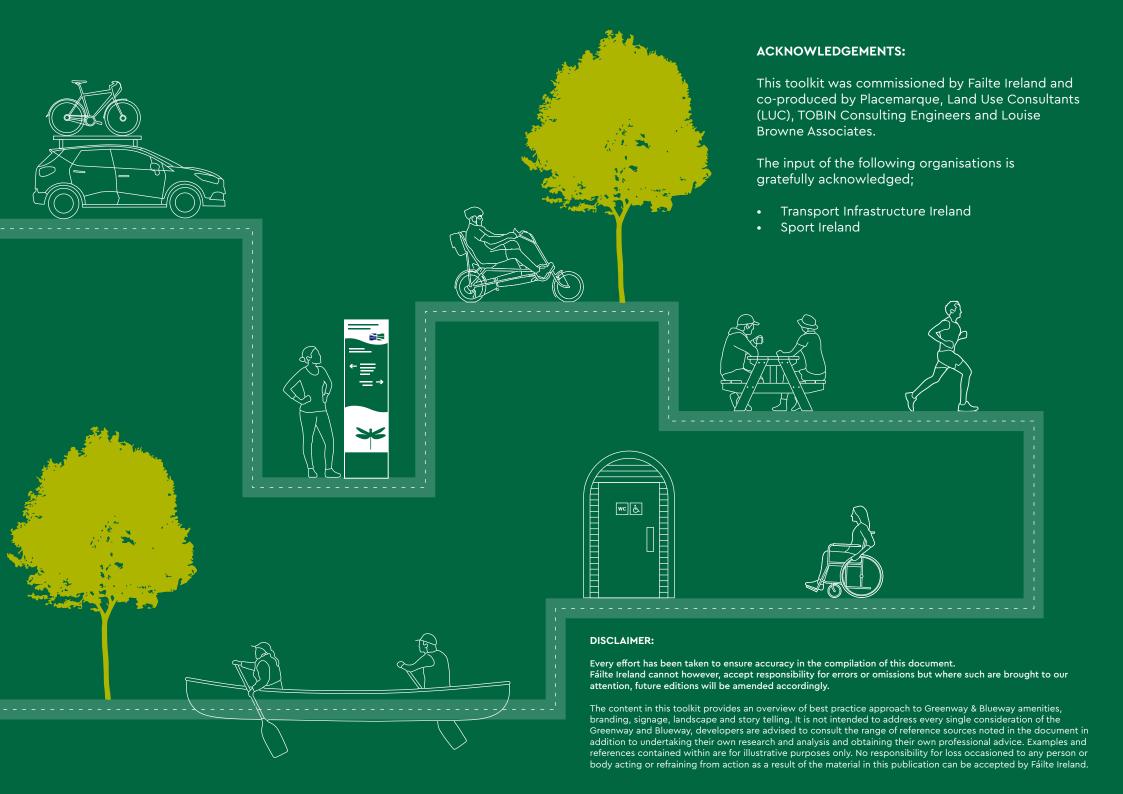






# Visitor Amenity Best Practice Toolkit for Greenways and Blueways

A solution guide for visitor amenities and infrastructure on new and existing Greenways and Blueways





# **Contents**

1.	Introduction	Pg. <u>4</u>
2.	Considerations for visitor amenities	Pg. <u>9</u>
<b>3.</b>	Best practice examples	Pg. <u>1</u>
	3.10 What is the location and landscape context?	Pg. <u>1</u>
	3.11 Who will be using the Greenway or Blueway?	Pg. <u>13</u>
	3.12 Access for all	Pg. <u>1</u> 4
	3.13 Branding; making it clear as a Greenway or Blueway	Pg. <u>16</u>
	3.14 Signage and mapping	Pg. <u>17</u>
	3.15 Local stories	Pg. <u>23</u>
	3.16 Arrival and access	Pg. <u>28</u>
	3.17 Facilities	Pg. <u>36</u>
	3.18 Waste and water management	Pg. 5 <u>4</u>
	3.19 Landscaping	Pg. <u>56</u>
4.	Concept designs	Pg. <u>6</u>
<b>5.</b>	Amenity solution guide	Pg. <u>65</u>



### Greenways

A Greenway is a predominantly traffic free path, designated for use by pedestrians, cyclists and other non-motorised users such as wheelchair users, families with buggies etc.

Greenways are designed specifically to meet the needs of cyclists in terms of gradient and surface and are wide enough to accommodate shared usage. Often making use of redundant railways, Greenways are ideal for cyclists, and in particular cyclists with limited experience and children.

# Blueways

Blueways are a network of approved and branded multi-activity recreational trails and sites, based on, and closely linked with the water, together with providers facilitating access to activities and experiences.

Fun and adventure by boot, boat or bike on and alongside scenic waterways, enjoyed entirely at your own pace. Blueways offer fun waterscape experiences, in, on or near the water for locals and visitors, using lakes, canals, rivers and coastal environments to walk, cycle, swim, kayak, SUP and engage with nature and heritage. Blueways are activity experience corridors with water at the core.



# This document provides an overview toolkit for visitor amenities at Greenways and Blueways.

The purpose of the document is to assist in ensuring that the development of Greenways and Blueways considers the visitor experience from the beginning. While creating physical infrastructure is a significant aspect of the route and trail development, the key to their success are in the type of experience participants have.

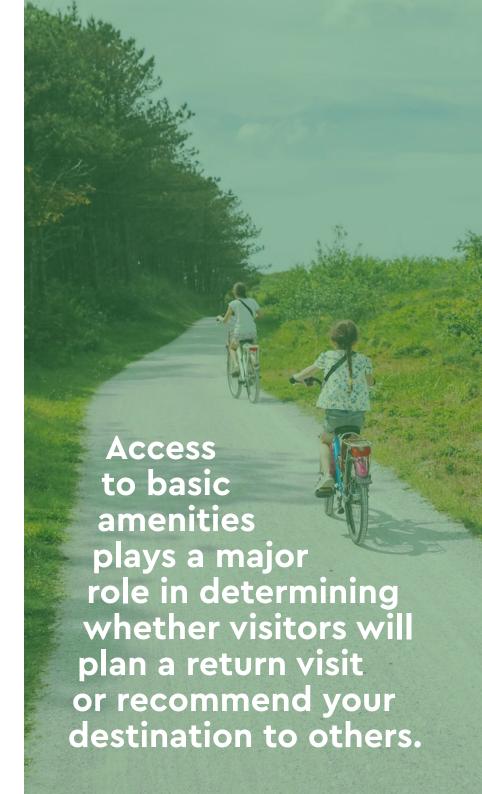
This toolkit is intended to a guide, and should be considered aspirational rather than prescribe the content of designed nodal spaces, providing an approach to design and implementation. All facilities illustrated may not be required in every scenario, but are intended to provide an aspirational checklist of what could be included.

