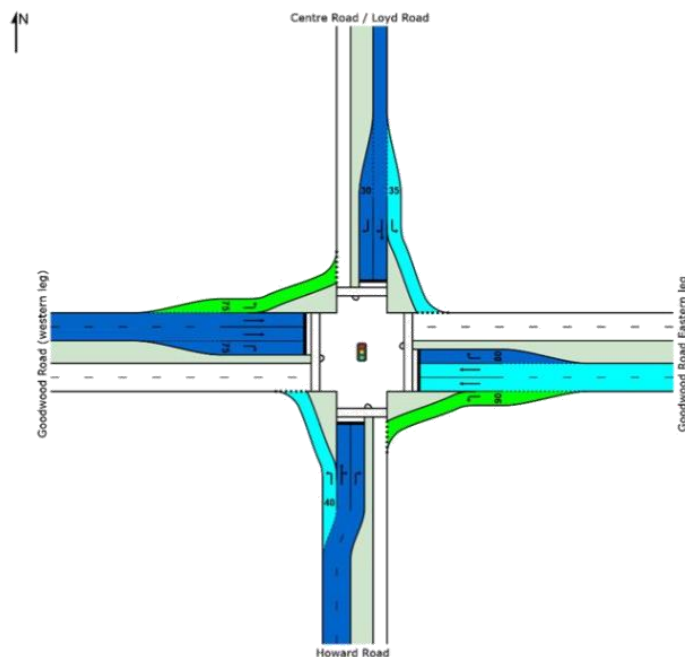
Lane Level of Service

 **Site: 101 [Goodwood Road / Loyd Road pm - with development and 14 year design life FINAL]**

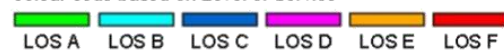
Goodwood Road / Loyd Road pm peak with development and 14 year design life
 Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)
 Variable Sequence Analysis applied. The results are given for the selected output sequence.
 Design Life Analysis (Final Year): Results for 14 years

All Movement Classes

	South	East	North	West	Intersection
LOS	C	B	B	C	C



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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LANE LEVEL OF SERVICE

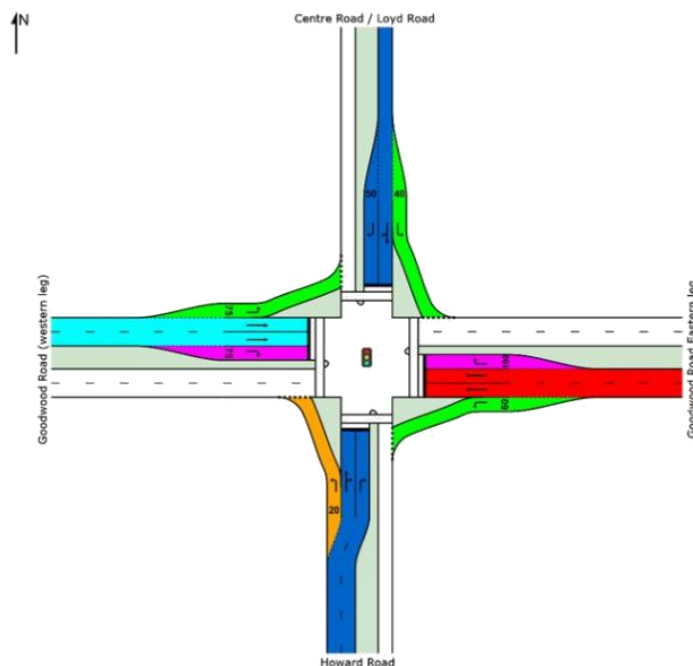
Lane Level of Service

 **Site: 101 [Goodwood Road / Loyd Road am with development and 14 year design life - FINAL]**

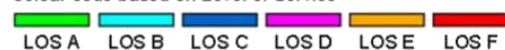
Goodwood Road / Loyd Road am peak with development and 14 year growth
 Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)
 Variable Sequence Analysis applied. The results are given for the selected output sequence.
 Design Life Analysis (Final Year): Results for 14 years

All Movement Classes

	South	East	North	West	Intersection
LOS	E 11	E 11	B	B	D



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

11 Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

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LANE LEVEL OF SERVICE

Lane Level of Service

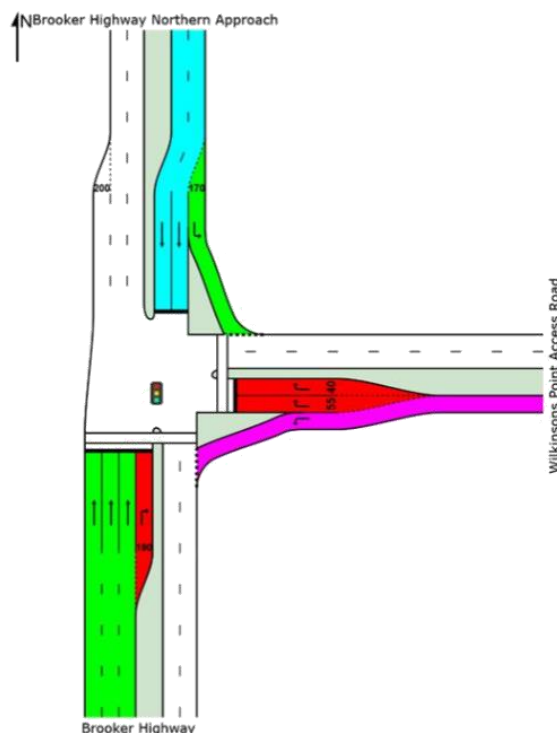
 **Site: 101 [Wilkinsons Point Access Road / Brooker Highway - AM Peak Existing with 3 phases]**

Wilkinsons Point Access Road AM Peak Existing (3 phases)

Signals - Fixed Time Isolated Cycle Time = 180 seconds (Practical Cycle Time)

All Movement Classes

	South	East	North	Intersection
LOS	A	E	B	B



Colour code based on Level of Service

					
LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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LANE LEVEL OF SERVICE

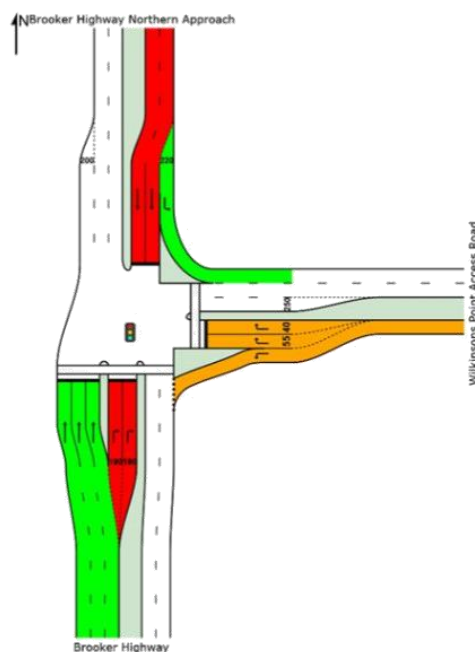
Lane Level of Service

 Site: 101 [Wilkinsons Point Access Road / Brooker Highway - AM Peak - 3 phases - 14 year]

Wilkinsons Point Access Road AM Peak in am peak
Signals - Fixed Time Isolated Cycle Time = 180 seconds (Practical Cycle Time)
Design Life Analysis (Final Year): Results for 14 years

All Movement Classes

	South	East	North	Intersection
LOS	A	E 11	F 11	F 11



Colour code based on Level of Service

					
LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

11 Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

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LANE LEVEL OF SERVICE

Lane Level of Service

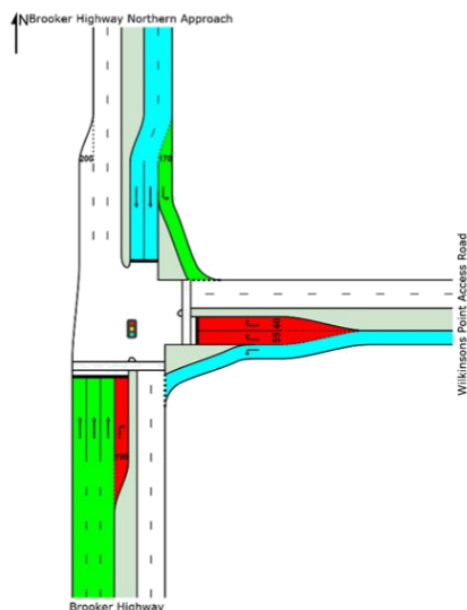
 **Site: 101 [Wilkinsons Point Access Road / Brooker Highway 3 phases existing PM peak**

Wilkinsons Point Access Road PM Peak Existing

Signals - Fixed Time Isolated Cycle Time = 180 seconds (User-Given Cycle Time)

All Movement Classes

	South	East	North	Intersection
LOS	A	E	B	A



Colour code based on Level of Service

					
LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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LANE LEVEL OF SERVICE

Lane Level of Service

 **Site: 101 [Wilkinsons Point Access Road / Brooker Highway - with development PM peak and 3 phases and 1.5% com]**

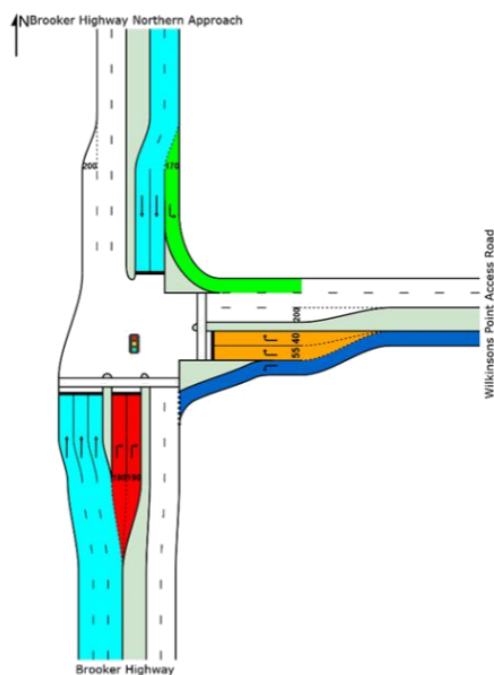
Wilkinsons Point Access Road PM Peak with development 500 trips and 3 phases and 1.5% growth on the Brooker Highway

Signals - Fixed Time Isolated Cycle Time = 180 seconds (User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 14 years

