



# Margate to Huntingfield Shared Pathway Project Development Report

May 2024

<b>1.</b>	<b>Executive summary</b>	<b>3</b>
1.1	Background	3
1.2	Project development – feasibility of a Margate to Huntingfield Shared Pathway	3
1.3	Summary of route analysis	4
1.4	Constraints and design development	7
1.5	Potential for spur lines	8
1.6	Current project status	8
<b>2.</b>	<b>Introduction</b>	<b>9</b>
2.1	Background	9
2.2	Project objectives	9
2.3	Project limits	9
<b>3.</b>	<b>Summary of identified route</b>	<b>11</b>
3.1	Overview	11
3.1.1	Main route	11
3.1.2	Spur 1 – Beach Road to Esplanade	12
3.1.3	Spur 2 – Endeavor Avenue and Dru Point	12
3.1.4	Spur 3 – Patriarch Drive and Margate Avenue	12
3.2	Reasons for identified main route	14
3.2.1	Margate section of main route	14
3.2.2	Feedback from department / Council	14
3.3	Opportunities and risks for main route	15
<b>4.</b>	<b>Design criteria and departures</b>	<b>18</b>
4.1	Design criteria	18
4.2	Departures	21
<b>5.</b>	<b>Constraints and design development</b>	<b>22</b>
<b>6.</b>	<b>Summary and next steps</b>	<b>24</b>

# 1. Executive summary

## 1.1 Background

The Channel Highway Algona Road to Sandfly Road Corridor Study was undertaken to investigate safety concerns and consider how the Channel Highway meets the current and future community need. The Corridor Study Report set out a long-term plan for this corridor. It identified current challenges and includes a short list of prioritised opportunities for future improvement projects.

One project short listed for more detailed assessment was a feasibility study for an off-road shared path for cyclists and pedestrians from Margate to Huntingfield, which would extend the shared path that exists between Snug and Margate.

The Department of State Growth, in conjunction with Kingborough Council, funded a feasibility study for the proposed shared pathway, identifying a potential route. This was reviewed by both the department and Kingborough Council, and community feedback (see Attachment A) was sought in 2022. Where feasible, feedback has been incorporated into the route design, which is the subject of this report.

Further site investigation and design development is required before a route can be finalised. The further investigations are largely focused on major structural components. This is described in further detail below.

## 1.2 Project development – feasibility of a Margate to Huntingfield Shared Pathway

The department engaged Burbury Consulting to undertake a feasibility study for the proposed shared pathway.

The feasibility study was required to confirm:

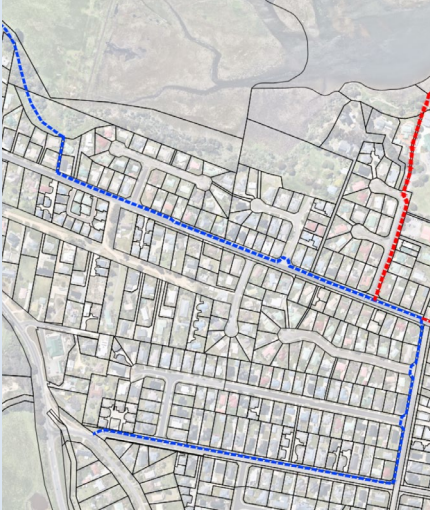

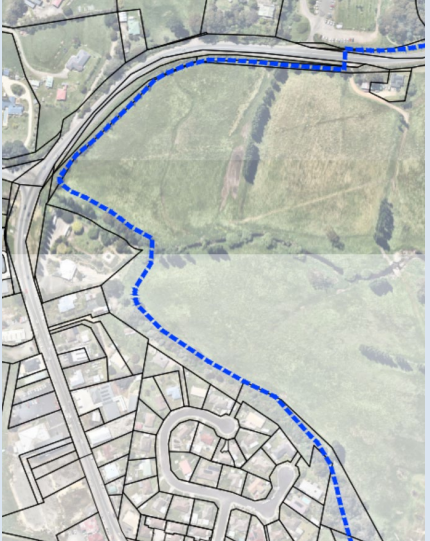
- options analysis for the most appropriate alignment
- design scope and requirements for project implementation
- risk review on design, construction and operations.

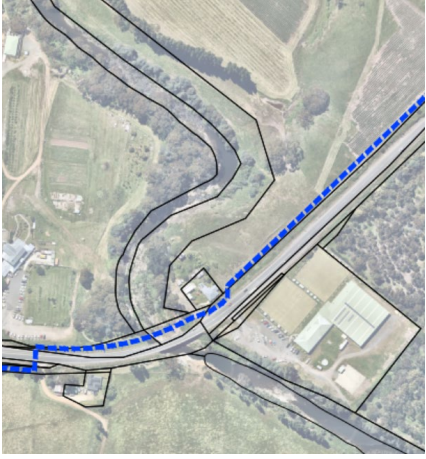




### 1.3 Summary of route analysis




The following provides a summary of the route that was analysed following work undertaken in 2022 by Burbury Consulting.

**Table 1 – Summary route analysis**

Section	Description	Map
<b>Southern Region (Margate)</b>	<ul style="list-style-type: none"> <li>• Start at northern end of the existing Snug to Margate shared pathway.</li> <li>• New roadside concrete pavement for shared pathway and utilise existing road corridor.</li> <li>• Follows Incana Road, Bundella Road and Beach Road.</li> <li>• Descend to agricultural land and head north along property boundary.</li> </ul>	
<b>Southern Region (Margate)</b>	<ul style="list-style-type: none"> <li>• Opportunity for Spur Lines as shown in red.</li> <li>• Connectivity to Dru Point Foreshore.</li> <li>• Connectivity with Channel Christian School.</li> <li>• Connectivity with existing walking tracks.</li> </ul>	
<b>Southern Region (Margate to Brookfield)</b>	<ul style="list-style-type: none"> <li>• New shared pathway formation at-grade along property boundary.</li> <li>• Minor creek crossing at Margate Rivulet.</li> <li>• Culvert widening at Channel Highway.</li> <li>• At-grade crossing near to Brookfield – road widening required to provide for central refuge.</li> </ul>	