The 'Rural Cycleway Design (Offline & Greenway) DN-GEO-03047' document sets out minimum criteria for TII Greenways, and this toolkit highlights additional facilities that are suggested to improve the overall visitor experience.

Greenways and Blueways are routed generally through the un-built landscape connecting existing places and settlements. The range of users are wide, from commuters, to families on short trips, to tourists and individuals with additional access needs.

The aim when developing a Greenway or Blueway is to include the theme of respecting the landscape and encouraging biodiversity and sustainability. The Greenway or Blueway route should be appealing in the sense that it shall also:

Provide opportunities for all to engage with the landscape, culture and heritage of an area, highlighting those elements that contribute to a distinct sense of place.







The exemplars highlight and recognise the importance of the landscape in 5 different location scenarios:

- Forest
- Upland & bog
- Lowland & rural
- Waterways & coastal
- Urban edges

These will make up the majority of landscape scenarios that the Greenways and Blueways cover.

This toolkit has evolved from, and builds upon, previous work carried out by others. In particular, the 'Greenways and cycle routes ancillary infrastructure guidelines'. The TII 'Rural Cycleway Design (Offline and Greenways)', which provides requirements for minimum standards for the provision of ancillary infrastructure on Greenways. And also, the 'Blueway Developer Toolkit' which has been recently produced.

All these documents can be found via the links on the following page(s).

The aim of this toolkit is to work alongside all of the available documents, assisting to develop an awareness of best practices for visitor amenities within Greenways and Blueways. Recognising them as visitor destinations, and reinforcing their unique qualities.

For the avoidance of doubt and in the event of any conflict or ambiguity between documents, the requirements of the TII 'Rural Cycleway Design (Offline and Greenways)' and 'Greenways and cycle routes ancillary infrastructure guidelines' documents take precedence.

# This toolkit is not intended as a fully prescriptive solution...

However, it shall be used to guide and support bodies and local authorities in planning Greenways and Blueways, and in applying for funding opportunities for an improved visitor experience and amenity.





This toolkit shall be considered a helpful guide to developers when thinking about developing a new Greenway or Blueway project or retrofitting an existing one. The key statutory policy documents can be seen and accessed here, this toolkit shall be read in conjunction with the existing suite of Greenway and Blueway standards, guidance and local development plans.

**Greenway Visitor Experience** & Interpretation Toolkit





Find here



Blueway Developer Toolkit

Find here

(This Document) Visitor Amenity Best Practice Toolkit for **Greenways** and Blueways

Biodiversity and climate change should be at the heart any Greenway or Blueway. As such, the documents below should also be referenced simultaneously to this toolkit.



National Biodiversity Action Plan (NBAP) Find here



Climate Action Plan 2023 (CAP23) Find here

#### **Greenways**

Greenways and Cycle Routes Ancillary Infrastructure Guidelines Find here



TIIV TII Publications

Rural Cycleway Design (Offline & Greenway) DN-GEO-03047 Find here

Strategy for the Future Development of National and Regional Greenways Find here



Greenway Design and Brand Guidelines Find here

brand guidelines



**Great Outdoors** A Guide for Accessibility Find here



Accessible Outdoor Places Design Guidelines Find here



**Blueways** 

Blueway Paddling Trail Guidelines Find here



Please refer to Section 2.1 in 'Greenways and Cycle Routes Ancillary Infrastructure Guidelines' document for more detail. Find here

Please refer to **Page 5** in 'Advisory Note 5 - Paddling Trail Guidelines' document for more detail.

This document refers to 'trailheads' and 'rest areas' when categorising which infrastructure and amenities are best suited to a certain location when developing a Greenway or Blueway, the definition and context of which can be seen below. The TII 'Rural Cycleway Design (Offline & Greenway) DN-GEO-03047' document sets out the minimum ancillary infrastructure provision requirements at these trailheads.

#### Major trailhead

These are located at significant points on the route, typically at the start/end points, often in towns or villages, and at other significant entry points. Major trailheads must have ample car parking and, as well as bike parking. If resources permit and high usage is expected, facilities may also include toilets and changing rooms. (Note: Consider the life cycle costs of the trailhead for sustainability & maintenance etc).

Major trailheads may also provide a sense of journey, a start or end point to a destination and comprehensive information should be provided on an information board. This could include the story of the route and indicate the various points of interest along the route.

Major trailheads might also host or link with other recreation facilities such as parks, cycle trails, skateboard areas and camp sites. These other facilities have the potential to entice participants to use the route and add value to the trail experience for the user.

#### Minor trailhead

Located along the route, these facilities have a lower amount of access points. Typical locations include intersections between the route and public roads, and at smaller service locations.

In addition to providing practical resources such as parking and directional signage, these minor trailheads should ideally encourage participation from local residents and from passing impulse participants, and can also act as route rest areas.

#### Rest area

Rest areas are points along the route, which provide a space for users to relax, take in the view, or shelter. Rest areas might also include, or be structured around trailheads, or art installations.

Rest areas can vary in format and scale from commercial facilities such as cafés, or bars which may require vehicle access for deliveries etc, to simple seating areas at points of interest, and possibly located after more demanding sections of the route such as long gradients, or as break points on long route sections. There may be a requirement for directional and interpretation signage at these areas.

### Blueway trailhead

Blueways are a network of approved and branded multi-activity recreational trails and sites, based on, and closely linked with the water. Together with providers facilitating access to activities and experiences.

The trailheads will be the formal entry points and the main locations at which visitors are encouraged to access / egress the waterway.

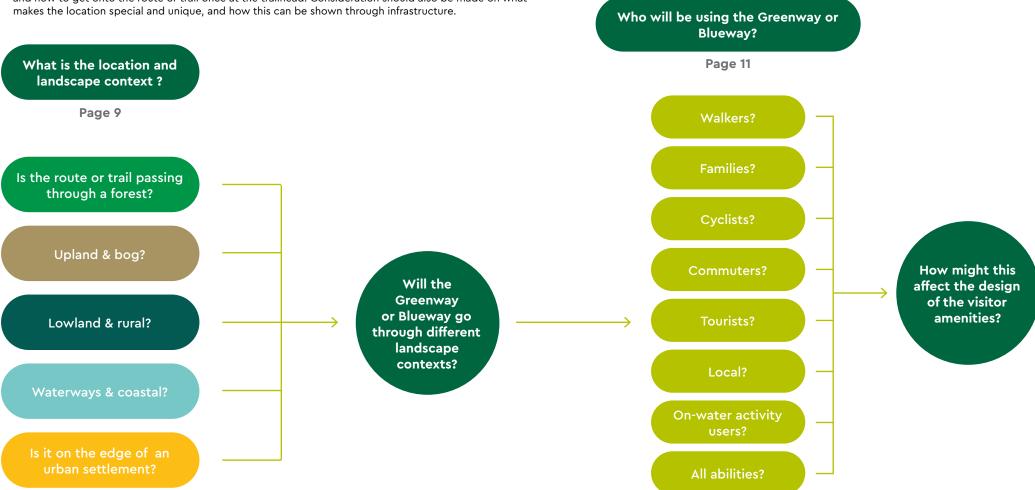
On a linear river trail this will often be at the most logical upstream and downstream location – bookending the other access points.