All Movement Classes

	South	East	North	Intersection
LOS	B	E 11	B	B



Colour code based on Level of Service

				
LOS A	LOS B	LOS C	LOS D	LOS E

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

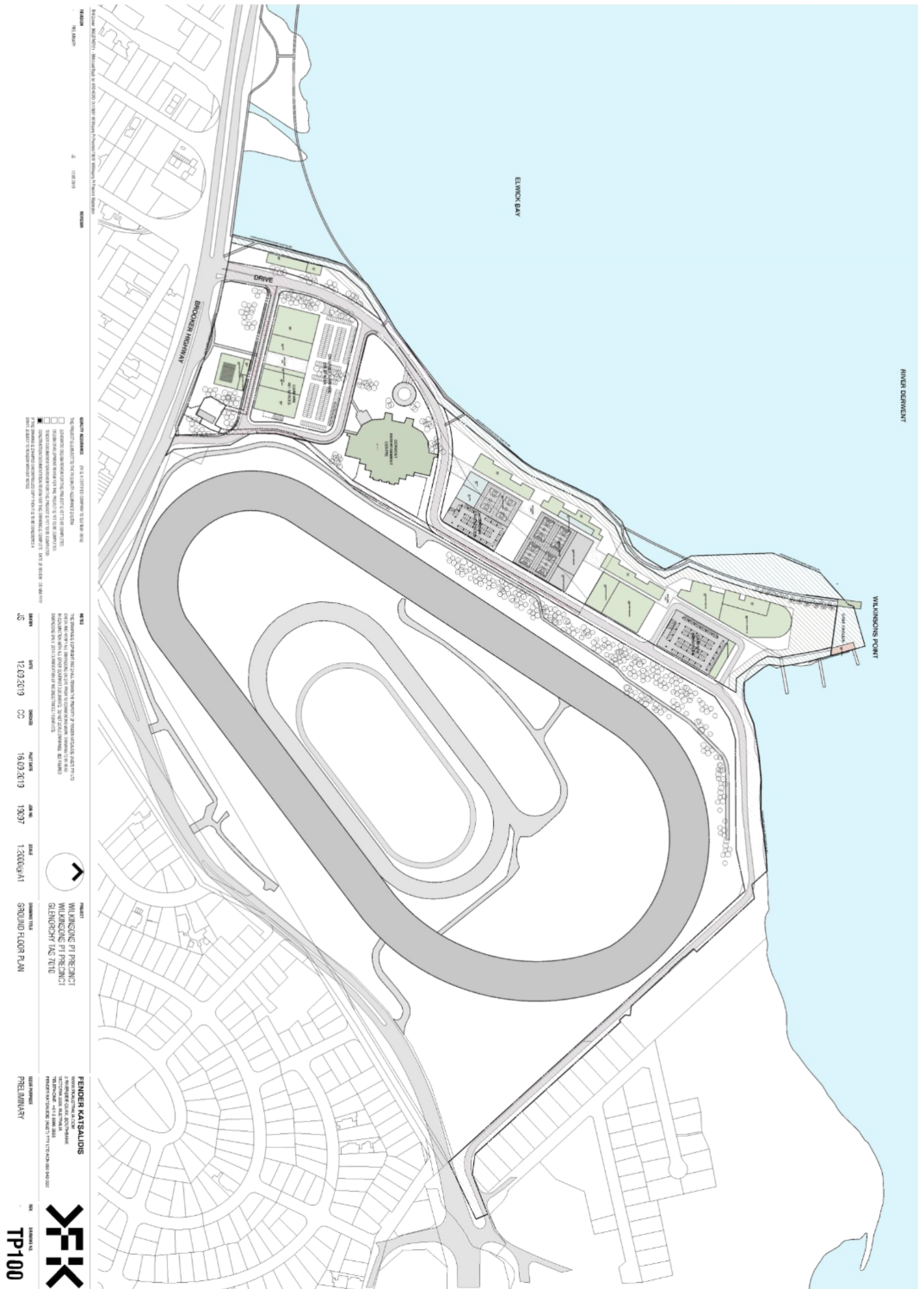
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

11 Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

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Appendix B

SIDRA OUTPUT FILES

LANE LEVEL OF SERVICE

Lane Level of Service

 **Site: 101 [Goodwood Road / Loyd Road pm existing - FINAL**

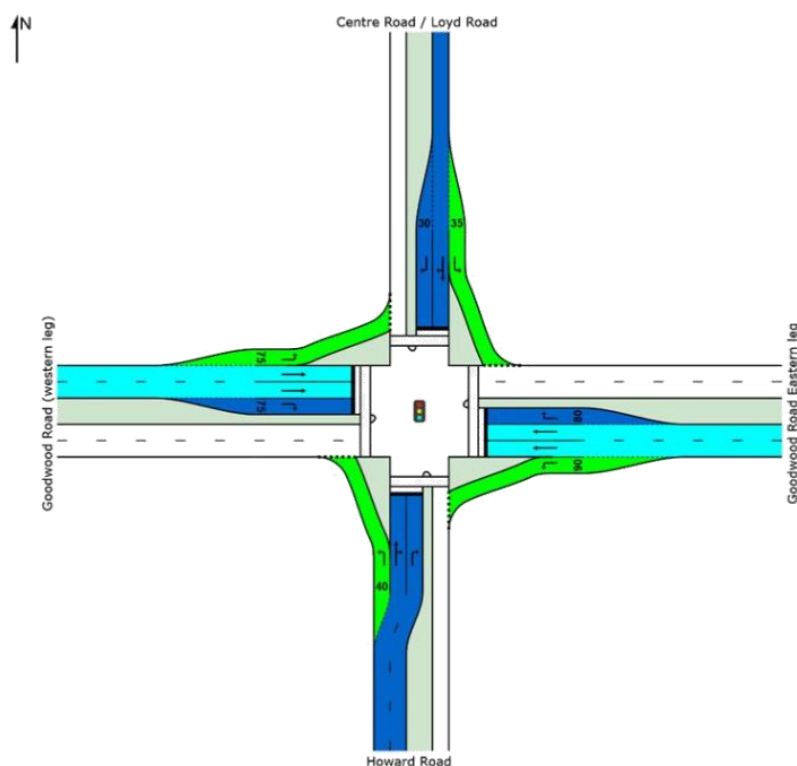
Goodwood Road / Loyd Road pm peak existing

Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

All Movement Classes

	South	East	North	West	Intersection
LOS	B	B	B	B	B



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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PLan\IN\goodwoodLoydRoadam25.sip7

LANE LEVEL OF SERVICE

Lane Level of Service

 **Site: 101 [Goodwood Road / Loyd Road am existing - FINAL]**

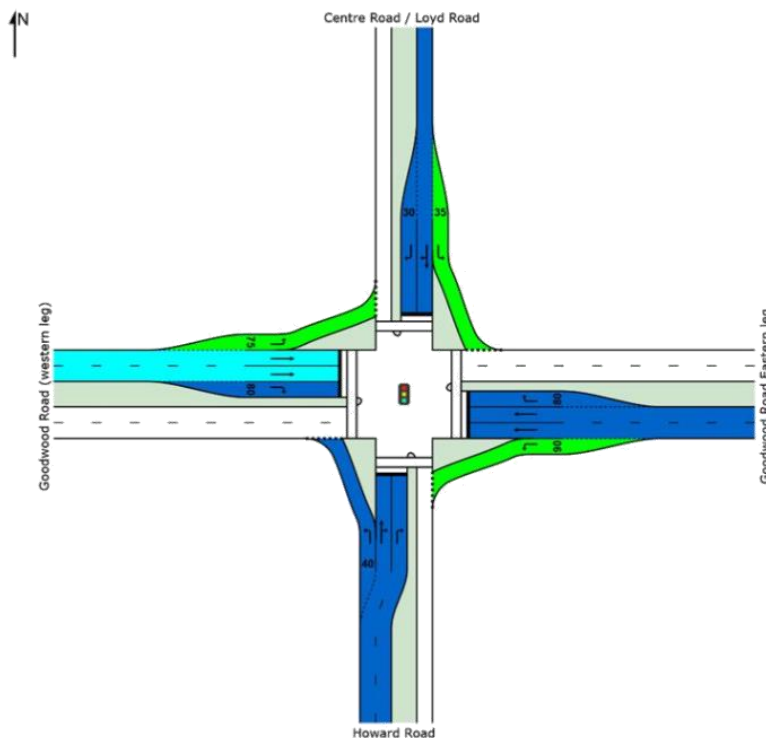
Goodwood Road / Loyd Road am peak existing

Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

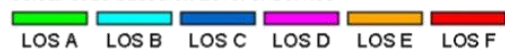
Variable Sequence Analysis applied. The results are given for the selected output sequence.

All Movement Classes

	South	East	North	West	Intersection
LOS	C	B	B	B	C



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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PLan\N\goodwoodLoydRoadam25.sip7

LANE LEVEL OF SERVICE

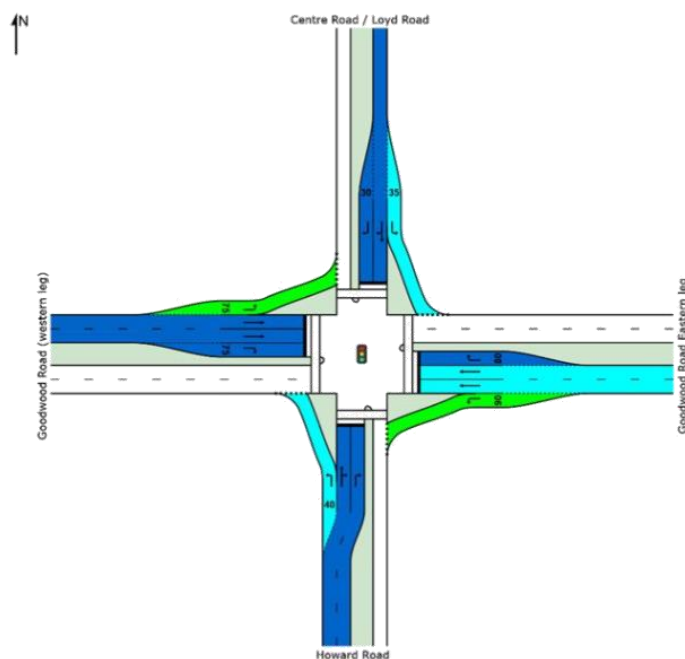
Lane Level of Service

 **Site: 101 [Goodwood Road / Loyd Road pm - with development and 14 year design life FINAL]**

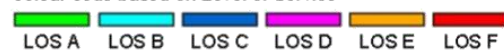
Goodwood Road / Loyd Road pm peak with development and 14 year design life
 Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)
 Variable Sequence Analysis applied. The results are given for the selected output sequence.
 Design Life Analysis (Final Year): Results for 14 years

All Movement Classes

	South	East	North	West	Intersection
LOS	C	B	B	C	C



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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LANE LEVEL OF SERVICE

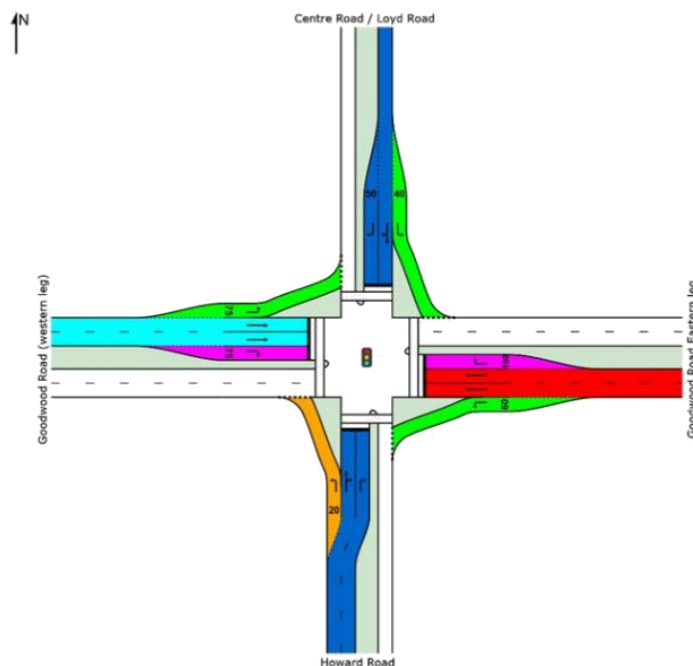
Lane Level of Service

 **Site: 101 [Goodwood Road / Loyd Road am with development and 14 year design life - FINAL]**

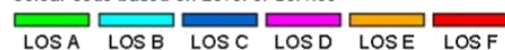
Goodwood Road / Loyd Road am peak with development and 14 year growth
 Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)
 Variable Sequence Analysis applied. The results are given for the selected output sequence.
 Design Life Analysis (Final Year): Results for 14 years

All Movement Classes

	South	East	North	West	Intersection
LOS	E 11	E 11	B	B	D



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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LANE LEVEL OF SERVICE

Lane Level of Service

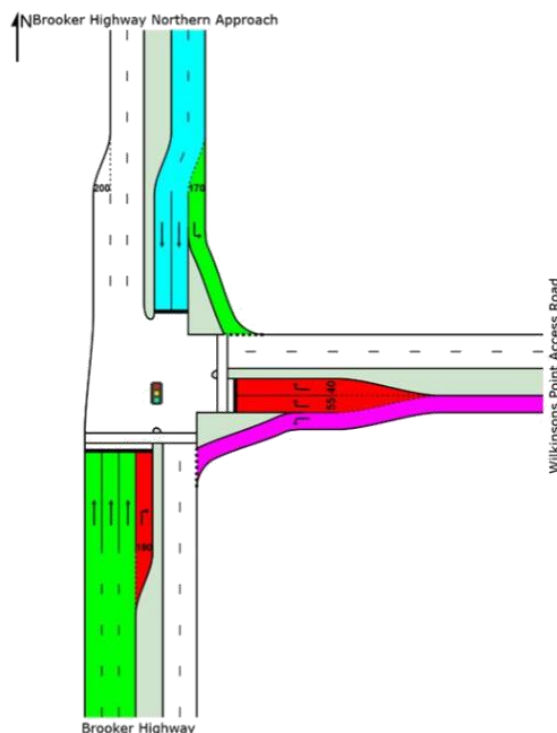
 **Site: 101 [Wilkinsons Point Access Road / Brooker Highway - AM Peak Existing with 3 phases]**