Section	Description	Map
<b>Southern Region</b> <b>(North West Bay River crossing)</b>	<ul style="list-style-type: none"> <li>Retaining walls required to accommodate widening for shared pathway on northern side of Channel Highway, adjacent Brookfield.</li> <li>New shared bridge on the northern side of existing road traffic bridge.</li> <li>Soffit of new shared pathway bridge provided at higher level than existing road traffic bridge so as not to impact on hydraulic cross-section of river.</li> </ul>	
<b>Central Region</b> <b>(Channel Highway)</b>	<ul style="list-style-type: none"> <li>Western side of Channel Highway provides for low-cost at-grade formation (gravel surface).</li> <li>Shared pathway provided at crest of batter, so separated from traffic.</li> <li>Consideration given to connectivity with Margate Train – at-grade crossing not appropriate given high-speed environment – alternative underpass or overpass possible but with higher costs.</li> <li>At-grade through junctions / driveways.</li> </ul>	
<b>Central Region</b> <b>(Howden Road Junction)</b>	<ul style="list-style-type: none"> <li>New shared bridge over Channel Highway to northern side of Howden Road.</li> <li>Utilise lightweight steel superstructure to minimise erection time and impact to road users.</li> <li>Shared pathway provided on northern side of Howden Road – gravel path infrastructure – some cut-and-fill required and separated to roadway.</li> </ul>	



Section	Description	Map
<p><b>Central Region</b> <b>(Howden Road)</b></p>	<ul style="list-style-type: none"> <li>Constrained along Howden Road adjacent to North West Bay Golf Course, therefore further design development required.</li> </ul>	
<p><b>Northern Region</b> <b>(Peter Murrell Reserve)</b></p>	<ul style="list-style-type: none"> <li>Minor crossing at Coffee Creek (culvert or similar).</li> <li>Utilise existing tracks through Peter Murrell Reserve (allowing for some upgrade of surface and drainage).</li> <li>Extensive network of existing tracks, therefore opportunity to engage with Tasmania Parks and Wildlife Service to determine viability of use.</li> </ul>	
<p><b>Northern Region</b> <b>(Peter Murrell Reserve)</b></p>	<ul style="list-style-type: none"> <li>Utilise existing tracks through Peter Murrell Reserve (allowing for some upgrade of surface and drainage).</li> <li>Extensive network of existing tracks, therefore opportunity to engage with Tasmania Parks and Wildlife Service to determine viability of use.</li> </ul>	

Section	Description	Map
<b>Northern Region (Huntingfield)</b>	<ul style="list-style-type: none"> <li>Exit Peter Murrell Reserve and connect to existing road / footpath infrastructure.</li> <li>Upgrade of existing infrastructure to provide for wider shared pathway.</li> <li>Shared pathway to finish at existing Algona Road underpass.</li> <li>Opportunity for spur line (shown in red here) to Patriarch Drive / Huntingfield Avenue to connect to Huntingfield Park and Ride.</li> </ul>	

## 1.4 Constraints and design development

**Table 2 – Summary of constraints**

I.D.	Location	Constraint	Design Development
1	Immediately north of Beach Road (Embankment)	The shared path exits Margate at the crest of a (nominal) 15 metre earth embankment. The path needs to traverse the embankment to access the lower grassed area at the embankment toe.	Retaining walls with potential cut-and-fill construction on embankment.  Geotechnical investigation required to inform global stability.
2	Crossing of Channel Highway (Brookfield)	The route relies on crossing the Channel Highway near to the Brookfield Centre.	Consideration is to be given to the crossing design, noting traffic speed and types of vehicles using the highway.
3	Crossing of North West Bay River	The route crosses the North West Bay River.	Separate bridge on the northern side of the existing road bridge.
4	Crossing of Channel Highway (Howden Road Junction)	The route relies on crossing the Channel Highway near to the Howden Road Junction.	Overpass with ramps to the northern side of Howden Road.  Likely a steel superstructure to minimise erection time and impact to road traffic.
5	Howden Road to Peter Murrell Reserve	The corridor is constrained in parts through this section including adjacent to the North West Bay Golf Course.	Potential for road widening or dedicated path on the North West Bay Golf Course.
6	Route through Peter Murrell Reserve	The Tasmania Parks and Wildlife Service has expressed concerns regarding the use of their established paths.	Use of the existing paths is a key part of this transport strategy, minimises land acquisition and provides broader amenity for users.

## **1.5 Potential for spur lines**

The potential for spur lines from the main route was identified as part of this study. These come with additional cost but potentially provide amenity for shared pathway users and extend user catchments. These can be described as:

1. From Margate (Beach Road) north on Endeavour to the foreshore, Channel Christian School and Dru Point.
2. From Margate (corner Bundalla Road / Beach Road) west to the Esplanade, foreshore and Dru Point.
3. From Peter Murrell Reserve (northern end) westward on to Patriarch Drive, then north Huntingfield Avenue.

## **1.6 Current project status**

At the time of publishing, no further design or investigation work is proposed by the Tasmanian Government on this project.

Additional engagement is likely required to refine the identified route prior to any site investigations and detailed design development, with the key stakeholder concerns associated with the current route being the alignment running through Peter Murrell Reserve, plus the need for two Channel Highway crossings.

No funding is currently committed for the design development and construction phase of this pathway project.

This project development report will be used to help the department and Kingborough Council make future funding decisions.



## 2. Introduction

### 2.1 Background

This report presents an option for an off-road shared pathway linking Margate to Huntingfield, providing a clearly defined route that can be used by pedestrians and cyclists.

The Channel Highway between Margate and Huntingfield currently provides only a limited means of access for cyclists and pedestrians travelling between these locations. Construction of a dedicated off-road shared pathway would likely serve to reduce congestion and increase safety along this highway section due to the following:

- reduction in number of cyclists currently interacting with vehicles on the Channel Highway
- increasing the appeal of commuter cycling for current motorists.

This assessment has been prepared on the understanding that the department has a preference for enabling a dedicated 2.5–3 metre wide off-road pathway for pedestrians and cyclists.