On coastal and inland lake trails – the majority of Blueway excursions will be circular. However, there may be a number of trailheads from which to begin and end a journey. These trailheads will therefore have the highest volume of use and should adhere to the more in-depth criteria found within 'Blueway Paddling Trail Guidelines' document referred above.



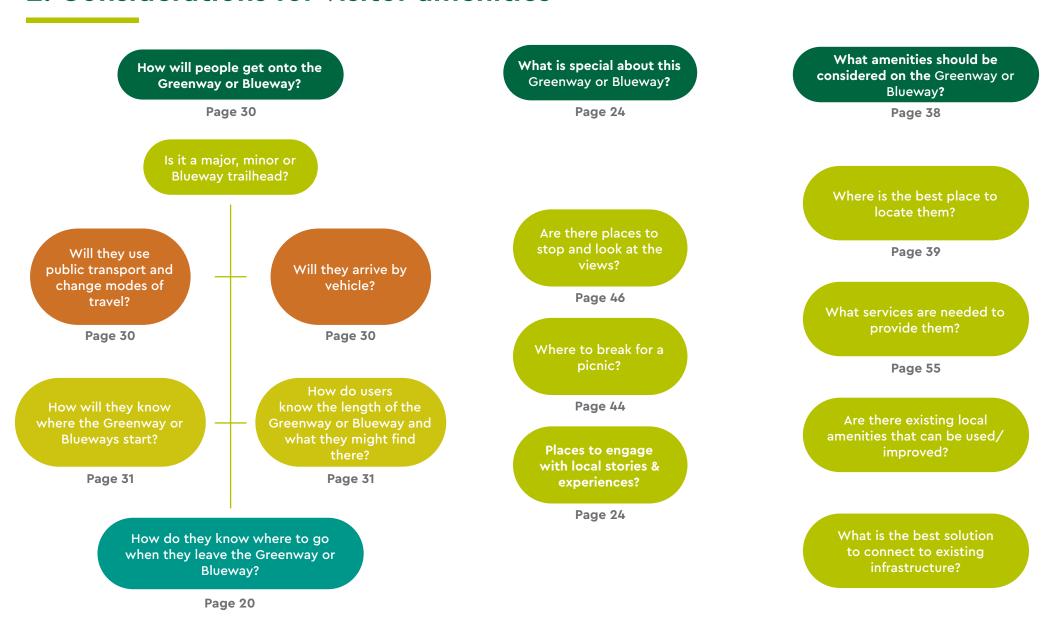
### 2. Considerations for visitor amenities

When considering the requirements for visitor amenities, it is important to bear in mind a few questions to help plan out the type of amenities that will be required. For reference, the following pages outlines some of the questions that should be considered. It is important to think about the context and type of landscape in which the routes or trails will be situated, the types of users to consider, how users will plan their journeys and how to get onto the route or trail once at the trailhead. Consideration should also be made on what





### 2. Considerations for visitor amenities





### 3. Best practice examples

### 3.10 What is the location and landscape context?

The context of where the Greenway or Blueway goes through will set the look and feel of what should be considered in terms of visitor amenities. Some Greenways and Blueways will cover more than one landscape type.

The aim will be to introduce amenities where possible to enhance the visitor experience, in locations convenient for the users. To respect and celebrate the landscape, locating them where there is ease of access to services and infrastructure. Also to design amenities so that they are part of the surrounding landscape, and encourage sustainability.





#### How to use this toolkit

This toolkit sets out best practice exemplars of facilities and also highlights in which context they may be best suited. Above is an example of how to follow the context guidance.









**Upland & bog** 

Lowland & rural

Waterways & coastal

**Urban edges** 



### 3.10 What is the context?

The context of the Greenway or Blueway can be defined as below:



#### **Forest**

- Dense tree cover over a significant area.
- Rich biodiversity of plants and animals.
- · Distinct canopy formed by the upper branches of trees.
- Unique sound scape with bird calls and rustling leaves.
- Under story layer of smaller trees and shrubs.
- · Presence of organic matter on the forest floor.
- · Ecosystem services including climate regulation and water cycle maintenance.



#### **Upland & bog**

#### Upland

- Higher elevation compared to surrounding areas.
- · Drier soil conditions with good drainage.
- Typically characterized by trees such as conifers or hardwoods.
- Often exhibits slopes or hills.
- · May have rocky terrain or exposed bedrock.
- Upland blanket bog isn't always necessarily drier soil conditions with good drainage. Refer below.

#### Bog

- Wetland area.
- Waterlogged and acidic soil with poor drainage.
- · Dominated by peat moss and other bog-specific vegetation like sphagnum moss and carnivorous plants.
- · Often surrounded by wetlands and characterized by a lack of trees or presence of stunted, water-adapted
- · Supports specialised wildlife such as amphibians, waterfowl, and insecteating species.



#### Lowland & rural

- Open and expansive landscapes with a lower population density.
- · Presence of agricultural activities such as crop fields, pastures, or livestock farming.
- · Scattered farmhouses, barns, or agricultural infrastructure.
- Less developed infrastructure compared to urban areas, with fewer buildings and roads.
- Presence of rivers, streams, or wetlands.
- · Common vegetation includes grasslands, marshes, or floodplain forests.



#### Waterways & coastal

- · Coastal locations: attract visitors to sheltered waters i.e. not the force of the ocean.
- · Inland waterways: new discoveries and perspectives from calm water.
- Banks or shores edges of the waterway may be sloping or lined with vegetation.
- Presence of aquatic life with aquatic plants, fish, insects, or other organisms that inhabit the water.
- · Proximity to bridges, dams, or boats.



#### **Urban edges**

- Higher population density and a concentration of buildings.
- · Developed infrastructure, including roads, bridges, and transportation networks.
- · Commercial areas with businesses. shops, and restaurants.
- Presence of amenities such as schools, hospitals, and recreational facilities.
- Urban parks, squares, or public spaces.
- Street lights and signs, traffic signals, and a well-defined street arid.



### 3.11 Who will be using the Greenway or Blueway?

#### Visitors and local people using the Greenway or Blueway for

- Walking
- Running
- Cycling
- Paddling

#### Users can include

- Individuals
- Family groups of all abilities
- Peer groups

#### Who want to

- · Explore what an area has to offer
- · Exercise in the fresh air
- · Commute from one place to
- · Spend time enjoying the outdoors

#### They can arrive

- · On foot
- · On a bike
- By public transport
- By car
- · By coach



#### On-water activities

Long Distance / Local

Blueways provide wonderful opportunities for people to enjoy on water activities such as canoeing, kayaking and paddle-boarding at their own pace and under their own steam. Aimed at the novice participant - the low or no-skilled 'dabbler' - users can comprise enthusiastic individuals, groups and families seeking light-hearted fun. For those holidaying in the area, such outdoor activities are an important element of their stay. Given the inherent dangers posed by water bodies, guided use under the watchful eye of a qualified activity provider is a must, and consideration of this requirement needs to be taken into account when making provision for Blueway users engaging in activity on the water.