Wilkinsons Point Access Road AM Peak Existing (3 phases)

Signals - Fixed Time Isolated Cycle Time = 180 seconds (Practical Cycle Time)

All Movement Classes

	South	East	North	Intersection
LOS	A	E	B	B



Colour code based on Level of Service

					
LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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LANE LEVEL OF SERVICE

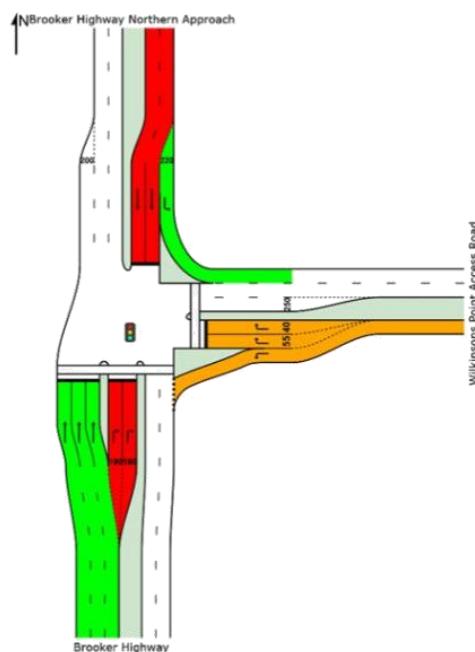
Lane Level of Service

 Site: 101 [Wilkinsons Point Access Road / Brooker Highway - AM Peak - 3 phases - 14 year]

Wilkinsons Point Access Road AM Peak in am peak
Signals - Fixed Time Isolated Cycle Time = 180 seconds (Practical Cycle Time)
Design Life Analysis (Final Year): Results for 14 years

All Movement Classes

	South	East	North	Intersection
LOS	A	E 11	F 11	F 11



Colour code based on Level of Service

					
LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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LANE LEVEL OF SERVICE

Lane Level of Service

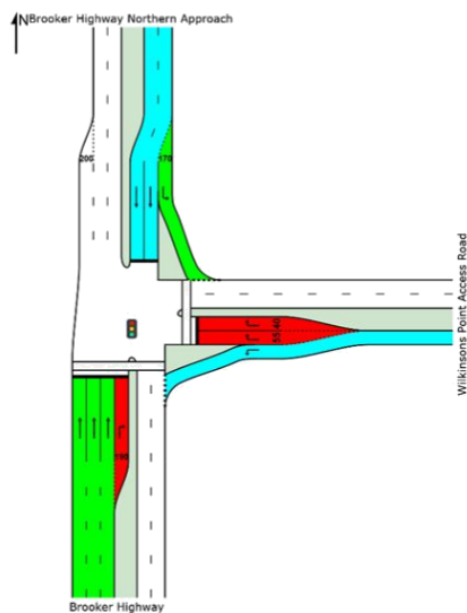
 **Site: 101 [Wilkinsons Point Access Road / Brooker Highway 3 phases existing PM peak**

Wilkinsons Point Access Road PM Peak Existing

Signals - Fixed Time Isolated Cycle Time = 180 seconds (User-Given Cycle Time)

All Movement Classes

	South	East	North	Intersection
LOS	A	E	B	A



Colour code based on Level of Service

					
LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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LANE LEVEL OF SERVICE

Lane Level of Service

 **Site: 101 [Wilkinsons Point Access Road / Brooker Highway - with development PM peak and 3 phases and 1.5% com]**

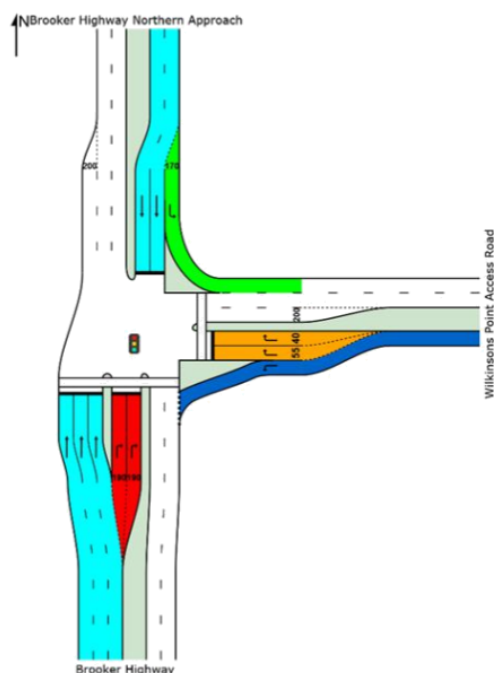
Wilkinsons Point Access Road PM Peak with development 500 trips and 3 phases and 1.5% growth on the Brooker Highway

Signals - Fixed Time Isolated Cycle Time = 180 seconds (User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 14 years

All Movement Classes

	South	East	North	Intersection
LOS	B	E 11	B	B



Colour code based on Level of Service

				
LOS A	LOS B	LOS C	LOS D	LOS E

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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WILKINSONS POINT PROPOSED REZONING INFRASTRUCTURE REPORT

DOCUMENT INFORMATION	
PROJECT ADDRESS:	601, 601A & 601B Brooker Highway, Glenorchy
DOCUMENT TITLE:	WILKINSONS POINT PROPOSED REZONING INFRASTRUCTURE REPORT
DOCUMENT NUMBER:	19R99-61-2
DATE OF REPORT:	16 September 2019
CLIENT COMPANY:	Larry Kestelman Group
REPORT AUTHOR:	Rachel Homer, BE(Hons) BSc GradIEAust
CHECKED BY:	Dr Jane Sargison, BE DPhil FIEAust CPEng NER CC6183N

Structural | Civil | Mechanical | Research | Energy | Environmental
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JSA Consulting Engineers Pty Ltd | ABN 45 165 277 681

INTRODUCTION

The Larry Kestelman Group (LKG) is seeking to rezone the site at Wilkson's Point, Glenorchy, (601, 601A & 601B Brooker Highway) to allow for future development of the site to include sporting, cultural, commercial and entertainment facilities.

This report summarises the existing infrastructure servicing the site, providing the location, capability and condition (where available). The key infrastructure described includes: water, sewer, electricity, gas, telecommunications and stormwater connected to the site or located within the vicinity of the site.

This report provides an insight into key geotechnical aspects of the site, including the underlying geology and the history of land reclamation and application of potentially uncontrolled fill on the site.

In addition to this, the report summarises the key road network accessing the site with an overview of the likely expansion required to service the proposed development.

Information provided in this report has been sourced from the individual services providers, Dial Before you Dig, historical records from government archives, previous reports for the site and site assessment by JSA Consulting Engineers.

This report is structured as follows:

1. Site Information
2. Development Proposal
3. Land Reclamation History
4. Sea Level Rise
5. Stormwater
6. Sewer and Trade Waste
7. Water
8. Electricity
9. Lighting
10. Gas
11. Telecommunications
12. Road Access and Parking

The potential future demand for services at the site has been based on the proposal outlined in Wilkinsons Point Precinct preliminary plans by Fender Katsalidis, with estimates of gross floor areas and proposed land use in accordance with the drawings. A summary of the existing infrastructure is provided in the existing site plans included at Appendix A.



Dr Jane Sargison

Director

SITE INFORMATION

Site Data

Local Government:	Glenorchy City Council
Planning Overlays:	Coastal Inundation Hazard Area Waterway and Coastal Protection Areas Coastal Erosion Hazard Area Landslide Hazard Area
Local Services:	Reticulated water, sewer, stormwater, electricity (11kV and low voltage), fibre optic (NBN)
Site Address	601, 601A and 601B Brooker Highway (referred to in this report as #601, #601A, #601B), refer to Appendix A

Development information

Land Description:	Derwent Entertainment Centre (DEC) and foreshore precinct
Proposed Works:	Proposed rezoning for commercial precinct
Total Land Area:	Approx. 16.4 ha



Figure 1: Location of 601, 601A & 601B Brooker Highway [1]

Accuracy of service location data

Service locations have been provided through a combination of service provider GIS programs, dial before you dig (DBYD), on-site investigations and aerial photographs. The accuracy of the data should be verified by on-site survey before detailed design work commences.



DEVELOPMENT PROPOSAL

This report is based on data from the proposal outlined in Wilkinsons Point Precinct preliminary plans by Fender Katsalidis, with estimates of gross floor areas and proposed land use in accordance with the drawings (as summarised in Table 1). This data has been used in conjunction with TasWater documentation for water and sewer demand, and industry experience regarding the sizing and demand of the hotel and retail areas for electricity and lighting requirements.

Proposed use	Approx. GBFA (m ²)
Active Sports Recreation	12742
Carpark	44545
Existing DEC	6538
Food & Beverage	6060
Fast food	2340
Ferry terminal	258
Hotel	22128
NBL Facilities	4884
Retail	8820

Table 1: Proposed land use and gross floor area (m²)

LAND RECLAMATION HISTORY

The site area has been increased by reclamation of land with the introduction of fill between 1975 and 2003, noting the construction of the Derwent Entertainment Centre on this site in 1988 – 1989.

The historical aerial photographs provided in Figure 2, show the commencement of fill within the bay in the southwest corner of property between 1975 and 1976. By 1981, this bay was completely filled to current boundary extents. This area is now predominantly occupied by parking for the Derwent Entertainment Centre.

Land reclamation along the northern corner of the property at Wilkinsons Point (#601B) with the introduction of a sea wall in this area extended the point to its current area between 1989 and 2003.

It was reported in the *Wilkinson's Point Master Plan report 2012* [2], that Glenorchy City Council had investigated whether the fill was a possible source of contamination for the site, and it had been determined that the areas tested were not contaminated.

Preliminary geotechnical assessment by W.C. Cromer in 2007 indicates 0.8-2.2m of fill across the different areas of the site, with groundwater encountered across the site at approximately sea level. The fill was found to contain a range of building waste material including concrete, timber, PVC, plastic, metal, bricks, copper wire and lead piping [3].

It should be noted that prior to any building works on the site, an environmental site assessment would be required to determine whether the fill utilised on the site had introduced any contamination. This assessment would be the responsibility of any future landowner.

Visual inspection of the material that can be seen at the surface along the shoreline indicates use of dolerite material along the north-western boundary.

The sediments in the Elwick Bay area are known to have high levels of heavy metal contamination [4], and any works at the foreshore would be required to minimise disturbance of sediment to prevent the introduction of contamination into the water column.

The site geology reported in the Mineral Resources Tasmania (MRT) map (Figure 3) is based on data from 1999 and represents the site prior to the 2003 reclamation. This map shows some sections of the western property boundary to be under water; this has since been filled in as indicated on aerial photographs.

Yellow hatching (Qhmm) is "man-made deposits", noted as fill; areas marked Qpad are alluvial terrace deposits dominantly of cobbles and small boulders of dolerite and subordinate Parmeer clasts. The northern part of Wilkinsons point exhibits a shoreline of transitional olivine basalt (Tbr).

The balance of the site is poorly consolidated to unconsolidated sand, clayey sand and silt (TQd) (possible former course of the Derwent River).

Future development on the site would likely require piling.