### 2.2 Project objectives

Previous reports by Burbury addressed the following objectives as defined by the department:

- perform an options analysis for the most appropriate alignment
- design the scope and requirements for project implementation
- provide a risk review on design, construction and operations/maintenance.

This report focused on the following:

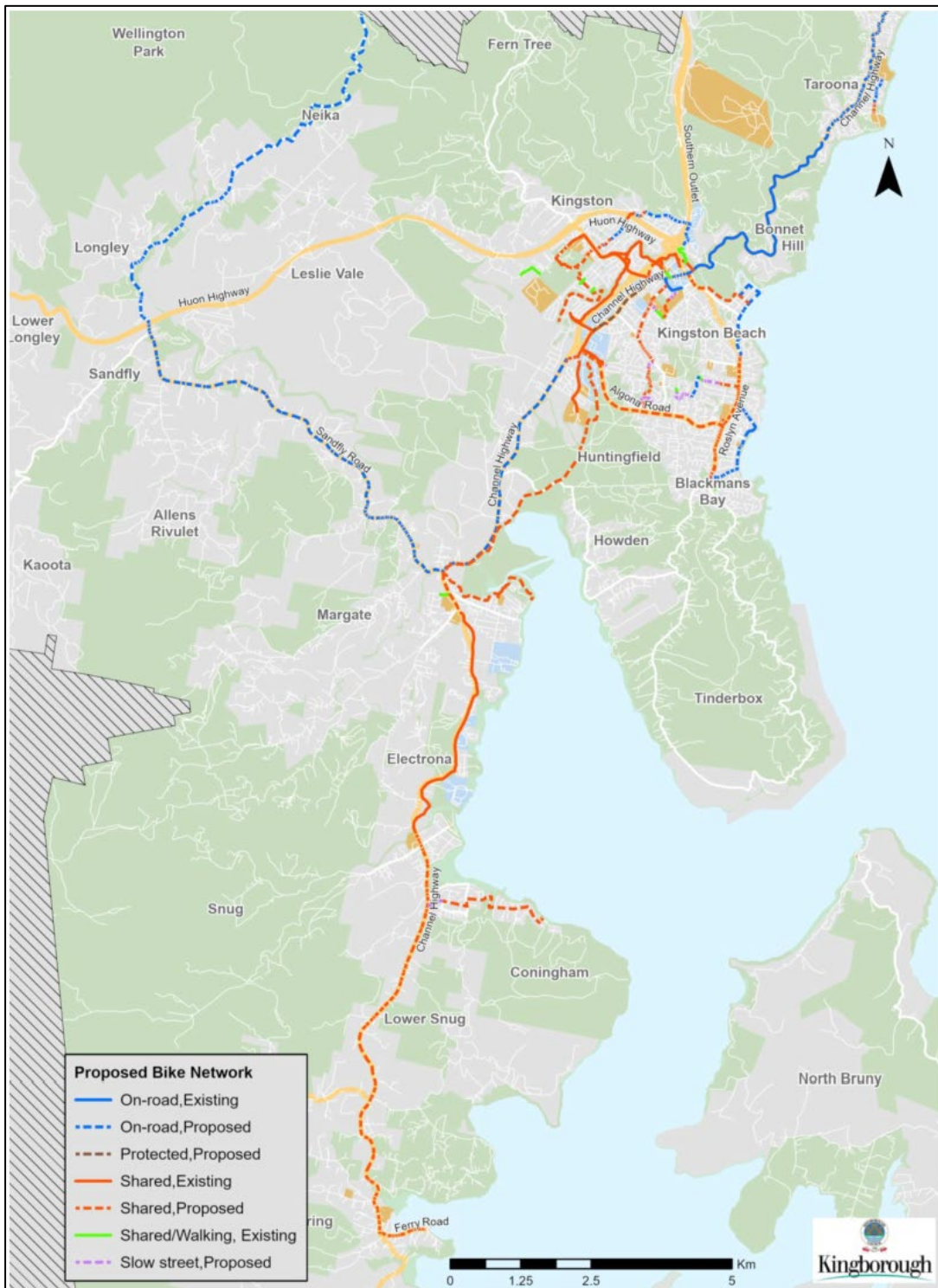
- summary and details associated with the route
- project constraints and areas requiring design development.

### 2.3 Project limits

The project limits extend from the northern terminus of the existing Snug to Margate shared path at Crescent Drive in Margate, through to the Algona Road underpass in Huntingfield (nominally 8 kilometres).

The extent is identified in Figure 1 displaying the Kingborough Council's proposed *base case* alignment for a shared pathway from Margate to Huntingfield, which is from the *Kingborough Cycling Strategy 2021 – 2030*.

**Figure 1 - Existing and proposed bike network for municipality**



## 3. Summary of identified route

### 3.1 Overview

#### 3.1.1 Main route

- This route commences on the northern end of Crescent Drive, where the existing Snug to Margate shared pathway terminates. From there it follows Incana Road east through to Bundalla Road and then north along Bundalla Road to Beach Road. The improvement of existing footpaths along minor roadways has been identified as the optimal treatment method for this area.
- The route then follows existing footpaths west along Beach Road and turns north through the footway located at 34 Beach Road. At the northern end of this footway the track turns north west. It then descends into the boundary of the rural land opposite the Sandfly Road and Channel Highway intersection, and around to an area immediately south of 1629 Channel Highway. A minor (culvert or other) crossing is required for traversing the Margate Rivulet. Further investigations are required for this area.
- From near the existing driveway for 1629 Channel Highway, the route then crosses the Channel Highway near Brookfield, Margate, via the use of an at-grade crossing. Road widening of the immediate and adjacent sections of the Channel Highway is required to accommodate this treatment. The route then turns east and uses the existing road reserve towards the North West Bay River, where an elevated bridge structure is proposed for crossing. The area leading up to the western side of the bridge requires a retaining wall system to provide a level approach wide enough for the pathway and to serve as an abutment/wingwall for the bridge. Further investigations are required for this area.
- The route then follows the west side of the Channel Highway using rural land corridors and available road reserve to the Howden Road intersection. Further investigations are required for this area.
- Crossing from the west side of the Channel Highway onto the north side of Howden Road requires an overpass to provide safety for shared pathway users, while ensuring minimal delays to traffic during construction. An at-grade crossing is not considered suitable given the complexity of the junction and high-speed environment. An underpass has been considered but would result in significantly more road traffic impacts.
- Once on Howden Road, the alignment follows the north side of the existing road reserve for approximately 650 metres to where an existing track (slightly north of Villa Howden) follows the TasNetworks power poles into the North West Bay Golf Course. From here, the route tracks approximately parallel to Howden Road, within the boundary of the golf course, and crosses Coffee Creek (adjacent to an existing TasWater pipeline crossing next to Howden Road).
- From the eastern side of Coffee Creek, the route enters the Peter Murrell Conservation Area and follows the existing network of tracks to intersect with the Coffee Creek Fire Trail (near the western end of Middle Fire Trail). The alignment then follows Coffee Creek Fire Trail north, past Huntingfield Pond to Patriarch Drive in Huntingfield.
- The route then continues along the north side of Patriarch Drive, east of Coffee Court to the southern side of the existing underpass on Algona Road, Huntingfield. This is the northern terminus of the proposed shared pathway.