#### Cyclists

Leisure, Visitor, Commuter

Leisure cyclists can vary greatly in age, skill and fitness, and can include families. They generally live nearby / in the surrounding area and favour looped itineraries, regular rest areas and opportunities to get food and drink. Visiting cyclists can also vary in ability, usually come heavily equipped and often travel in groups. They will be seeking out attractive areas, scenic rides, and interesting features and, ideally, routes and trails that link places to visit and stay with attractions to experience. Integration with public transport is a key consideration. Commuter cyclists can include those travelling between settlements, places of work, and schools and require safe, direct and well-surfaced routes and trails.

For people with limited mobility, getting access to the outdoors can be challenging. Many routes and trails aren't suitable for people using mobility assistance devices. Some routes may be too narrow, too steep or uneven or may be punctuated by barriers or other obstacles. It will be important to take an inclusive approach, and be mindful of their needs and challenges. Consider how people with different abilities can enjoy active time on Greenways and Blueways.



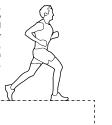
#### Recreational walkers Local / Long distance

Whether walking for health benefits, wanting to spend time in the outdoors or meeting up with friends or fellow walkers, safe and continuous access from key settlements with places to rest, take shelter or just take in the view along the way are key requirements for this user group. Walking is also a universal tourist activity, encompassing the full spectrum from intensive long-distance trail-walks and dedicated walking holidays to short unplanned walks at destinations. For the long-distance walker, accommodation facilities, amenities and attractions along the way are key considerations as is integration with public transport.



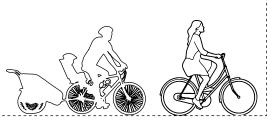
#### Runners

Greenways, particularly those in a safe off road environment or on the edge of urban areas. make it very easy and safe for anyone to get out for a run. Whether for a short, leisurely jog, a longer distance training session either solo or as part of a running club. The routes should accommodate the needs of guides as they accompany visually impaired runners in a safe, convenient. Well-surfaced tracks, along with water points, are a key requirement.



#### **Families**

Not all young children will have the stamina for a long walk, and not all parents will either. Greenways that loop back to where they start from with route lengths clearly indicated will help families know what they are getting into. A usable toilet with baby changing tables will provide peace of mind. Paths wide enough for pushchairs and family groups, going in both directions, with pull-offs where the path widens will enable other users to pass by family groups. Integrating play into the pathway in the form of nature-themed play pockets add interest for children, encouraging them to keep moving forward along the route.





### 3.12 Access for all

Ireland is renowned for its natural beauty, incredible landscapes, and breathtaking coastlines. Given the nature and locations of the Irish landscape, which is often rugged and remote, accessing the great outdoors and engaging in outdoor pursuits can present many challenges, particularly for individuals with additional access needs.

The Irish Wheelchair Association in conjunction with Sport Ireland have developed the concept of designing and delivering outdoor access guidelines. These could be used by various organisations, that provide and manage facilities within the great outdoors.

The Great Outdoors - A Guide for Accessibility & Accessible Outdoor Places Design Guidelines documents aim to provide organisations and land managers with relevant guidance and information relating to accessible design, including, in some instances, the provision of on-site supports that can be provided in order to make their specific environments more available and accessible for individuals with additional access needs. The guides can also act as a support for future service planning and in many instances can combine with an annual service plan on improving accessibility within the outdoor environment. By following these guidelines it is anticipated that there will be a significant increase in the opportunities for individuals with additional access needs who wish to become involved and active in outdoor locations and activities. It is important to consider the needs and preferences of people with additional access needs and consult with these user groups where changes are being proposed.

Additionally, technologies like NaviLens codes, which aid visually impaired people who have difficulty using traditional signage, should be considered within signage and mapping. The capabilities of this code allow users to interact more easily and be accessible with their environment.



NaviLens code for visually impaired users who have difficuty using traditional signage Image source: https://www.navilens.com/en/















### 3.12 Access for all

What are the key considerations when developing visitor amenities for all abilities?

Please refer to 'Great Outdoors - A guide for accessibility' document for more detail.

#### Information & communication

Please refer to page 29 in 'Great Outdoors - A guide for accessibility' document for more detail.

- Online information (pre-arrival)
- Use of symbols
- Signage and information boards
- Wayfinding
- Information to allow for pre-planning of a journey

#### Greenways

Please refer to page 45 in 'Great Outdoors - A guide for accessibility' document for more detail.

- Classification and grading of trails
- Route information
- Entrance and exit points
- Obstacles and barriers
- On-site equipment and support
- Accessible picnic areas
- Accessible playground areas

#### **Blueways**

Please refer to page 81 in 'Great Outdoors - A guide for accessibility' document for more detail.

- Obstacles and barriers
- Entrance and exit points
- Access routes to riverbanks, Jetties and walkways
- Accessible fishing stands
- Access to water-based activities
- On-site equipment and supports
- Safety risk management waterbased activities

#### **Built environment**

Please refer to page 101 in 'Great Outdoors - A guide for accessibility' document for more detail.

- Accessible parking
- Pavements, crossings and approach
- External ramps
- Access to and circulation within a building
- Access to & use of facilities
- Public toilet/WC accessible independent use provision
- Public toilet/WC accessible assisted use provision



### 3.13 Branding; making it clear as a Greenway or Blueway

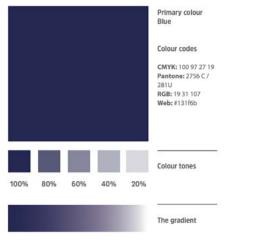
A key aspect of improving the visitor experience is to reinforce a consistent brand, making it clear that it's a Greenway or Blueway. There have been brand guidelines produced for both the Greenways and Blueways which give more detailed guidance than this document. The following pages provide an overview of the branding and branded signage, developers should refer to the guidelines referenced below for further detailed guidance. The guidelines, should be used on all routes and trails that meet the definition of accredited Greenway & Blueway.

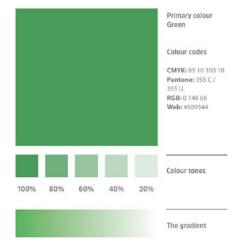
Greenway & Blueway developers should ensure that the Greenway or Blueway logo complies with design and brand guidelines and should advise suppliers for signage (e.g. on-road directional, trailhead welcome signs, Greenway map boards) and communications (e.g. website, social media, printed collateral, interpretation). For more information on the Blueways signage and branding please visit: <a href="here">here</a> for more info. And for Greenways visit: <a href="here">here</a>

Consistency in the use of the Greenway and Blueway brand will maximise visibility and make it easier for potential users to find the trailhead. This applies to online channels (before they visit the area) and in-destination (after they arrive). It will also help to raise awareness internationally of the entire offering in Ireland and support the achievement of objectives set out in the Greenways and Blueways strategies.