Wilkinsons Point Proposed Rezoning Infrastructure Report

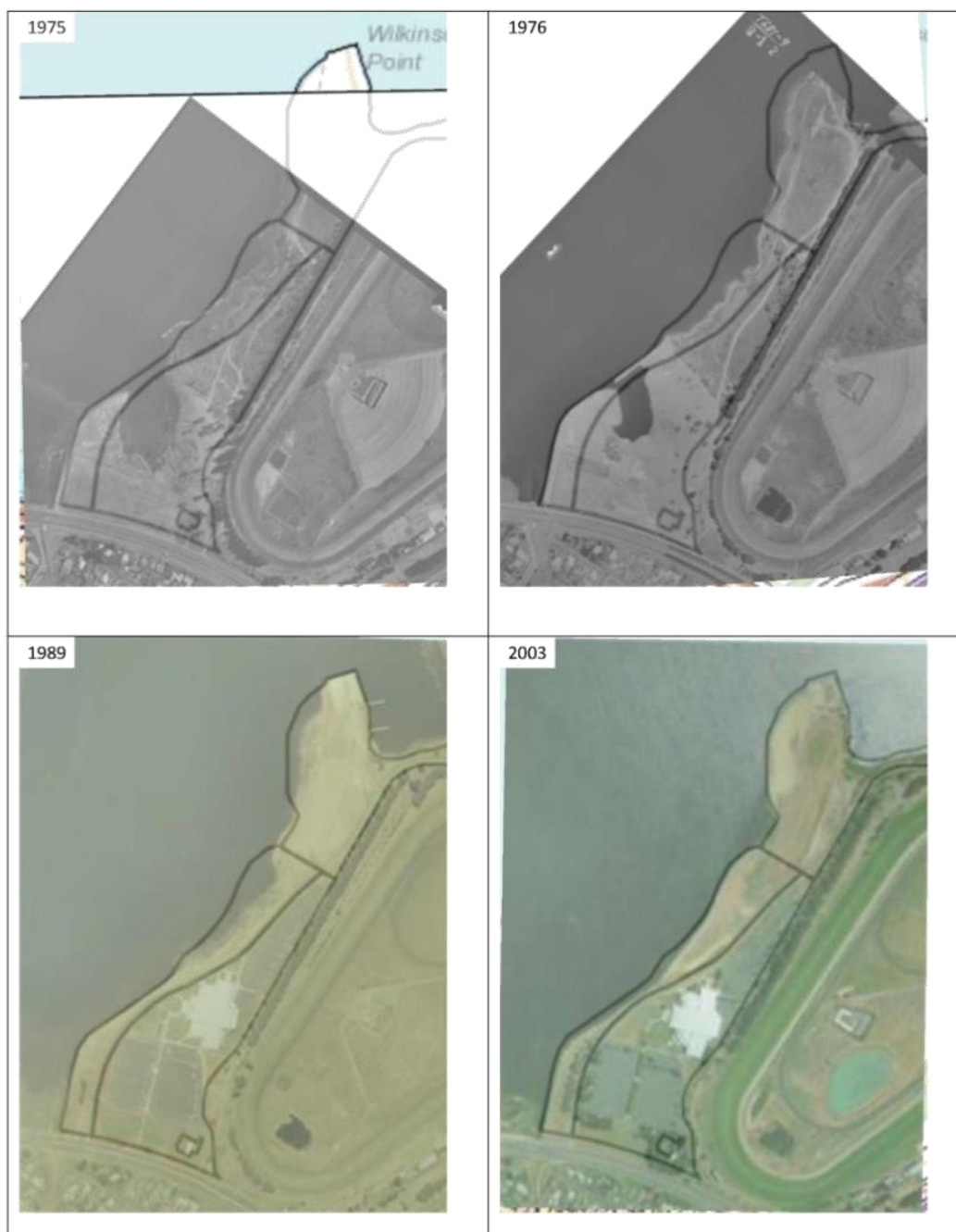


Figure 2: Historical aerial photographs showing site fill progression between 1975 - 2003 [5]



Figure 3: Site geology map (Hobart) extract [6]

SEA LEVEL RISE

A 2008 study by University of NSW [7], reported in [2] was undertaken to determine the likely sea level rise impacts on the site. The ground levels across the site are between 0.8m and 8m AHD (Australian Height Datum) and the study recommended that the existing sea wall be increased to a height of between 1.4 to 2m to allow for future sea level rise and storm events with 1% annual exceedance probability. Events of wave overtopping were also considered.

The existing sea wall (2019) has been measured at 2m or greater, along the western foreshore, which would indicate that this sea wall upgrade has been completed in accordance with the study recommendations for sea wall height.

The floor levels of proposed buildings will need to be considered with respect to future sea level, and basement design, if required, will need to consider groundwater impacts given the location, underlying geology and presence of fill. It is noted that the ground floor level buildings are unlikely to be considered habitable spaces, however safe egress from the site in the event of a 1% annual exceedance probability storm tide event with climate change predicted at 2050, would need to be considered in the development of the site.

The Glenorchy City Council Interim Planning Scheme 2015 identifies the areas hatched in blue in Figure 4 to be low or medium hazard areas and likely to be inundated in the 1% AEP storm tide event with climate change in 2050. These classifications require floor level for habitable rooms to be at least 2.1m AHD (300mm above the 1% AEP level at 2050).



Figure 4: Coastal Inundation Hazard Area [8]

STORMWATER INFRASTRUCTURE

Existing

All existing stormwater infrastructure is detailed on existing site plans included at Appendix A (C001 – C006).

The site currently has multiple stormwater discharge points into Elwick Bay. Six stormwater outlets were located on site on the western boundary, with one not visible (underneath a footbridge) but the location was noted on the site plans based on Council's GIS data.

One stormwater outlet along the northern boundary was located on site, and one further was not located on site (possibly buried under eroded coastline) but indicated on the site plan based on Council's GIS data. All stormwater discharges directly to the River Derwent.

Stormwater from the northern section of internal road (#601A) enters a pipe network which crosses neighbouring properties (2A Goodwood Road) before discharge to the River Derwent.

Stormwater drainage from the southern section of road (#601A) discharges to the municipal stormwater system to the south, which eventually discharges in Prince of Wales Bay.

Several irrigation systems were noted on site and some pits associated with irrigation drainage were flooded.

Some ponding was noted along the western section of site, as the lowest points of the property are lower in elevation than the built-up footpath area along the coastline.

The site is currently owned by Council, and the stormwater drainage from the site has not been subject to the usual requirements of a single lot connection for stormwater for each lot (3 lots in this site). In

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ENGINEERS



addition to this, easements have not been created on the title for stormwater associated with land owned by other entities.

The stormwater load from the existing site is significantly mitigated by the open grassland, with more than 50% of the area currently permeable.

Proposed

The stormwater infrastructure for the proposed development would rely on the proximity to the River Derwent and utilise multiple discharge points typically in accordance with the existing situation.

Significant stormwater treatment with Water Sensitive Urban Design (WSUD) features to meet the requirements of the State Stormwater Strategy [9] would be required. It is likely that multiple treatment systems would be incorporated into the final site plan, since the topography is not suitable for gravity discharge to a single treatment system.

It is recommended that open areas and walkways would implement raingardens and any open carparking would be required to treat all runoff via engineered stormwater treatment pits with oil booms and gross pollutant traps.

A fully developed site would be expected to increase the stormwater runoff by 75 – 100% and the incorporation of rainwater harvesting to tanks for irrigation purposes would provide a beneficial use whilst implementing the principles of Water Sensitive Urban Design. Due to proximity to the River Derwent, on-site detention tanks are not recommended for this site.

Excavation of basement levels, if necessary, would require consideration of the water table and provision of pump systems.

The three stormwater outlets to Elwick Bay servicing the DEC and carparks, being 525, 300 and 750mm diameter concrete headwalls from south to north of the site would be expected to provide suitable outlets for future use, however the smaller headwalls along the northern part of the site beyond the carparking areas (300 – 450 diameter) would most likely require upgrade to 525 or 750 diameter as this area of the site is developed beyond the existing road.

Stormwater infrastructure servicing the current DEC carparking area (noted as 525 diameter and 300 diameter concrete pipes) may need to be relocated depending on the final proposed locations of buildings in this area, since these assets cannot be built over.

Stormwater infrastructure servicing the existing DEC is expected to be fit for purpose for ongoing use and minor modification of the DEC within the existing footprint.

The proposed NBL facilities could utilise the existing 750mm diameter outlet and headwall, if the adjacent food and beverage facilities are not located over this asset.

Easements

Currently the land is all Council owned, and none of the stormwater assets are located within formal drainage easements.

An easement would be required for stormwater infrastructure from the TasWater water pump station to Brooker Hwy.

Once the site is subject to private ownership, drainage easements may need to be created for the stormwater infrastructure, depending on any subdivision of titles. It may be possible to utilise the road



reserves, which are to remain Council property, for placement of assets in order to avoid the necessity for easements.

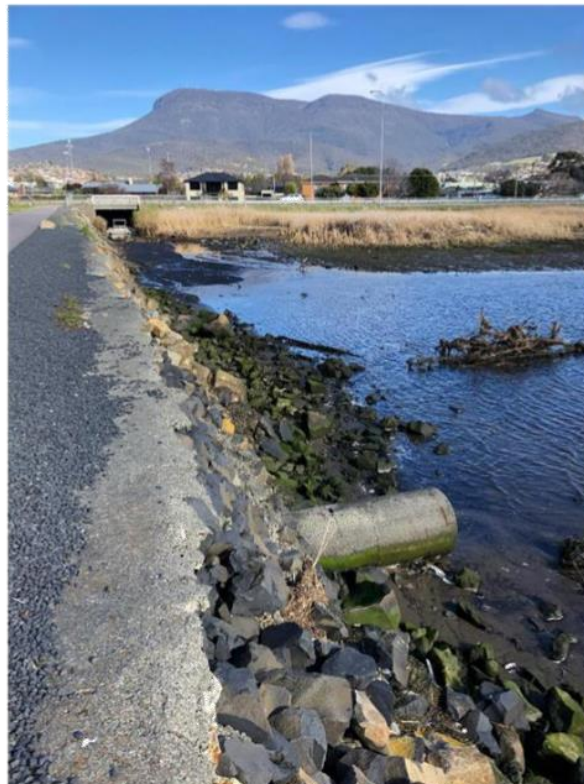


Figure 5: DN525 concrete stormwater outlet pipe servicing existing DEC carpark, with Brooker Highway, 5m culvert, and Montrose Bay Cycleway in background.

SEWER

Existing

The sewer pump station located within the existing carpark (DEC Carpark Sewage Pumping Station) is a TasWater owned asset shown on TasWater GIS with a TasWater reference number (POWSP03). This is currently located on Council land and services the existing DEC.

This sewer pump station also services a lot connection from the neighbouring racecourse property (noting that there is no formal easement for this sewer infrastructure). The racecourse also has a connection along Goodwood Rd, noting that the property has two lot connections.

The existing sewer pump station pumps to a maintenance hole approximately 100m away within the property boundary of #601 Brooker Hwy, then gravity falls to another pump station approximately 650m away (Booth Avenue Sewage Pumping Station POWSP02).

From this location it is pumped and then gravity falls to Prince of Wales Bay Sewage Treatment Plant.

A second rising sewer main (RSM, 100mm diameter PVC) is shown on GIS data which may have been installed to service a future development at #601A. This rising sewer main connects to the DEC pump station system. However, a pump station was not installed at the time of installation of this RSM.

The existing DEC has approximate capacity for 5400 people at any given time, according to seating capacities available online [10]. The existing DEC has 10 bathrooms, 5 bars and a kitchen according to floor plans available online [11]. The TasWater supplement recommends 0.014ET (Equivalent Tenements) per visitor for a cinema / theatre / public entertainment venue / conference centre [12]. This equates to 76ETs for the existing DEC.

The existing Glenorchy Arts and Sculpture Park (GASP) installation on Wilkinson's Point is serviced by an on-site wastewater management system (Envirocycle with land application). This services an amenities block with 5 WCs.

Proposed

The proposed site loading has been estimated utilising the TasWater supplement [12] guidelines, based on the equivalent tenements (ET) recommended per unit (room, m², visitors) for each proposed development type. The calculation of potential ET demand for the site is summarised in Table 2 (Appendix B), as up to 713ET (almost 10 times the current demand). TasWater have advised that due to the size of the site, future sewer design would also require an estimation of the groundwater infiltration to gravity fed sections of the sewer system.