### **3.1.2 Spur 1 – Beach Road to Esplanade**

Spur 1 extends the shared pathway east from Bundalla Road along Beach Road for approximately 350 metres to the Esplanade intersection. From this point, the route tracks north along the Esplanade for a short distance to connect with the existing concrete shared pathway which follows the coast to Dru Point, Margate boat ramp and the Dru Point Bicentennial Park area.

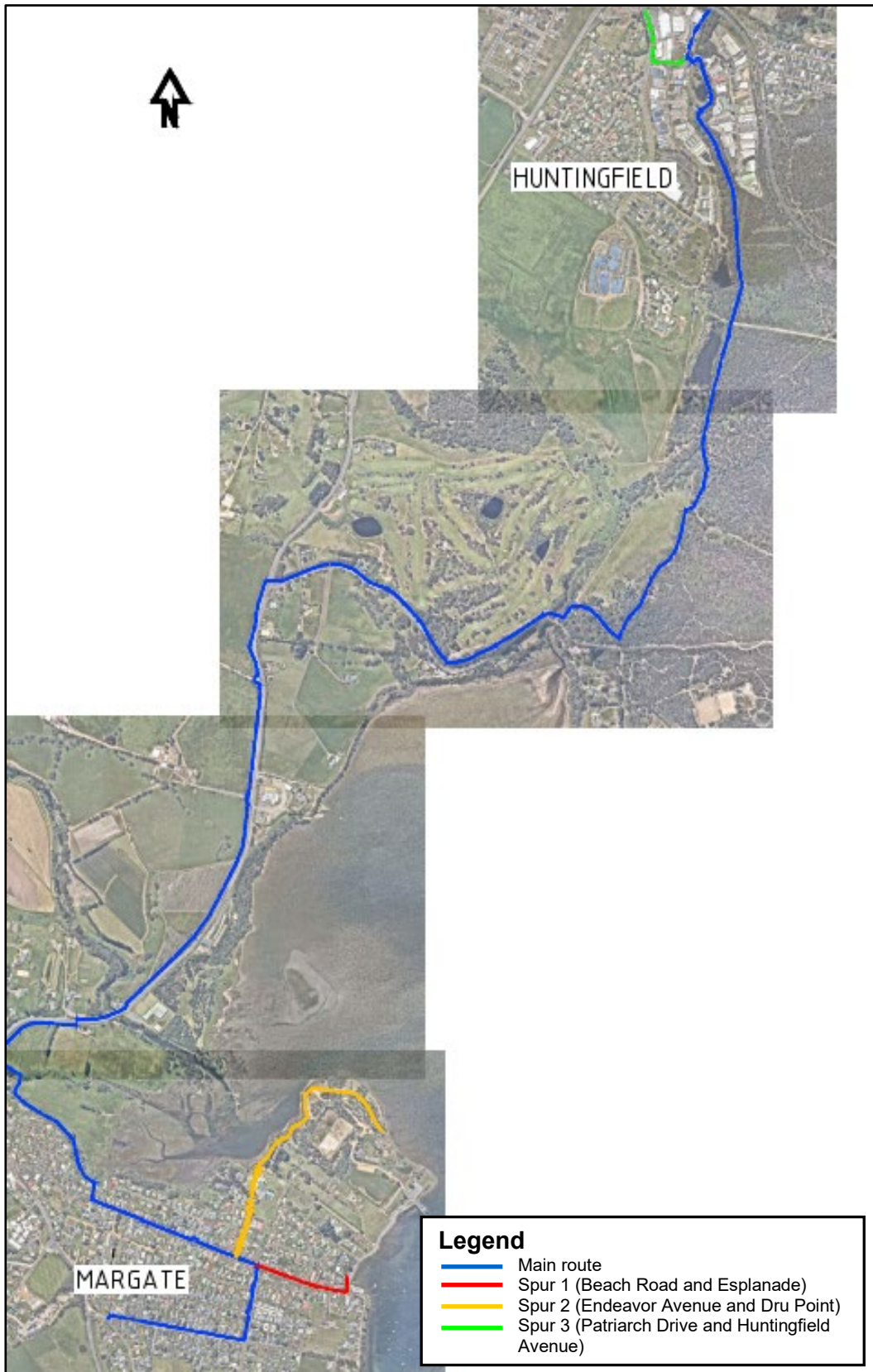
### **3.1.3 Spur 2 – Endeavor Avenue and Dru Point**

Spur 2's alignment extends from the proposed route on Beach Road north, along existing footpaths on Endeavour Avenue to the start of the current pathway between the Channel Christian School and the residence at 1A Discovery Place, Margate. From this point, the route follows the existing gravel pathway around the coastal edge of Dru Point to the Dru Point Bicentennial Park area. This could potentially form a loop back to the route if constructed in conjunction with Spur 1.