The Greenway logo has been designed to work alongside the Blueway logo reflecting their similarities while also emphasising their differences. Counties that offer both Greenways and Blueways can enjoy the benefits of both. Blueways are approved and branded as multiactivity recreational trails and sites. Based on, and closely linked with the water, together with providers facilitating access to activities and experiences.

#### Colour





#### Typography





#### **Key principles**

When it comes to wayfinding and signage on Greenway and Blueways, there are several key principles to consider. These principles aim to enhance user experience, provide clear navigation, and ensure safety. There is clear guidance in the branding and signage guidelines for the Blueways - here and Greenways - here, which will be the default signage for the types to use. There may be scope in some locations to use mapping, route information and story telling, which is more in keeping with the landscape and locality.

Some important principles to keep in mind:

- Clear and consistent signage: use clear, legible, and consistent signage design.
- Trailhead information: provide comprehensive information at trailheads. including maps, distances, safety guidelines and other activities and attractions in the local area.
- Directional signage: place signs at decision points to indicate directions and distances to destinations.
- Distance markers: these can be placed along the route to help users track distance and progress.
- Route markers: use visible markers to guide users along the designated path.
- Universal symbols: using universally recognised symbols on signs ensures all users can determine their meaning.
- Multilingual signage: is there a need to show multiple languages on signs? Irish and English should always be shown with the same prominence, but are other languages required or can this be provided digitally?
- Safety and emergency information: safety guidelines and emergency contact numbers.
- Tactile signage: tactile signs allows access for all information.
- Technologies like NaviLens codes, which aid visually impaired people who have difficulty using traditional signage, should be considered within signage and mapping. The capabilities of this code allow users to interact more easily and be accessible with their environment.
- Regular maintenance: signage maintenance may be required for visibility and durability. Who will need to do this?

For more information on the Blueways signage and branding please visit: here for more info. And for Greenways visit: here

Please refer to Section 3 in Greenways and Cycle Routes Ancillary Infrastructure Guidelines here document for more detail.









#### **User journey**

The user journey doesn't start on a trail, it starts before the user has arrived at the Greenway or Blueway. It's therefore significant to the user experience that the signage extends beyond the site boundaries to direct people to the Greenway or Blueway site from key transport hubs, and junctions. Below is a diagram that sets out key stepping stones for signage along the user journey.









#### Iconography

These icons should be used for Greenway and Blueway maps and directional signage. The icons represent the facilities available on the Greenways and Blueways. Icons act as a visual aid and should be used to supplement text legends. The use of icons helps to quickly show the visitor amenities available and their locations, which will aid pre-planning a journey.























Wheelchair























Picnic Area











Train Station



Arrival and gateway signs announce the entrance to the trails. The arrival sign or infrastructure will provide reassurance to the user that they are in the right place.

- The sign should be clearly visible to passing traffic.
- Not block visibility to the entrance of the site / car park.
- Never be used in place of a tourist directional sign / directional sign.

These signs should be placed at the gateways to the Greenway and Blueway sites to mark the entrance. The signs should only be placed at the starting points of trails and not at every access point. Signs should be placed as close to the entrance point as possible and be clearly visible.

#### Forest

Upland & bog

Lowland & rural

Waterways & coastal

Urban edges

#### **Arrival & gateways**













#### Forest

Upland & bog

Lowland & rural

Waterways & coastal

Urban edges

#### **Mapping**

Mapping helps users understand the Greenway or Blueway layout and plan their route. For many users, the journey will not start at the trailhead, so it is important to provide online and printed material for mapping. This will allow users to gauge where they should be arriving and also gives the visitor an idea as to the amenities in the locality, how far certain infrastructure is in comparison to their trail start and distances between each. This gives users information on how to prepare for the trail, and whether they may need to pack additional food and drink if service providers are located further than their ability accommodates.

Maps provide a clear overview of the network, including junctions, intersections, and alternative routes. Users can refer to the map to determine their location, follow the designated paths, and make informed decisions about their journey.

They should indicate important landmarks, points of interest, and amenities along the trail, highlighting rest areas, water sources, viewpoints and picnic spots. Maps should also include the location of nearby train stations/ bus stops (transport hubs) and electric vehicle charging points, or other features that users may find useful during their exploration. By including this information, trail maps help users identify destinations and make informed choices about where to stop or take breaks.

In addition, trail maps can be used to promote awareness of accessibility features and facilities available along the trail, such as wheelchair-accessible paths, accessible toilets, or sensory experiences for all abilities.

The trailhead information panel should depict both the water-based trails, together with the land-based trails, to show the multi-activity nature of the Blueway; paddle, pedal, walk. Trail grading, description of trail grading and emergency contact details should also be included.

Some land-based trails are closely associated with the waterway, but not directly alongside. It may be impractical to display full details of such land-based trails on Blueway trailhead information panels, so these might be represented simply with an icon, or by an exploded map, or QR code link.

An example might be a way-marked long distance trail which commences at a Blueway trailhead but which runs through the countryside.







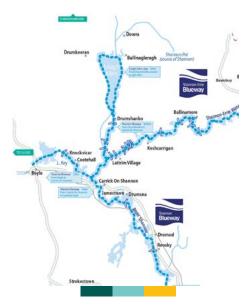




Map showing blueway trails Image source: discovertheshannon.com









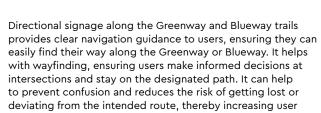


#### Directional & en-route signage









Forest
Upland & bog
Lowland & rural

Urban edges

Waterways & coastal

#### Activity signage - on water

Directional markers deliver a clear and highly visual message. Warning signs are used to deliver information to the users to warn them on surrounding risks. This could include rapid ahead information etc.





Blueways brand & signage guidelines Image source: Placemarque

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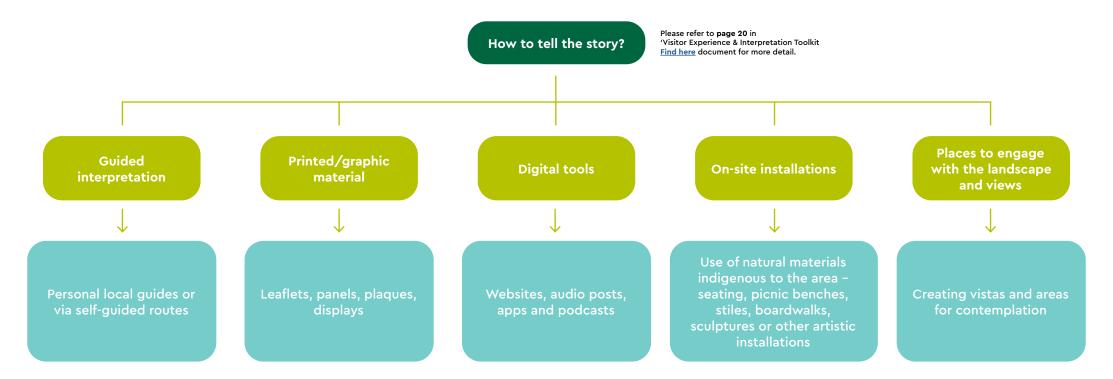
### What is special about the **Greenway or Blueway?**

Greenways and Blueways are not simply a means of getting from A to B, they are an experience in and of themselves. They also allow users to experience the communities linked to the Greenway and Blueway, and should tell the stories of the people and places through which they pass.