The Prince of Wales Bay Sewage Treatment Plant (STP) recorded an annual inflow of 2827ML/year for the 2017-18 reporting year [13], a reduction of 208ML/year from the previous year [14]. The licenced daily flow limit for this STP is 9900kL/day; in the 2017-18 reporting year it recorded an average daily flow at 78% of the licenced limit (7745kL/day) [13].

The estimated average dry weather flow rate (ADWF) for the proposed development is 335kL/day, based on calculations as per TasWater Supplement and Technical Addendum [12] [15]. This is equivalent to 3% of the licenced flow capacity of the STP. Adding this additional flow to the average daily inflow to the STP in 2017-18, the average daily flows are 8080kL/day (82% of STP licenced capacity). Further investigation would be required, but based on this preliminary assessment, the STP may have sufficient capacity for this development; although other development in this catchment would affect this capacity.

TasWater Service Enquiry (SA 2019/00517-GCC) [16] has confirmed that sections of the existing gravity network would need to be upsized by the developer to accommodate increased loading. The existing sewer pump station currently servicing the DEC would require upgrade to accommodate the increased load, along with possible relocation of this asset. Existing data regarding the Booth Avenue sewer pump station are limited, but it is expected that this would also require upgrade. It is noted that TasWater have a planned renewal for the sewer rising main from this pump station.

Development of the northern section of the site (NBL facilities, sports facilities and hotel) would require the installation of a new pump station, which could utilise the installed rising sewer main along the road as described above.

As the GASP and waterfront area is proposed to remain in the ownership of Council, the existing amenities block at the northern point and associated on-site wastewater management system could be maintained. The existing amenities block has therefore not been factored into loading calculations for sewer.

Trade Waste

Trade waste services associated with food preparation sites in particular will need to be included at detailed design stages for each building or tenancy.

Easements

Currently the land is all Council owned, and none of the sewer assets are located within formal drainage easements.

Once the site is subject to private ownership, drainage easements would need to be created for the existing sewer infrastructure, including:

- An easement (3m) from racecourse (2-6 Goodwood Rd) to sewer pump station in DEC carpark.
- An easement (4m) over rising sewer from DEC carpark pump station to maintenance hole (MH) to the south, then an easement (3m) over gravity main from MH to property boundary.
- Land surrounding this sewer pump station would need to be transferred to TasWater, with Right of Way (ROW) provided, and/or the pump station may need to be relocated, such that TW can maintain access to this asset.
- Similarly, if the new pump station to be installed at #601A were to be a public asset, this and the associated existing rising sewer main would need to be located within easements and maintain access for TasWater. Alternatively, this pump station may be a privately owned asset.

Additional easements may be required over new sewer infrastructure, depending on the arrangement of infrastructure and the road through the development (which would remain as Council property, see section on parking and access for further detail).



Figure 6: TasWater's DEC Carpark Sewage Pumping Station (POWSP03)

WATER

Existing

The site is subject to existing easements for bulk water transfer mains and a TasWater water pump station (on a separate title).

559 Brooker Highway (CT 110871/2) is owned by TasWater and is contained wholly within the boundaries of #601. This property contains a water pump station, with a right of way over #601 to provide TasWater access to this property.

Variable width easements on the title for #601 and #601A contain DN806 MSCL bulk transfer water mains connecting to the pump station. An easement (variable width) connects this land parcel to Brooker Highway. A section of the DN806 bulk transfer water main within #601A, and the DN813 MSCL bulk transfer water main along Brooker Highway frontage, do not have existing easements on the title.

TasWater Service Enquiry (SA 2019/00517-GCC) [16] has confirmed that water supply to the site is from the Tolosa Zone with a total supply head of 107m.

The property is currently serviced by a DN150 connection to the DN150 PVC main in Brooker Highway, with DN150 pipes throughout the property. In addition to the DN150 connection at Brooker Highway frontage, three other water meters were located on site (1 in #601B and 2 in #601A, sizes DN40 – DN50). Multiple fire hydrants were also located, mostly concentrated around the existing DEC building, as shown on the existing site plans in Appendix A.

The existing DEC has approximate capacity for 5400 people at any given time, according to seating capacities available online [10]. The existing DEC has 10 bathrooms, 5 bars and a kitchen, according to floor plans available online [11]. The TasWater supplement recommends 0.009ET per visitor for a cinema / theatre / public entertainment venue / conference centre [17]. This equates to 49ETs for the existing DEC.

The existing Glenorchy Arts & Sculpture Park (GASP) Pavilion on Wilkinson's Point is serviced by a water connection not shown on TasWater's records, with a DN50 water meter on site. This includes an amenities block with 5 WCs. Water pipes are shown on Council's GIS records, and are included in the site plans at Appendix A. The TasWater supplement recommends 0.4ET per WC for a public amenities block [17]. This equates to 2ETs for the existing amenities block.

Proposed

The proposed demand is summarised in Table 3 (Appendix B), at 460 ET. TasWater Service Enquiry (SA 2019/00517-GCC) [16] has confirmed that preliminary modelling by TasWater indicates that there is little spare capacity in this part of the Tolosa Zone, and the development would likely have a significant impact on the performance of the existing infrastructure (resulting in unacceptably high head losses). Some of the existing reticulation pipework may need to be upsized to mitigate these impacts, the exact extent of required upsizing would need to be investigated and negotiated with TasWater as part of detailed design.

TasWater have also advised that due to the size of the demand, a loop main would be required to augment the existing DN150 connection, with a new connection required from the DN100 water main in Park Road, to ensure security of supply [16]. The DN100 in Park Rd crosses the property boundary of #601A at the intersection of Loyd Rd and Park Rd, and then continues north-west along Park Rd.

Connection to this DN100 water main would require either:

- Running a new DN100 line down the north-eastern side of Loyd Rd and connect to the existing DN100 in the intersection of Loyd Rd and Park Rd. This would require crossing the multiple other services in this intersection, and an augmentation of the DN100 for approximately 1000m from the existing termination into the site.
- Crossing one of the properties along Park Rd, for example 15 Park Road or 2A Goodwood Rd (the latter of which is Department of Defence). This would require the negotiation of a new easement, and an augmentation of the DN100 for approximately 500m from the existing termination into the site.

The first option is preferable due to complexities of easement negotiation; however, detailed design would need to verify that required clearances from all other services in the vicinity could be achieved.

Fire service would be required and the existing DN150mm water pipe on site would be able to provide fire supply for hydrants at the required 90m intervals along the road.

Easements

Currently the land is all Council owned, and only part of the DN806 bulk transfer main is located within formal drainage easements over #601 and #601A.

Once the site is subject to private ownership, drainage easements would need to be created or widened for the existing water infrastructure, including:

- Extension of existing easements over the bulk transfer water mains. TasWater requires 10m easement over water mains >DN600 [17].
- New easements over the bulk transfer water mains along Brooker Hwy frontage of #601 and #601A, and along the eastern property boundary of #601 and #601B.

Noting that easements may not be required over any land that would remain Council property.

Additional easements may be required over new water infrastructure, depending on the arrangement of infrastructure and the road through the development (which would remain as Council property, see section on parking and access for further detail).



Figure 7: TasWater's Elwick Water Pumping Station at 559 Brooker Highway (HOBWP15)

ELECTRICITY

Existing

There are two supplies for the existing DEC building. Overhead power from the north and underground power from the south. Overhead power lines run through property from the northern side, however there are no existing electricity easements on the site.

Advice from TasNetworks via personal correspondence with Contact Group [18] is that there are presently 4 x 750kva transformers in the substation (T171827) within the existing DEC building. Historical maximum demand (MD) readings for two of the transformers indicate approximately 800 amps each. The others were 100 amps, due to the LV configuration. The instantaneous loads at the time were less than 100 amps. There is potentially capacity from the substation to supply more load. The existing substation is a modern substation with low maintenance requirements and is owned by TasNetworks.

Records available indicate that the substation in the building is quite large and has spare room for another two transformers, but this would need to be verified.

Proposed

Advice from TasNetworks via personal correspondence with Contact Group is that the expected supply requirements are as follows:

- The food and beverage areas may be expected to require a supply of 300 Amps / phase.
- The retail area would also be expected to require a supply of 300 Amps / phase.

- The hotel would be expected to require a 1000 Amp / phase supply, depending on the size of the building.
- The NBL and sports facilities would be expected to require approximately 200 Amps / phase, depending on the size of the building, as the main power use would be from lighting and heating (hot water).

As the existing substation potentially has room to provide extra capacity to service the proposed development, the main issue is voltage drop on long runs of LV to service the northern section of the site. A transformer could potentially be installed on a pole to feed this area of the development site from the overhead powerlines.

A detailed study would need to be completed as part of detailed design to determine if additional supply would be required. The new buildings could be fed from the existing DEC building utilising the existing transformers, or if additional supply is required, then the existing substation could possibly accommodate additional transformers. However, a cost comparison between the required lengths of LV conductors versus putting in a new substation elsewhere on the site, should be completed as part of the detailed design.



Figure 8: Overhead powerlines running from north to south, terminating at the DEC building

LIGHTING

Existing

There is existing overhead street lighting along the access road from Brooker Highway and throughout the existing carparking areas to either side of the DEC building. The southern section is fed via underground power lines, with the northern section by overhead power lines. There is no existing street lighting along Loyd Road.

Proposed

Lighting requirements would be dependent on the detailed design of the development proposal. However, given that the existing access road from Brooker Highway would be utilised, and remain as Council property, the existing street lighting along this road could be sufficient for this section of road. If Loyd Road were to be utilised as a second access to provide a ring road through the development, street lighting and accompanying power supply would need to be provided along this section of road.



Figure 9: Existing road through #601, with overhead street lighting

GAS**Existing**

There is no current natural gas connection to the property. The Hobart transmission pipeline runs along the Brooker Highway and up McGough Street, therefore spare natural gas capacity is expected to be available at this location.

TasGas Networks have advised via Enwave Australia [19] that the existing gas pipe along the Brooker Highway property frontage, is part of the 10 bar gas network, and is not normally used for gas connections. Exceptions can be made for larger industrial volumes as required on a case by case basis.

Proposed

Preliminary advice from TasGas Networks via Enwave Australia [19] is that depending on the gas volumes required by this site, a new gas connection to the 5 Bar gas network would be recommended. The closest connection point is located at the northern end of McGough Street. This would require a new crossing of the Brooker Highway near this location and the gas would then be reticulated through the development site.

Connecting via Goodwood Road would not be recommended, unless the majority of the Natural Gas supply requirements are in the north-east of the site. There may be capacity issues depending on volumes required at this point.



Figure 10: Existing TasGas infrastructure at end of McGough St in foreground with TasNetworks infrastructure, Brooker Highway & existing DEC in background

TELECOMMUNICATIONS

Existing

Existing Telstra and NBN services the site from both south (Brooker Hwy frontage) and north sides.

Proposed

NBN Co Service Enquiry (DEV-00084049) [20] has confirmed that the hotel would require 5-10 NBN connections, to satisfy requirements for standard telecommunications connections along with fire alarm and lift emergency phones. The remaining development areas would be case by case, with at least 1 connection required per tenancy. On the assumption that this would be mostly smaller shops and restaurants, NBN Co have assessed the proposal on the basis of an estimated 100 connections across the site. Based on this projected loading, NBN Co have advised that there is fibre readily available in the area and no additional backhaul development would be likely to be required from the developer.

PARKING & ACCESS

Existing

The main entrance to the property is off the Brooker Highway at a signalised intersection. There is a second entrance at the signalised intersection of Goodwood Road, Park Road and Loyd Road. This second entrance is currently gated on Loyd Rd, restricting access to the site from this direction.

The Traffic Impact Assessment prepared by Howarth Fisher and Associates notes that there is currently parking available for 900 vehicles at the Derwent Entertainment Centre carpark [21].

TasWater has a right of way over part of #601 for access to their water pump station (559 Brooker Highway); however, there is no connecting right of way over #601A.

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JSA Consulting Engineers Pty Ltd | ABN 45 165 277 681

JSA CONSULTING
ENGINEERS



Access to #601B via Goodwood Rd is shared with 2A Goodwood Rd (Department of Defence); however, there is no right of way on the title for #601B to benefit 2A Goodwood Rd.

As the properties are currently Council owned, and the road would be maintained as Council owned as part of the development, the absence of right of ways is not an issue.