### **3.1.4 Spur 3 – Patriarch Drive and Margate Avenue**

Spur 3 commences at the intersection of Coffee Court and Patriarch Drive in Huntingfield. From there it heads west on the northern side of Patriarch Drive to the intersection with Huntingfield Avenue and then north along the east side of Huntingfield Avenue to join the existing shared pathway network opposite the Huntingfield Park and Ride facility. This spur route also provides connection to the existing shared pathway heading south on Huntingfield Avenue from Patriarch Drive to the schools (St Aloysius Catholic College and Tarremah Steiner School) and the planned Huntingfield Stage 2 residential development.

Figure 2 – Route (main and spurs) alignments



### **3.2 Reasons for identified main route**

The route was identified after an options analysis review. The primary reasoning behind this selection hinged mainly on the significant differences between this option and others.

Justifications for the selection of this route include:

- efficient use of existing infrastructure
- minimal impacts to concerned stakeholders
- lower ongoing maintenance costs and issues
- avoiding sensitive coastal zones
- potential to include optional spur routes at relatively low cost to further improve connectivity.

#### **3.2.1 Margate section of main route**

This portion of the route had to provide an alternative alignment through Margate to avoid constraints within the town centre and adjacent areas on the Channel Highway, until further strategic planning has occurred for Margate. The route was also selected due to the following justifications:

- remaining on key roads provides a simple and easily understood route for users
- providing potential spur route options for improved access to popular coastal and recreational areas
- using existing/available footpath areas.

#### **3.2.2 Feedback from department / Council**

Consultation during project development provided feedback and potential options to investigate further. A number of these suggestions were assessed as viable, while others were investigated but deemed non-viable. All feedback aided in the development and finalisation of the route.

##### Considered and included

- Move the at-grade crossing from initially proposed location at Kingborough Bowls Club, further south to Brookfield Margate to avoid problematic geological marker and route behind house at same location (1629 Channel Highway).
- Include Spur 3 to link the Algona Road underpass to Huntingfield Park and Ride facility, for improved connectivity and to remove the need for users to cross roundabout from the north to access public transport.
- Provide a connection to Quince Place land that is being developed, through existing council land extending from Bundalla Road.
- Consider council's asset maintenance costs for infrastructure constructed in coastal environments/shoreline areas. Council wants to avoid building additional infrastructure in these areas due to associated climate change risks.

##### Considered and not adopted

- The initially suggested route through Margate along the Channel Highway was investigated thoroughly, but determined not to be feasible due to the extensive constraints associated with property boundaries, proximity of existing infrastructure/buildings and difficulty providing effective separation from high volumes of traffic. Further strategic planning for the town centre could assist with providing an alternative route.



- An at-grade crossing to provide access to Margate Train businesses was determined not to be feasible due to the 80 kph speed limit and sight/stopping distance concerns with traffic approaching from the south. An overpass or underpass could be further investigated.

### 3.3 Opportunities and risks for main route

After performing an options analysis review and selecting the main route, additional analysis was undertaken to identify potential risks and opportunities. A detailed list of possible opportunities and risks is provided below in Table 7.

**Table 3 - Options opportunities**

Options opportunities	
<b>Efficient use of existing infrastructure</b>	The proposed route from Crescent Drive through Margate to the #36 Beach Road footway would (where possible) utilise widening of existing footpaths on minor roadway alignments and three existing footways.
	Proposed development of existing Coffee Creek Fire Trail through Peter Murrell Conservation Area to minimise potential environmental impacts and potentially assist with streamlining Tasmania Parks and Wildlife Service approvals process.
	Route alignment would provide access to proposed start/end point for North West Bay River multi-use trail (as detailed in Kingborough Council 'North West Bay River Multi-use Feasibility Study 2020').
	Alignment would run adjacent to future residential land developments (Quince Place land in Margate and Huntingfield Stage 2 Project).
<b>Connectivity with key locations</b>	Northern alignment through Huntingfield would enable link to St Aloysius Catholic College and Tarremah Steiner School. Margate section in the vicinity of Channel Christian School.
	Potential additional alignment spurs would provide links to Dru Point, Margate Esplanade and Huntingfield Park and Ride facility.
	Decommissioned TasWater sewage treatment plant at Dru Point is potentially being repurposed into public open space by Kingborough Council. This would create additional need for improved access to this area.
	Transition point through footway at #36 Beach Road enables close access to Margate town centre.
	Alignment development in the North West Bay River Bridge area would provide improved access to Brookfield Margate.
	Removes active commuters from constrained areas of Channel Highway through Margate town centre and North West Bay River Bridge (areas with minimal width/poor quality road shoulders).
	Reduces likelihood of cyclist/pedestrian interactions with vehicles parking in Margate town centre.
	The alignment would improve access to numerous existing public bus stops along its route.

Options opportunities	
<b>Improved safety</b>	Extensive use of minor roads through Margate area would minimise risk of vehicle interactions at speed.
	Reduced frustration to Channel Highway motorists (reduced delays due to interactions with commuter/recreational cyclists).
	Overpass at Channel Highway/Howden Road intersection could provide public transport users a safe method for accessing bus stops on both sides of the Channel Highway.
<b>Minimal impacts to concerned / influential stakeholders</b>	Alignment on western side of Channel Highway, avoiding concerned landowners on eastern side.
	Route crossing to western side of Channel Highway near Brookfield Margate avoids choke point between existing road barrier and Kingborough Bowls Club infrastructure.
	Proposed use of northern side of Howden Road road reserve and within the North West Bay Golf Course would reduce impacts to Villa Howden and potentially sensitive residential properties located on coastal alignment.
<b>Lower maintenance costs</b>	Approximately 80 per cent of proposed alignment would utilise simplified gravel surface treatments. Required maintenance/repairs could be easily conducted using existing council-owned plant and equipment.
	Minimal usage of bridges/elevated walkway structures requiring specialised routine inspections.
<b>Avoids impacts to sensitive coastal / shoreline zones</b>	Alignment utilises areas away from shoreline reducing environmental, geotechnical and erosion concerns.
	Aligns with Kingborough Council future plan to limit potential infrastructure risks associated with climate change and rising sea levels.
	Inland route reduces likelihood of potential opposition from community environmental groups.
<b>Futureproof</b>	Maximising distance from existing Channel Highway alignment minimises any potential impacts/clashes with prioritised road shoulder widening upgrades.
	Overpass location at Howden Road intersection would align with possible reallocation of Howden Road, due to potential realignment with Fehres Road/Channel Highway intersection outlined in 'Channel Highway - Corridor Study Report - Algona Road to Sandfly 2020' (p70).
	Option to add pathway to connect with Dru Point via Channel Christian School footway and/or via Beach Road east to Esplanade.
	Provide access to planned residential land developments in Huntingfield and Margate as previously listed.