Interpretation enables that storytelling. It is a communication process that helps us to share our stories with others. Information presents facts, while interpretation unveils the local stories that are unique about the particular landscape.

In planning your Greenway or Blueway, think about the kind of interpretation that suits your local area. Considering the stories you want to interpret, the local geography and climate. Ask yourself 'What makes our Greenway different?' and 'What is the best way for us to tell our stories?'.

While budget will help you identify which of these tools you can afford, an interpretation plan will ensure your money is wisely spent. Your interpretation plan should address issues such as target markets. Who is the Greenway for? How will the needs and interests of your target markets differ between locals, domestic tourists and international tourists?





#### What stories do you want to tell?

- What features, qualities and stories make your Greenway or Blueway special and memorable?
- Are there specific elements that will be of more interest to international visitors than to locals or domestic visitors? If so, what is the best way to highlight them?
- Who are the historical and cultural characters associated with the local area and how can you bring them to life?

#### Education

- There should be emphasis on education in supporting and promoting nature and biodiversity which should appeal to all ages and user groups.
- There is an opportunity for Greenways and Blueways to be attractive and alternative educational opportunity for school tours, outings, etc. if education is given significance in the signage and installations. It could also support local communities and other user groups such as disability groups and their carers engaging in these activities.

#### Creating a sense of place

- How can you create a sense of place around your Greenway or Blueway to make it memorable and
- Does your Greenway feature built and/or natural heritage assets that could become iconic photo opportunities?
- How can you use your Greenway to signpost other local attractions and activities that will add value to the overall experience for users?

#### Animating your Greenway or Blueway

- Can you schedule events at different times of year to animate the Greenway for locals as well as for visitors? These could be run exclusively by the developer, by third parties or a combination of both
- Do seasonal variations of changing landscapes or changing wildlife offer opportunities that can be maximised with pop-up or temporary interpretation.

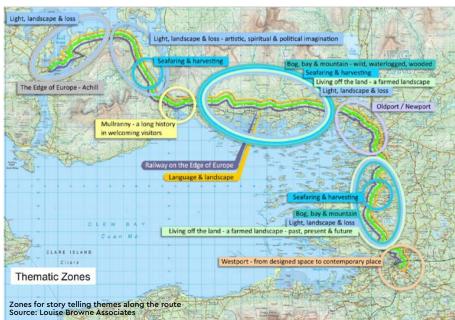
#### Rule of thumb for all forms of interpretation

- Keep the language simple, informal, short and sweet
- Use more images and less text

#### Further inspiration on animation and identifying and telling your story through interpretation

- Bored of Boards. The Heritage Council
- Ireland's Ancient East Storytelling Toolkit. Fáilte Ireland
- Interpretation Toolkit. Woodland Trust (UK)
- Development Guidelines for Tourism Destination Towns. Fáilte Ireland







Forest

Upland & bog

Lowland & rural

Waterways & coastal

**Urban edges** 

#### Interpretation & educational signage

Interpretation signage and displays placed in natural, historical, or cultural environments help visitors understand and appreciate the significance of the location and are one part in telling the story. Through use of text, images, illustrations, maps, and interactive elements, interpretation information can be an educational and engaging way to tell the story for all users. This type of signage helps to enhance the visitor's experience, to promote environmental or cultural awareness, and to encourage stewardship and conservation of the site.

To maximise climate resilience within the Greenway and Blueways, additional interpretation will be required to reinforce restriction boundaries that work to minimise the disruption of, preserve and enhance rare habitats such as upland bog.









Please refer to Section 4 in 'Greenways and Cycle Routes Ancillary Infrastructure Guidelines' Find here document for more detail.

















Forest

Upland & bog

Lowland & rural

Waterways & coastal

Urban edges

#### **Public art**

Public art and interpretation infrastructure can depict historical events, significant figures, unique ecological themes or cultural traditions that are relevant to the location. Through sculpture, murals, or installations, the artwork visually communicates the rich history of the place.

It can represent the local community's values, traditions, or aspirations, acting as a symbol that reflects the spirit of the area and the people who live there. Used in urban settings it can transform public spaces, making them more vibrant and inviting, creating a real sense of place.





















#### Interpretation & educational infrastructure

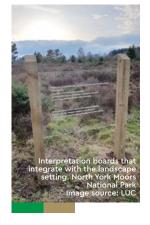
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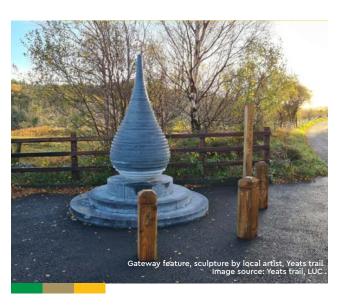


Upland & bog



Waterways & coastal

**Urban edges** 







### 3.16 Arrival and access

#### **Key principles**

- All Greenway and Blueway arrival provisions should be considered in accordance with TII's 'Rural Cycleway Design (Offline and Greenway)' minimum requirements.
- Access should be available for all authorised users, including multi-user and all-ability access.
- Access points should be inviting and easy to use. Consider gateway features, signage and interpretation at major and minor trailheads.
- Utilise a hierarchy of gateway features.
- Access control may be required to prevent unauthorised use.



Car park on the Grand Canal Greenway at Cappincur

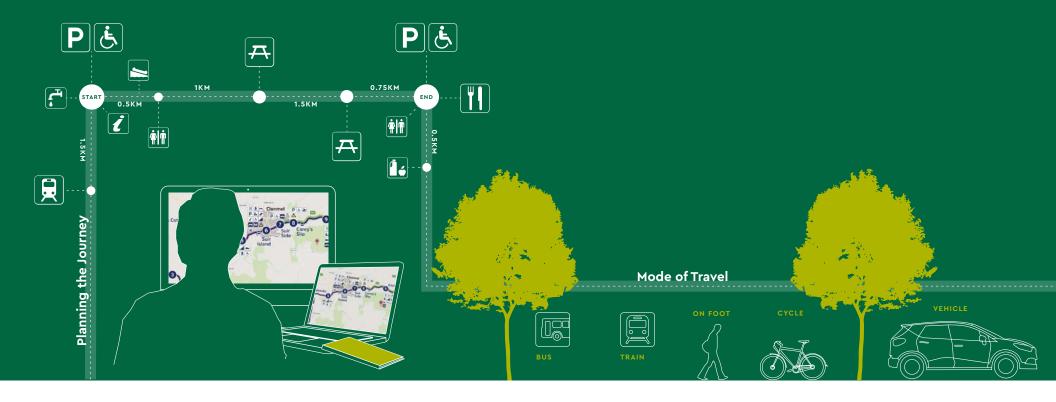


Trail entrance from Connemara Greenway car park



### 3.16 Arrival and access

How will people get onto the Greenway or Blueway?