A jetty has been installed as part of the GASP Pavilion on the north-eastern corner of Wilkinsons Point, which could be utilised for ferry access for future development.

There is an existing pedestrian walkway along the north-western property boundary along the sea wall, from the Brooker Highway to the GASP Pavilion.

The existing Montrose Bay Cycleway begins at the south-western corner of #601B.

Proposed

The existing access onto Brooker Highway has been designed to accommodate major events at the venue. That is, large volumes of traffic within a short timeframe (approx. all vehicles entering or leaving the venue within the space of about an hour). The proposed NBL facilities would generate similar traffic movements to the existing DEC, with major events generating large volume of traffic in short space of time.

The additional proposed development areas would raise the baseline level of traffic entering and leaving the venue outside of major events, and a traffic impact assessment would need to be completed as part of detailed design to determine traffic volumes, peak hours, and capacity calculations.

Loyd Road is narrow and in its current state would be acceptable as an emergency outlet road only. If it were to be used as a formal access road, upgrades would be required to Council standards including line marking, footpaths, kerbs and street lighting, and a realignment of the Goodwood Road / Loyd Road junction may need to be considered.

As part of future subdivision, the road from Brooker Highway entrance to Park Rd / Loyd Rd intersection would be maintained as Council property. Any necessary infrastructure upgrades within the future road reserve would be the responsibility of the developer.

It is recommended that proposed services to supply the development should be mainly consolidated within this road reserve where possible, for ease of access and to reduce the requirement for easements.

The existing parking areas are identified as zones for future development. New parking areas will be required to compensate, and to accommodate parking demand for the proposed development.



Figure 11: Existing entrance to DEC from Brooker Highway as viewed from opposite side of 5m culvert under Brooker Highway



Figure 12: Existing jetty at northern side of Wilkinsons Point (GASP Pavilion)

CONCLUSIONS AND RECOMMENDATIONS

This report summarises the public infrastructure servicing the site, including assessment of the capacity of this infrastructure to service future development on the site. There is generally sufficient capacity within existing stormwater, power, gas and telecommunications networks to service increased demand from the development proposal. Any upgrades required for these services are either on site or do not require significant head works.

It is recommended that the road through the development be maintained as a Council asset, with infrastructure required to service the site installed within the associated (future) road reserve where possible.

A detailed assessment of the condition of stormwater assets has not been considered as part of this investigation, particularly in relation to degradation due to exposure to seawater.

Intersection upgrades may be required, particularly if Loyd Road were to be used as a secondary main access.

Detailed geotechnical assessment would be required to assess potential contamination of the site due to uncontrolled fill, and expected low bearing capacity of underlying sediments, requiring piling.

The main issues with this site relate to capacity of existing TasWater infrastructure. A new sewer pump station will be required to service the northern section of the development, along with potential upgrades to 2 existing sewer pump stations (one on-site and one off-site), a potential relocation of one of these pump stations, and upgrades to both sewer and water pipe networks off-site. Based on this preliminary assessment, the Prince of Wales Bay sewer treatment plant appears to have sufficient capacity for the development proposal.

REFERENCES

The following reports and publications were reviewed in the preparation of this infrastructure report:

- [1] "LISTmap," [Online]. Available: <https://maps.thelist.tas.gov.au/listmap/app/list/map>. [Accessed 19 August 2019].
- [2] Inspiring Place Pty Ltd and Leigh Wooley, "Wilkinsons Point and Elwick Bay Precinct Master Plan, prepared for Glenorchy City Council," September 2012.
- [3] W. C. Cromer, "Glenorchy City Council Wilkinsons Point Project Preliminary Geotechnical Report," 2007.
- [4] Derwent Estuary Program, "State of the Derwent Year 2016 Report Card," 2016. [Online]. Available: https://www.derwentestuary.org.au/assets/State_of_the_Derwent_Report_Card_2016.pdf. [Accessed 14 August 2019].
- [5] "LIST Historical Aerial Photography," [Online]. Available: <https://www.thelist.tas.gov.au/app/content/the-list/aerialphotoviewer/>. [Accessed 1 August 2019].
- [6] S. M. Forsyth and M. J. Clarke, *Digital Geological Atlas 1:25 000 Scale Series, Sheet 5225 Hobart*, Mineral Resources Tasmania, 1999.
- [7] University of NSW Water Research Laboratory, "Sea Level Rise and Storm Surge Study, Wilkinsons Point Tasmania," 2008.
- [8] *Glenorchy City Council Interim Planning Scheme 2015*.
- [9] Department of Primary Industries, Parks, Water and Environment, *State Stormwater Strategy*, 2010.
- [10] [Online]. Available: <http://derwent.com.au/faqs/>. [Accessed 19 August 2019].
- [11] [Online]. Available: <http://derwent.com.au/building-plans/>. [Accessed 19 August 2019].
- [12] TasWater, *TasWater Supplement to WSA 02-2014-3.1 WSAA Gravity Sewerage Code of Australia (Melbourne Retail Water Agencies Edition) Version 2.0*, 2017.
- [13] Office of the Tasmanian Economic Regulator, "Tasmanian Water and Sewerage State of the Industry Report 2017-18," April 2019.
- [14] Office of the Tasmanian Economic Regulator, "Tasmanian Water and Sewerage State of the Industry Report 2016-17," April 2018.
- [15] TasWater, *Technical Addendum 01 - Revision 1 to TasWater Supplement to WSAA Gravity Sewerage Code of Australia - MRWA Edition (WSA-02-2014-3.1)*, 2018.
- [16] *TasWater water and sewer service enquiry SI 2019/00517-GCC*, 2019.

- [17] TasWater, *TasWater Supplement to Water Supply Code of Australia WSA 03 - 2011-3.1 MRWA Edition V2.0*, 2015.
- [18] *Peronsal Communication. Peter Barrett, Contact Group*, 2019.
- [19] *Personal Communication. Courtney Osbourne, Erwave Australia*, 2019.
- [20] *NBN service enquiry DEV-00084049*, 2019.
- [21] J. Fisher, "Traffic Impact Assessment and Sustainable Transport Strategy," Howarth Fisher and Associates, Sandy Bay, 2019.

WILKINSONS POINT
GLENORCHY, HOBART



Design Statement:

Situated between Elwick Bay and Ladbrokes Park racecourse, this relatively flat, 15 hectare linear site is characterized by its estuarine frontage to the Derwent River and long views to Hobart's surrounding hills and landmarks.

Contrasting moments of exposure and enclosure define the current experience of walking the site: exposure to the often-wild winds that howl across the Derwent, dispersed with moments of enclosure within vegetation and the pavilions that make up the Glenorchy Art and Sculpture Park (GASP), which runs along the waterfront.

Our response for this site seeks to distil its existing qualities of open skies, long views to significant natural and built landmarks, remnant industrial history, and contemporary use as a place for sport and art – an interesting tension that presents exciting opportunities for future development and placemaking.

Landscape Principles:

- + Enhance tree canopy across site
- + Preserve and enhance public access along waterfront
- + Development to not detract from the GASP architecture and experience
- + Buildings should not overshadow foreshore
- + Augment tree buffer adjacent racecourse with new succession plantings
- + Preserve and enhance experience of enclosure and exposure
- + Build upon the site's public art offering with new pedestrian connections
- + Create welcoming and inviting interface with street
- + New vegetation should complement predominant indigenous character (Locally indigenous species should be used along the waterfront, and a predominantly native palette be used within the sites interior)



SITE APPRECIATION



ENCLOSED

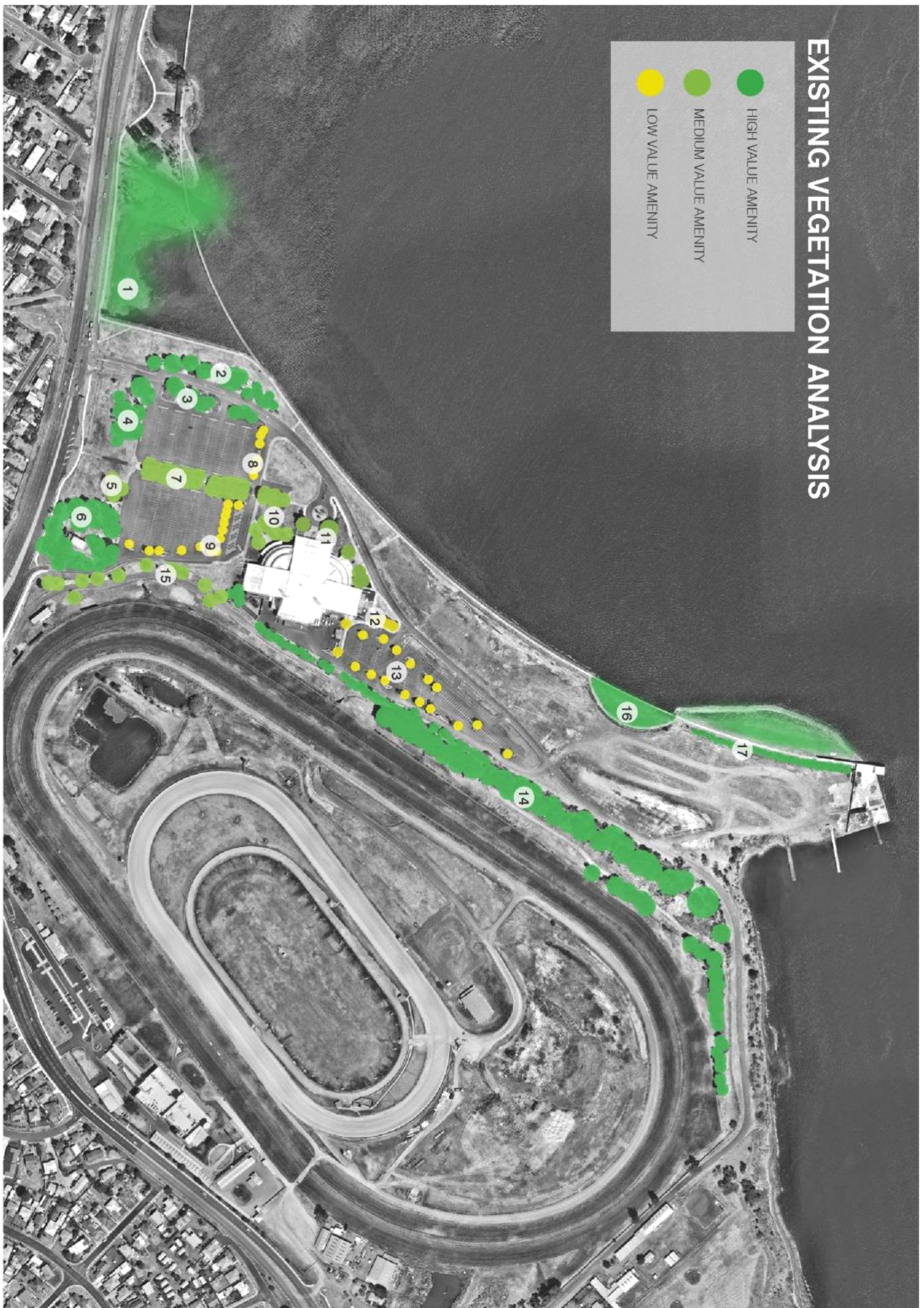


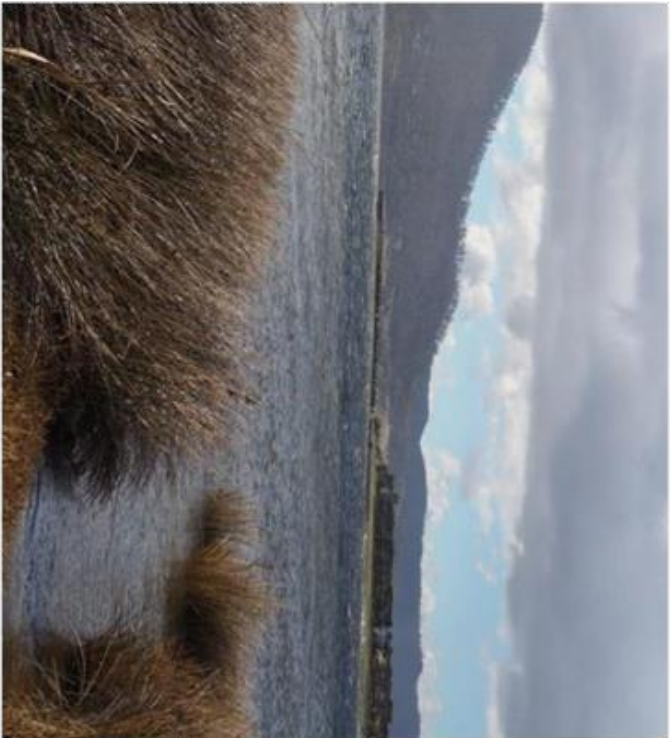
SEMI ENCLOSED



EXPOSED







1. Vegetated wetlands (predominantly *Phragmites australis*) along the shore of the bay adjacent to the Brooker Highway, between Barossa Creek and Humphreys Rivulet. This wetlands site is notable within the area for its 'natural' edge, which contrasts with the formalised Montrose foreshore and the heavily modified 'reclaimed' edge of Wilkissons Point.