**Table 4 - Options risks**

<b>Options Risks</b>	
<b>Stakeholder impacts/concerns</b>	Potential opposition from other Margate residents located directly adjacent to proposed alignment.
	Kingborough Bicycle Advisory Committee concerned with indirect alignment route through Margate and potential gradients from Coffee Creek through Peter Murrell Conservation Area.
	Proposed route on west side of Channel Highway would provide no direct access to Margate Train businesses (unsuitable for at-grade crossing due to traffic safety issues).
	Tasmania Parks and Wildlife Service has raised initial concerns with developing the existing track network through Peter Murrell Conservation Area and its potential associated impacts.
	'Friends of Peter Murrell Reserve' community group has previously opposed construction of public infrastructure in area.
	Potential clashes with existing services, TasWater infrastructure through golf course, Coffee Creek and Peter Murrell Conservation Area. Also, wastewater infrastructure at southern end of Beach Road footway.
<b>Environmental impacts</b>	Peter Murrell Conservation Area and the associated effects on drainage, pathway footprint and increased number of visitors. Our view is that this can be managed to improve existing amenity and drainage.
	Possible disturbance of native vegetation and habitat through alignment route proposed for North West Bay Golf Course, along Howden Road and footway/beach reserve land immediately north of Beach Road. To be managed through environmental survey in design development.
	Potential for watercourse habitat disturbance of North West Bay River due to proposed bridge and retaining wall structure. To be managed through environmental survey in design development.
<b>Lower than anticipated usage rates</b>	Perceived excessive detour through Margate section of alignment could potentially deter commuter cyclists from using this portion of the route.
	At-grade crossing near Brookfield Margate could possibly deter some users concerned with traffic interactions on the Channel Highway (especially during peak traffic periods).
<b>Safety issues</b>	At-grade crossing on Channel Highway near Brookfield Margate could be perceived by some potential users as a safety risk due to the associated traffic interaction.
	Emergency Services would require acceptable access to all sections of the proposed alignment to ensure the safety of all potential users. This becomes a design parameter.
<b>Heritage (Indigenous and European)</b>	Thorough surveys will be required to determine any potential areas of concern along the proposed alignment. This information is currently unknown and could potentially affect any future detailed design plans.



## 4. Design criteria and departures

### 4.1 Design criteria

The Austroads guidelines provides criteria on the following:

- shared path widths
  - clear width requirements for cyclists and pedestrians
  - path intention purpose (local access, regional or recreational)
- bicycle operating speeds
- horizontal curvature
- path gradients
- clearances, batters and requirement for fences
- crossfall and drainage
- sight distance
- changes in level (kerbs, driveways etc.)
- surface treatments and tolerances
- lighting
- underground services.

The following references have been extracted from the Austroads publication that are relevant to the above design criteria:

**Table 5.3: Shared path widths**

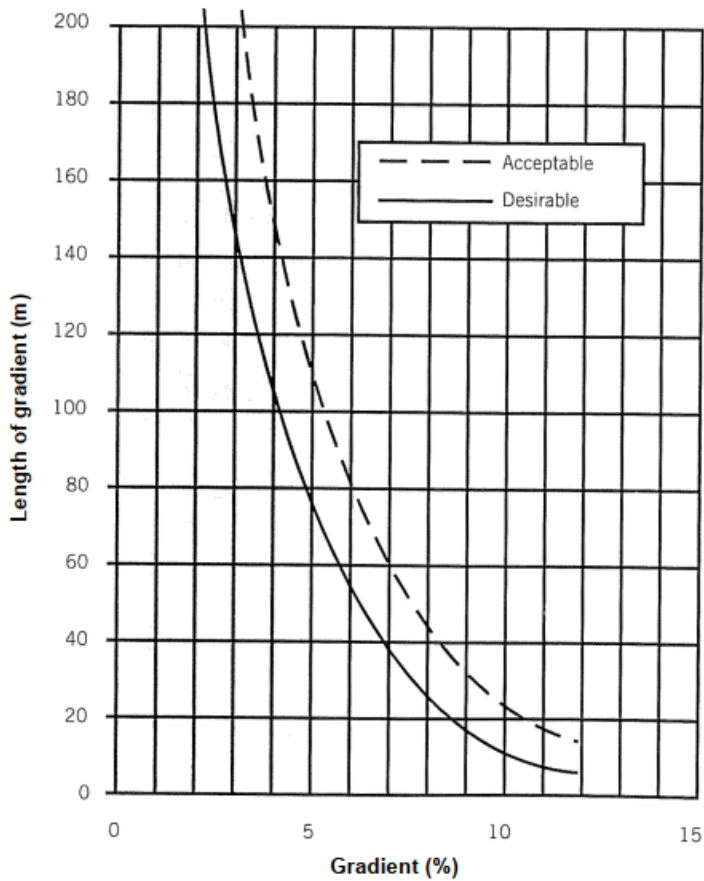
	Suggested path width (m)		
	Local access path	Regional path <sup>(3)</sup>	Recreational path
Desirable minimum width	2.5	3.0	3.5
Minimum width – typical maximum	2.0 <sup>(1)</sup> – 3.0 <sup>(2)</sup>	2.5 <sup>(1)</sup> – 4.0 <sup>(2)</sup>	3.0 <sup>(1)</sup> – 4.0 <sup>(2)</sup>

<sup>1</sup> A lesser width should only to be adopted where cyclist volumes and operational speeds will remain low.