#### Where does the journey start?

For most people the journey starts by planning ahead. This initial information is mainly sourced before they have even set off on the journey. For the one off user the extent of research will be greater than perhaps a familiar user however the majority still need to understand what trailhead they want to go to, how to get there and where to go once there. This information should all be accessed through online systems, or through printed material.

#### What are the modes of transport?

The information needed will vary depending on people's method of transport. For those using public transport, route maps and timetables will be required. People who are driving to the trailhead will need to know parking availability.

Cyclists will want to know where the bike racks and bike hire are situated. It is also important to understand that most journeys may require multiple methods of transport. So the user journey should be considered from the point of origin all the way to the route, and the efficiency when changing mode of travel may affect their decisions to travel to the Greenway or Blueway.



### 3.16 Arrival and access



#### Where are the arrival points?

It is important to reinforce the identity of Greenway and Blueways with the use of a gateway sign at each arrival point, this will act as an identifier to the user. Considerations should be made to determine whether the access points are major or minor trailheads, gateway signage and amenities will be determined by their location designation.

- Other considerations will be controlled access
- Sustainable use of materials
- Sustainable water management
- Greenway or Blueway geometry

#### How to get onto the Greenway or Blueway?

In addition to a trailhead gateway there is a range of external directional and mapping signage that will be required to direct the user to their desired route or trail starting point, with the possibility to introduce mobile mapping. 'Heads up' mapping (rotated maps to display in direction of viewing, rather than 'north up' only) and pictograms give users a better understanding of their surroundings and make wayfinding information accessible.

#### What are the changes in modes of travel?

The range in modes of travel at Greenway and Blueway trailheads need to cater to the preferences and needs of different users while promoting active lifestyles, sustainable transportation, and inclusive access to nature.

At Greenway and Blueway trailheads, changes in modes of travel include increased popularity of cycling, canoeing/kayaking, paddle boarding, and the use of electric mobility devices. There is also the need to improve wheelchair accessibility which will facilitate multi-modal integration for seamless transitions between different modes of travel.



### 3.16 Arrival and access - major trailheads

#### Forest

Upland & bog

Lowland & rural

Waterways & coastal

Urban edges

#### Car parking





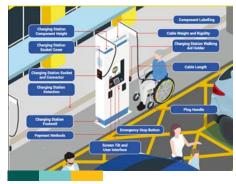






#### All abilities parking





Elements for Charging Station Design Image source: Electric Vehicle Charging Infrastructure – Universal Design Guidelines





#### Key considerations:

- Adequate provision of parking for cars, motorbikes and cycles.
- Provision should cater for all-ability access.
- Consideration of pedestrian circulation and access from local active travel routes.
- Integrate car parking into setting through green and blue infrastructure to support sustainable design, minimise visual impact and create a sense of arrival.
- EV charging stations should adhere to the 'ZEVI - Electric Vehicle Charging Infrastructure - Universal Design Guidelines' document referenced below.

Please refer to page 11 in 'Greenways and Cycle Routes Ancillary Infrastructure Guidelines' Find here document for more detail.

Please refer to 'ZEVI Electric Vehicle Charging Infrastructure - Universal Design Guidelines' Find here document for more detail.



### 3.16 Arrival and access - major trailheads

#### Forest Upland & bog Lowland & rural Waterways & coastal Urban edges

#### Electric vehicle (EV) charging

Key considerations:

- Infrastructure planning, including electrical capacity, connections, and compatibility with various EV charging standards.
- Parking spaces with sufficient size and appropriate layout to accommodate EV charging equipment
- Safety measures such as proper lighting, security cameras, and clear markings to enhance the security and visibility of EV charging stations.
- Integrating renewable energy sources like solar panels or wind turbines to power EV charging stations, promoting sustainability and reducing environmental impact.
- Consider as part of a wider understanding of the local EV charging network.
- Deployment of renewable technologies should be considered as they will provide lower maintenance costs, provide power to remote locations, etc.
- EV charging stations should adhere to the 'ZEVI Electric Vehicle Charging Infrastructure - Universal Design Guidelines' document referenced below.











### 3.16 Arrival and access - major trailheads

#### Trail start features

Key considerations:

- The design of Greenway or Blueway start features should be influenced by the locality in order to convey local distinctiveness.
- The scale and massing of the features should outwardly convey the hierarchy of the trailhead along the route.
- A clear idea on the functions of the trail start feature is required: sculpture, branding, shelter, controlling access, lighting.
- A multi-functional approach will minimise the potential for clutter and should be actively considered.
- Selection of appropriate materials, which are robust and create a sense of place.
- Trailhead features can be suitable for social media, marketing exposure, etc.





Forest Upland & bog Lowland & rural

Urban edges

Waterways & coastal











### 3.16 Arrival and access - minor trailheads

#### Forest Upland & bog Lowland & rural Waterways & coastal Urban edges

#### Trail start features















### 3.16 Arrival and access - Blueway trailheads

#### **Trail start features**











#### Water access



#### **Service providers**





Kev considerations (As well as major trailhead considerations):

Urban edges

Forest Upland & bog Lowland & rural

Waterways & coastal

- Greenway or Blueway start features to be designed to minimise impact on visual access to important open views and accentuate key viewpoints.
- Features to be sensitively located to minimise impact on views.
- Selection of materials which are robust and can withstand the coastal environment (as appropriate).

#### Water access:

- Activity providers are integral for facilitating access to activities and experiences.
- Appropriate access requirements should be determined through consultation with user groups and location of facilities.
- Design of access should be developed formally with an engineer and have due consideration of ecological and hydrological sensitivities.
- Selection of appropriate materials which are robust, non-slip and can withstand the coastal environment.