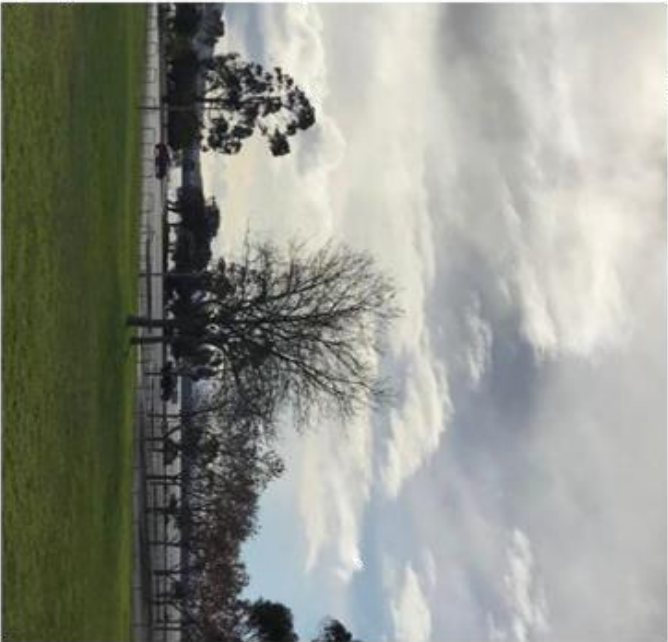
2. Mix of native planting with mulched surface treatment. Scattered medium to large Eucalyptus spp. with secondary canopy of She-oaks and Wattles. Low quality existing understorey, but opportunity to enhance. Provides valuable wind break from North-westerly winds and frames views to and from subject site across the Derwent River.



3. Mix of tall Eucalyptus spp. with secondary canopy of She-oaks. Low quality existing understorey, but opportunity to enhance. Provides valuable wind break from North-westerly winds and frames views to and from subject site across the Derwent River.



4. Group of large Gum trees. Tall trees with apparent good health and form. High landscape value due to position at entry into site. Height of trees will help to soften and provide scale to proposed built form.



5. Isolated group of 2 London Plane trees in lawn.



6. Mix of native planting with mulched surface treatment. Scattered medium to large Eucalyptus spp. with secondary canopy of She-oaks and Wattles. Low quality existing understorey, but opportunity to enhance. Provides valuable screening to substation and contributes to green threshold between subject site and highway.



7. Good avenue planting of London Plane trees. Trees appear in good health with good form, although constrained by limited soil in carpark.



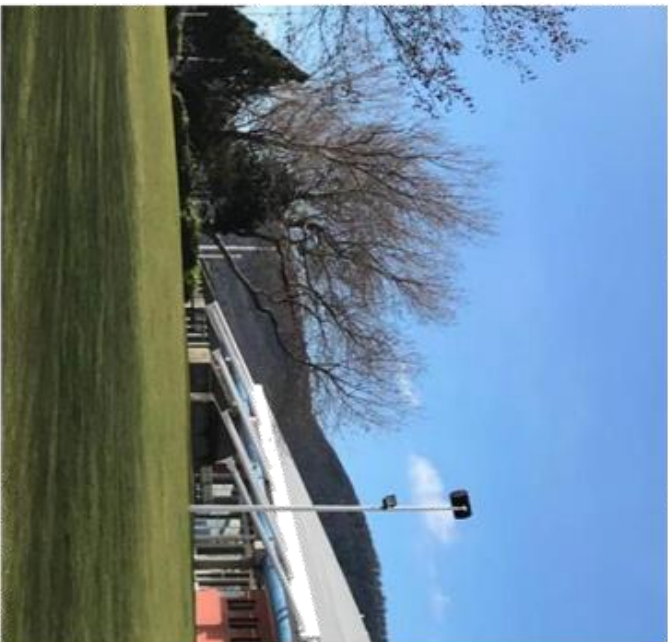
8. Medium sized Eucalyptus spp poor form and health due to constrained soils in carpark. Low quality understory.



9. Poor quality She-oaks in constrained planters in carpark.



10. Group of Silver Birch. Medium sized trees of poor quality, deformed by the wind. Forms entry to Entertainment Centre. Low value but retain if possible.



11. 2 Medium size London Plane trees at southern entry to Plaza. Poor form excite trees, but provided good landscape amenity and frame views to and from entry into Entertainment Centre. Retain if possible.



12. Low quality wattle trees long northern facade of Entertainment Centre.



13. Low quality tree and understory planting in Carpark (She-oak, Eucalypts and Watties)



14. Dense screen planting made up of Cupressus macrocarpa to the east, with a mix of gum trees, watties and she-oaks layered along the western edge and sporadic understory vegetation. This planting has important value for screening and wind protection, however, the C.macrocarpa are in decline and have a limited useful life expectancy. Infill and succession planting with native species recommended to restore this landscape asset. New planting along this edge should occur now to allow a new vegetative screen to develop before the C.macrocarpa eventually require removal.



15. Line of Eucalypt spp. along eastern edge of site. Defines edge and provide screening to the adjacent race track. Trees of poor quality. Suggest retain and enhance with new tree and understory planting.



16. New wetland planting installed as part of recent GASP works. Recommend to retain and protect.



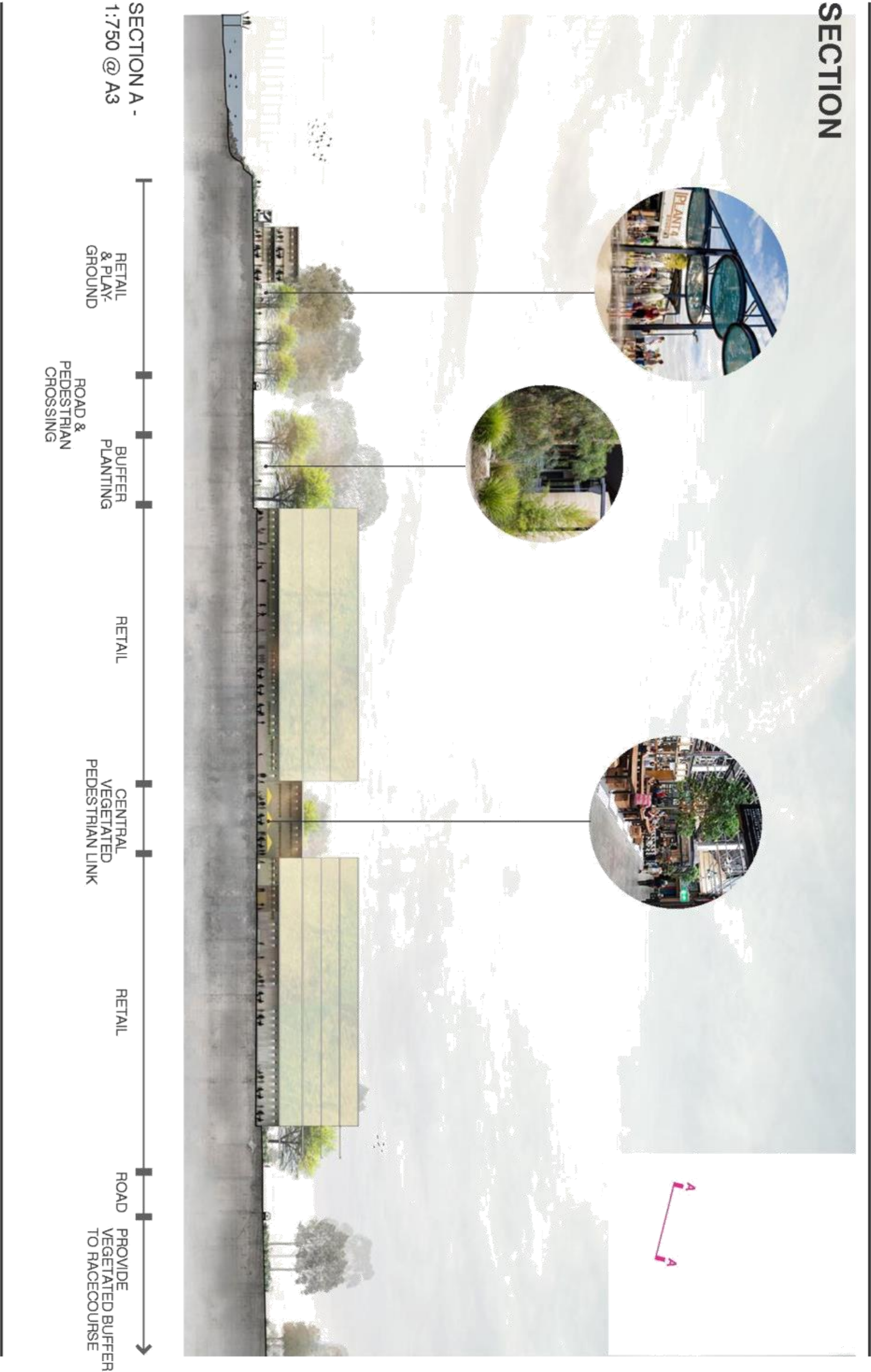
17. New She-oak and foreshore planting installed as part of recent GASP works. Trees still in establishment phase. Recommend to retain and protect.

MASTERPLAN

Landscape Features:

1. GASP pavilion and associated landscape to be preserved
2. Proposed ferry terminal
3. Hotel garden, protected from prevailing wind by enhanced vegetative screen and built form
4. Exposed foreshore edge of low native grasses and succulents to be preserved
5. Intermediate spaces between exposed edge and enclosed courtyards to include strategic tree plantings to soften built form but preserve water views
6. Wetland planting to be preserved - run off associated with new development should be retained and treated on site where possible
7. Alfresco dining opportunities along waterfront
8. Internal garden spaces, protected from climatic conditions by the surrounding built form, provide comfortable vegetated spaces for relaxation and enjoyment.
9. Wind break planting along edge of site to be retained and enhanced with new succession planting.
10. Derwent Entertainment Centre to be preserved with surrounding landscaping to reflect existing use
11. New and existing planting along entry drive to frame water-views while also providing climatic protection
12. Existing planting along Booker Highway to be retained and enhanced
13. Opportunity for public play space associated with waterfront pavilion
14. On grade carpark to incorporate tree canopy and WSUD principles to provide cooling and passive treatment of run off
15. Maintain scale and location of existing site signage