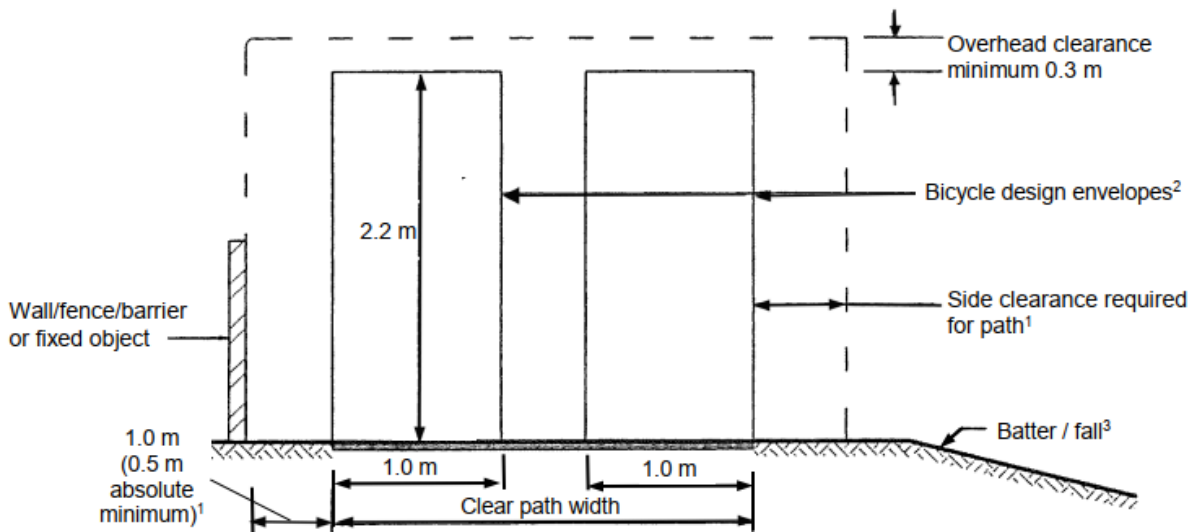
<sup>2</sup> A greater width may be required where the numbers of cyclists and pedestrians are very high or there is a high probability of conflict between users (e.g. people walking dogs, in-line skaters etc.).

<sup>3</sup> May be part of a principal bicycle network in some jurisdictions.

**Figure 5.6: Desirable uphill gradients for ease of cycling**

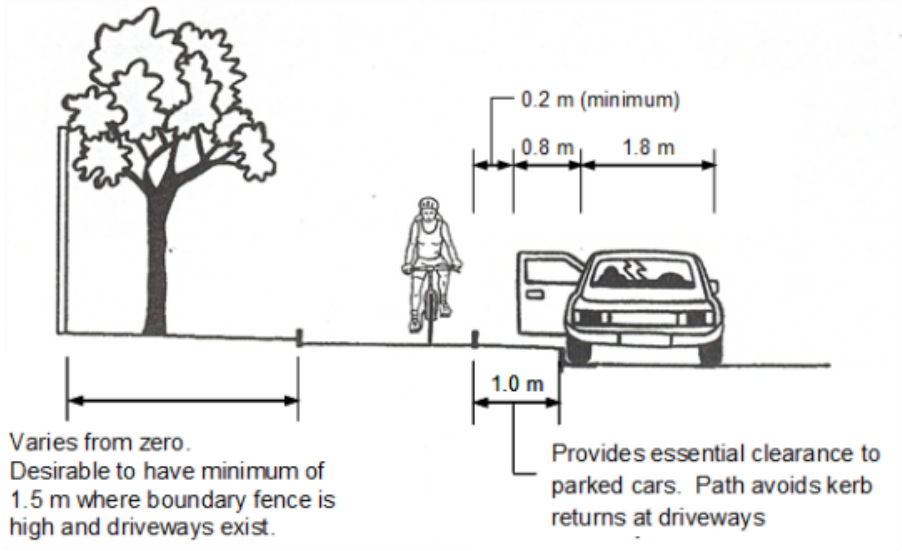


**Figure 5.7: Clearances between cyclist envelope and potential path hazards**

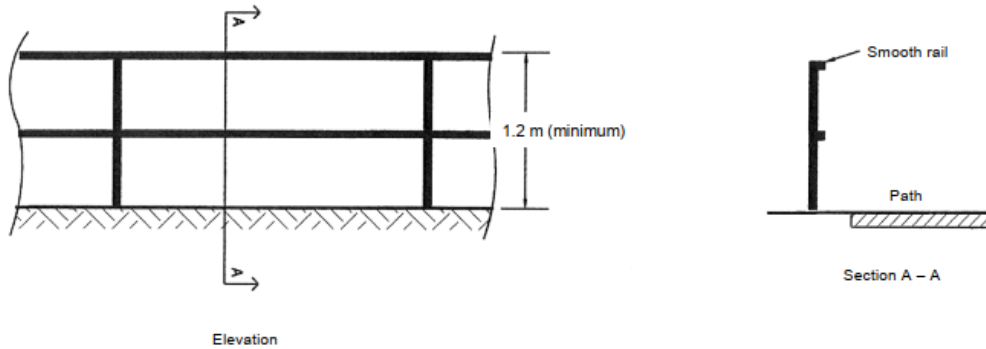


- 1 This may be reduced to 0.3 m where a fence or obstacle has smooth features.
- 2 Refer to Section 3.2.2 for guidance on bicycle design envelopes.
- 3 Refer to Section 5.5.3 for guidance on batters and need for a fence.

**Figure 5.8: Location of path in road reserve**

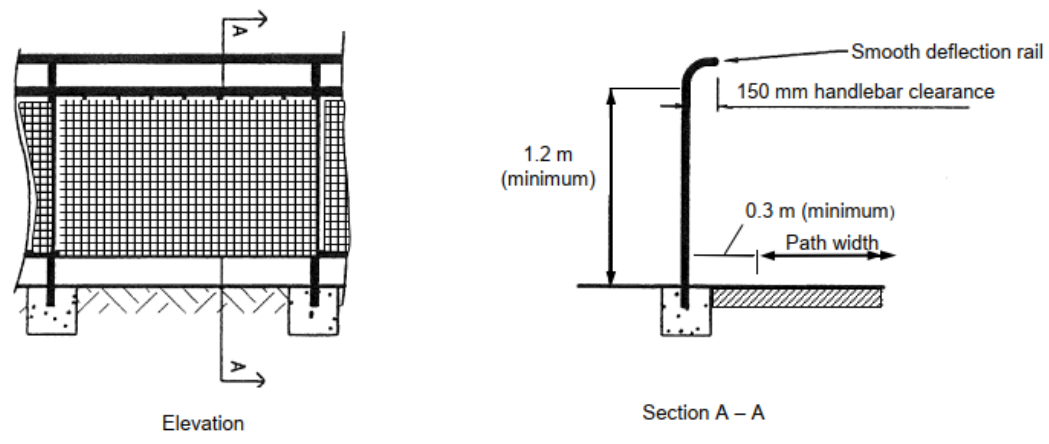


**Figure 5.11: Example of a partial barrier fence**



Notes: Any fence placed in road-related area should also be assessed for roadside suitability.

**Figure 5.12: Example of a full barrier fence**



1 This may be reduced to 0.3 m where a fence has smooth features.

## 4.2 Departures

Part of the route assessment involved identifying potential departures from key design elements along the proposed alignment, these are listed below:

- Shared pathway widths along the Margate section of the main route would possibly be constrained to a nominal 2.5m in some areas mainly due to limited available room between existing property boundaries and active roadways. Widths less than the 2.5m minimum requirement would be isolated to a small number of concentrated areas where clashes with existing services could occur.
- Several shared pathway locations through Margate and potentially in Huntingfield would rely on back of kerb structure to provide adequate separation with the adjacent roadway. This would typically be constrained to areas with traffic speeds not greater than 60km/hr.
- The proposed design for the shared pathway preferred option currently does not achieve Disability Discrimination Act (DDA) compliance to AS 1428.



## 5. Constraints and design development

Design development is required as part of this route selection. Note that other types of site survey (land acquisition, cultural heritage, flora / fauna) are not discussed, which are typically required for these types of developments and along the full route extents.

**Table 5 – Site constraint and design development**

I.D.	Location	Constraint	Design development required
1	Immediately north of Beach Road (Embankment)	The shared path exits Margate suburb at the crest of a (nominally) 15 metre high earth embankment. The path needs to traverse the embankment to access the lower grassed area at the embankment toe.	Likely that significant earthworks (cut / fill) and retaining walls will be required. Design development to include: <ul style="list-style-type: none"> <li>• site survey</li> <li>• geotechnical investigation</li> <li>• civil and structural engineering design development.</li> </ul>
2	Crossing of Channel Highway (Brookfield)	<p>The route relies on crossing the Channel Highway near the Brookfield Centre. While an at-grade crossing with central refuge has been identified as appropriate, further consideration will need to be given to traffic speed and vehicle types.</p> <p>Road widening is likely required. The constraints here include:</p> <ul style="list-style-type: none"> <li>• the existing North West Bay River bridge constrains road width to the east</li> <li>• the Brookfield entrance adds complexity to shared pathway user safety given the likely traffic entering and exiting the property directly adjacent to the crossing</li> <li>• existing property on the southern side of the road</li> <li>• the geological feature on the southern side of the road</li> <li>• the existing culvert and drainage infrastructure crossing Channel Highway</li> <li>• existing retaining walls on northern side of road.</li> </ul>	Design development will require: <ul style="list-style-type: none"> <li>• site survey</li> <li>• geotechnical investigation to enable road widening (test pits in road shoulder and adjacent roadside corridor</li> <li>• civil and structural engineering design development including optioneering of options.</li> </ul>

I.D.	Location	Constraint	Design development required
3	Crossing of North West Bay River	The route crosses the North West Bay River.	Design development will require: <ul style="list-style-type: none"> <li>• site survey</li> <li>• geotechnical investigation</li> <li>• bridge design development.</li> </ul>
4	Crossing of Channel Highway (Howden Road Junction)	The route relies on crossing the Channel Highway (likely) near to the Howden Road junction. Options include: <ul style="list-style-type: none"> <li>• underpass</li> <li>• overpass</li> </ul> An at-grade crossing with refuge has not been considered given the high-speed environment.	Design development will require: <ul style="list-style-type: none"> <li>• site survey</li> <li>• geotechnical investigation</li> <li>• civil and structural engineering design development including optioneering of the three options.</li> </ul>
5	Howden Road to Peter Murrell Reserve	The corridor is constrained in parts through this section, including adjacent to the North West Bay Golf Course.	Design development will require: <ul style="list-style-type: none"> <li>• site survey</li> <li>• civil design development including review for potential widening of the road</li> <li>• review of potential to utilise golf course land.</li> </ul>
6	Route through Peter Murrell Reserve	The Tasmania Parks and Wildlife Service has expressed concerns regarding the use of some of their established paths.	Use of the existing paths is a key part of this transport strategy, minimises land acquisition and provides broader amenity for users. <p>There is a large network of paths through the Peter Murrell Reserve and opportunity to work with Tasmania Parks and Wildlife Service to select a route amenable to them.</p>

## 6. Summary and next steps

The main route provides improved connectivity to existing and planned active transport infrastructure networks. In addition, this was supported by other potential opportunities identified with this route and the extent of the constraints encountered.

The additional scope of site investigations, surveys, consultation and engineering design development required to further progress this option through to the concept and detailed design phases is recognised.

This feasibility report will be shared and discussed with Kingborough Council, who provided funding to support the preparation of the report in conjunction with the Tasmanian Government.

The department and Kingborough Council will determine:

- how best to consult and gather feedback to address some known route issues
- how to progress required design work
- where to seek funding to progress the project.



Department of State Growth

Salamanca Square

2 Salamanca Square  
Hobart TAS 7000 Australia

Phone: 1800 030 688

Email: [projects@infrastructure.tas.gov.au](mailto:projects@infrastructure.tas.gov.au)

Web: [infrastructure.tas.gov.au](http://infrastructure.tas.gov.au)