SECTION

SECTION B -
1:750 @ A3



GASP WALK
CENTRAL SPINE PEDESTRIAN LINK
SPORTS STADIUM
ROAD
EXISTING TREES AND UNDERSTORY TO BE PROTECTED AND ENHANCED

SECTION

SECTION C -
1:750 @ A3

GASP WALKWAY

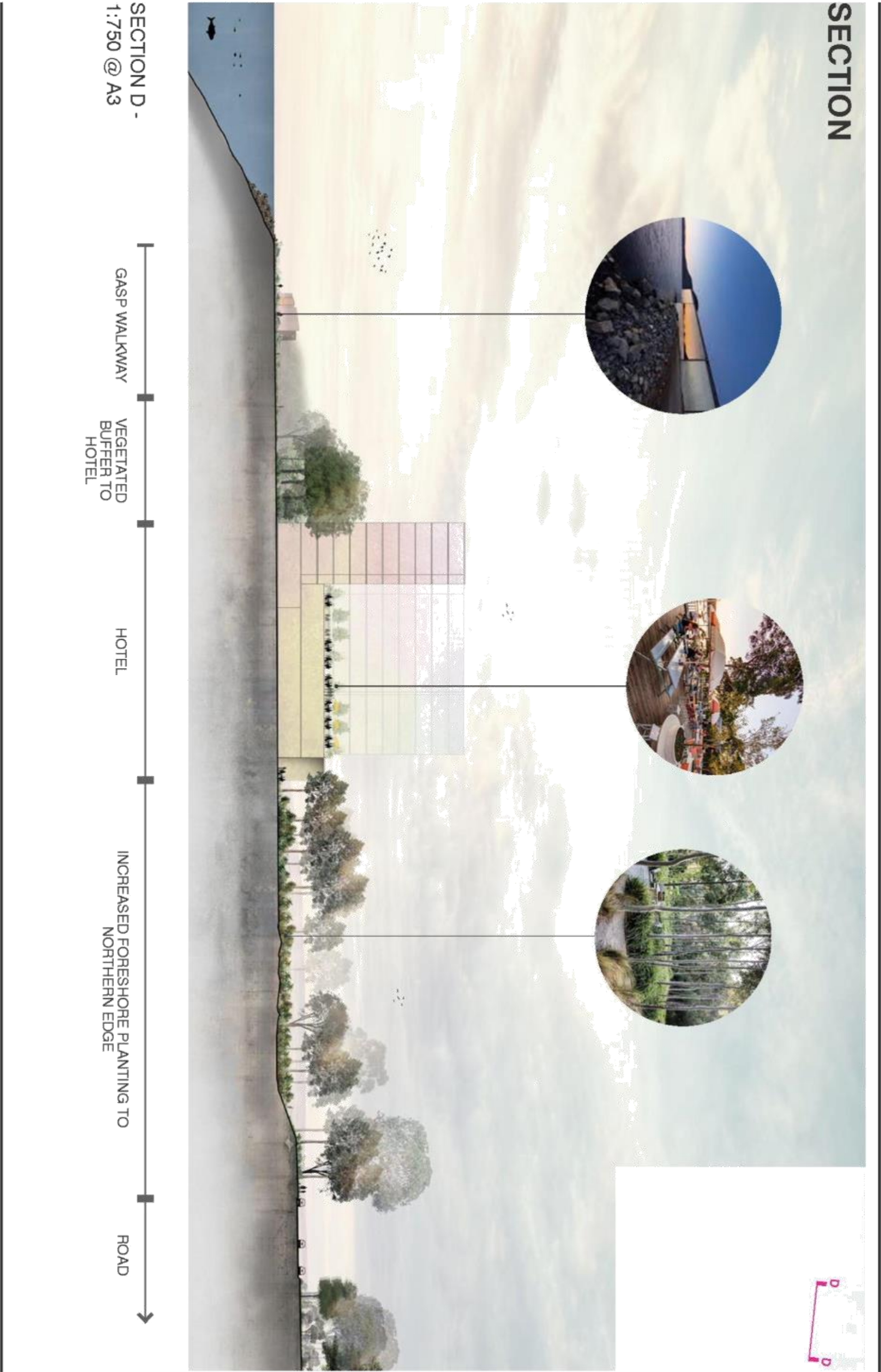
RETAIL & SPILL-
OUT SPACE

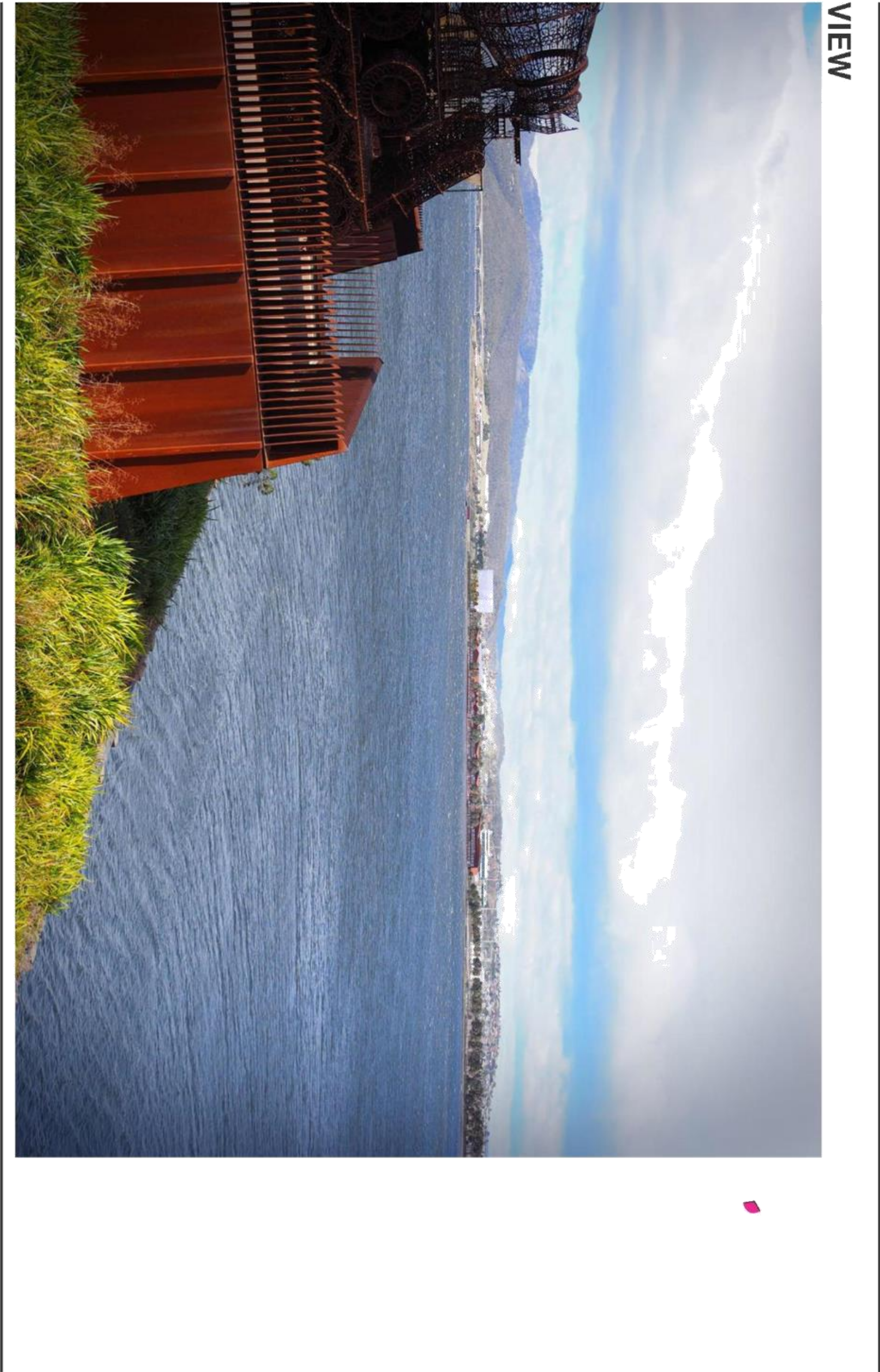
WINTER GARDEN

ROAD

EXISTING TREES AND
UNDERSTORY TO BE
PROTECTED AND
ENHANCED







VIEW



VIEW



VIEW



VIEW



VIEW



Department of Primary Industries, Parks, Water &
Environment

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Irene Inc Planning obo
Larry Kestelman Property Group Pty Ltd
Tasma Street
NORTH HOBART TAS 7000

Email: planning@ireneinc.com.au
gccmail@gcc.tas.gov.au

Dear Ms Duckett

**Lodgement of Section 33 Planning Scheme Amendment
Irene Inc Planning obo LK Property Group Pty Ltd
Proposed Amendments to the Wilkinsons Point and Elwick Bay Specific Area Plan**

This letter is issued pursuant to section 33(2A) of the *Land Use Planning and Approvals Act 1993* (LUPAA). It confirms that Irene Inc Planning obo the LK Property Group Pty Ltd has Crown consent to the making of this Application with the Glenorchy City Council for the enclosed Scheme Amendment Application under section 33 of LUPAA.

The Crown consent is for the proposal listed below (as detailed in the enclosed application and supporting documents):

Scheme Amendment: **Amend the *Glenorchy Interim Planning Scheme 2015* by modifying the Elwick Bay and Wilkinsons Point Specific Area Plan including land at 601, 601A and 601B Brooker Highway, Glenorchy, and 'The Grove Reserve' and 'Montrose Foreshore Community Park.'**

It is understood that further amendments to the application are being prepared in response to the council's correspondence to Ireneinc Planning dated 4 October 2019. This Crown consent is only given to the lodgement of this application. Any variation will require further consent from the Crown.

This owner's consent is provided to enable the public the opportunity to review and provide comment through a formal process. Where the council engages with the community through the planning process, the Department requires its position to be fully disclosed.

This letter does not constitute an approval to undertake any works. If planning approval is given for the proposal, the applicant will be required to obtain separate and distinct consent from the Crown before commencing any works on Crown land, in the event that any works are required.

If you require further information, please contact Anne Maginnity, Crown Lands Officer, Parks and Wildlife Service, by telephone on 6165 4684 or by email to propertyservices@parks.tas.gov.au

Yours sincerely



John Whittington
SECRETARY
15 October 2019

GCC File:
Enquiries
Direct Phone:
Email:



17 October 2019

Irene Duckett, on behalf of LK Property Group Pty Ltd
Ireneinc Planning
49 Tasma Street
NORTH HOBART TAS 7000

Dear Ms Duckett,

Consent to lodgement of a planning scheme amendment for land at Wilkinsons Point, Elwick Bay and Montrose Foreshore

I refer to your request for permission to lodge an amendment to the *Glenorchy Interim Planning Scheme* for Council land at 601, 601A and 601B Brooker Highway, Glenorchy (Derwent Entertainment Centre and Wilkinsons Point), The Grove Reserve and Montrose Foreshore Community Park (the Land), under the *Land Use Planning and Approvals Act 1993* (as in force until 16 December 2015).

I give permission to the making of the application on the Land, under section 33 (2A) of the *Land Use Planning and Approvals Act 1993*:

Applicant:	LK Property Group Pty Ltd, by their agent, Ireneinc Planning
Address of Land Subject to Application:	601, 601A and 601B Brooker Highway, Glenorchy (Derwent Entertainment Centre and Wilkinsons Point), The Grove Reserve and Montrose Foreshore Community Park
PID	7597188; 2984111; 2984138; 2060760; 2060744; 2060752; 1473731; and 5358765.
Nature of request	Land Owner consent to the lodgement of a planning scheme amendment for land at the Derwent Entertainment Centre, Wilkinsons Point, The Grove Reserve and Montrose Foreshore Community Park

In providing this permission, I note LK Property Group's undertaking to ensure that the amendment will provide for a 20-metre coastal buffer (as far as practicable) which is free from buildings on the western side of the Wilkinsons Point, as measured from the top of the seawall, to ensure current and future access to the GASP licence area. To the east of the GASP Pavilion, the coastal buffer will be 10 metres or wider, to provide for a shared pedestrian / vehicular access way.

PO Box 103 – Glenorchy TAS 7010
Ph: (03) 6216 6800
gccmail@gcc.tas.gov.au
ABN: 197 532 52 493

Please note that this permission to the making of the application does not constitute or imply either:

1. Council support for the application on its planning merits. This is a matter for independent assessment by the Glenorchy Planning Authority or delegate; or
2. Landlord permission to undertake use or development on Council land. Council may withhold its permission for the land to be used or developed in the manner proposed. Alternatively, before landlord permission is granted, there may be further processes required to be undertaken under the *Local Government Act 1993*, or negotiation of the terms upon which the land to be used or developed is to be occupied.

Yours faithfully,



Tony McMullen
General Manager

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