### **3.17 Facilities**

### What amenities should be considered for the **Greenway or Blueway?**

#### **Key principles**

- Ancillary facility provision should be considered in accordance with TII 'Rural Cycleway Design (Offline and Greenway)' minimum requirements.
- Seating should be provided at all appropriate nodal points where dwell time is being considered. This will include major trailheads and may include minor trailheads and rest
- Cycle storage and facilities including EV charging points should be considered at major trailheads. Formal and informal cycle parking should be considered at all nodal points including major and minor trailheads and rest areas.
- The design of cycle storage, seating, play areas and artwork should be influenced by the locality in order to convey local distinctiveness.
- Pocket recreation including play areas, outdoor gyms and camping facilities will be appropriate at major trailheads.
- There will be an opportunity to incorporate formal and natural play at urban edges where access opportunity is greatest.
- Consideration should be made for the safety of users and insurance requirements. This should be at the discretion and responsibility of the local authority, state landowner, or community group.
- Provision may be combined with artwork and other visitor amenities such as car parks, cafes and toilets to encourage longer periods of visitor interaction.
- At urban edges, seating may be utilised to encourage longer dwell time, such as outdoor eating. Materiality will be a key consideration to ensure suitability for purpose, robustness in areas where there will be increased use, and attractiveness to encourage interaction.
- Facilities need to include wash down areas for kayaks and canoes to prevent the spread of invasive species.

Please refer to Section 2 in 'Greenways and Cycle Routes Ancillary Infrastructure Guidelines' Find here document for more detail.

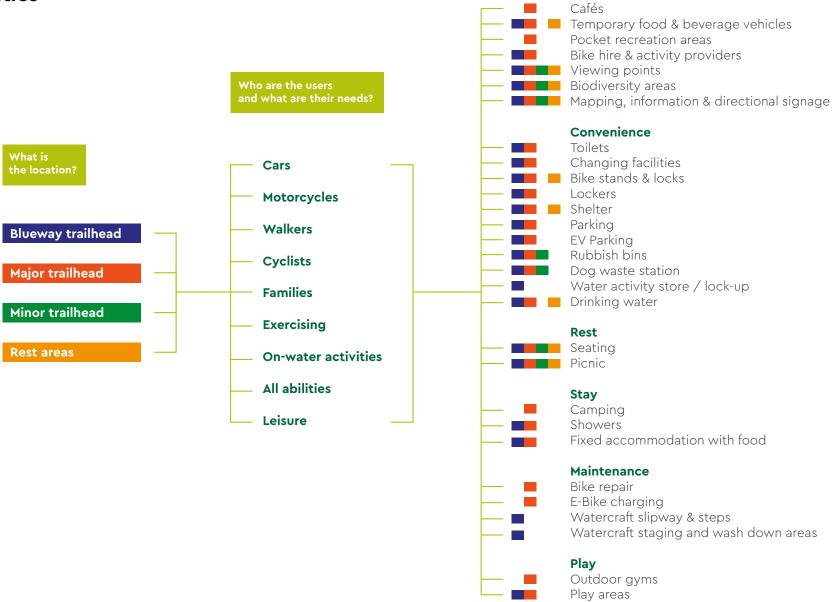






#### Which facilities should be considered?

**Destination** 





Play areas —

## 3.17 Facilities

Please refer to **Section 6.1** in 'Rural Cycleway Design (Offline & Greenway) – DN-GEO-03047' document for more detail.

Find here	
Type of facility	How often are facilities suggested?
Destination	Destination
Cafés —	— As per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
	Online cafes at major and minor trailheads will be market led, but shall be located every 20km if remote from urban areas.
	— Market led at minor trailheads, depending on competition locally.
Pocket recreation areas ——————	— At major trailheads, no maximum spacing suggested, market led.
Bike hire & activity providers —————	— Market led, depending on competition locally.
Viewing points —	— Dependent on identification of suitable viewing points.
	— Determined by location of trailheads or rest areas, no maximum spacing suggested.
Mapping, information & directional signage	— As required, depending on local wayfinding needs, but max. 5km spacing
	as per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
Convenience	Convenience
Toilets —	<ul> <li>At least at major trailheads, but every 15km if Greenway is remote from existing toilets facilities,</li> </ul>
	and as per Table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
Changing facilities ————————————————————————————————————	— At major trailheads, no maximum spacing suggested.
	— As per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
	— At major trailheads, no maximum spacing suggested.
Shelter	— Determined by location of trailheads or rest areas, but at least every 15km
	as per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
Parking —	— At major trailheads, no maximum spacing suggested.
EV Parking ————————————————————————————————————	— At major trailheads, no maximum spacing suggested.
Rubbish bins —	— Max. 15km spacing, as per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
Dog waste station —	<ul> <li>At major trailheads, no maximum spacing suggested.</li> <li>Determined by location of Blueway trailhead.</li> </ul>
Drinking water ————————————————————————————————————	— Max. 15km spacing, as per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
Rest	Rest
Seating ————————————————————————————————————	<ul> <li>As per seating requirements in table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.</li> </ul>
Picnic —	Max. 5km spacing, and as per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
Stay	Stay
Camping —	— At major trailheads, no maximum spacing suggested.
Showers	— At major trailheads, no maximum spacing suggested.
Fixed accommodation with food	Directional signage every 40km as per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
Maintenance	Maintenance
Bike repair	— Air pump max. 15km spacing, repair tools max. 40km spacing, as per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
E-Bike charging —	— Max. 15km spacing, as per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'.
	— Determined by location of Blueway trailhead.
Watercraft staging and wash down areas —	Determined by location of Blueway trailhead, water craft wash down required at every Blueway trailhead.
Play	Play - discretion of local authority, consideration should be made for the safety of users and insurance requirements
Out de ex eu me	At Majoratha illa orale and anno singuina superioral and superiora

At Major trailheads, no maximum spacing suggested. At Major trailheads, no maximum spacing suggested.



#### Purpose built cafés

Key considerations:

- The scale and massing of development should be sympathetic to the setting and local environment.
- Cafés should be designed with an enterprise and end-user in mind to ensure spaces are functional, viable and well designed.
- Cafés should be sited close to existing energy and water supply.
- The sharing of facilities should be encouraged - provision of toilets, changing facilities, external water supply, drinking water, etc.
- Rainwater harvesting should be explored to encourage sustainable water use.
- The inclusion of green roofs should be considered to integrate the structure into the environment and generate biodiversity benefits.
- Sustainable urban drainage systems and sustainable design incorporating renewable technologies shall be considered as part of the overall design scheme.
- External seating, cycle storage facilities and shelters should be considered as companion design features.

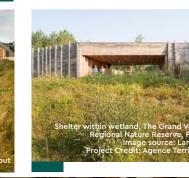
Please refer to Page 15 in Greenways and Cycle Routes Ancillary Infrastructure Guidelines' document for more detail.





Land End lookout -Surfacedesign, Inc - https://www.sdisf.com/lands-end-look

















#### Forest

- Upland & bog
- Lowland & rural
- Waterways & coastal
- Urban edges

#### Temporary food & beverage

Key considerations:

- Ensure that the location is accessible to vendors and customers. Consider road access and proximity to popular destinations or attractions.
- Evaluate the availability of basic facilities and infrastructure required for pop-up vendors, such as electricity, water supply, and waste management.
- Consultation with local authorities may be required to assess requirements and regulations or permits required for temporary food and beverage establishments. This may include health and safety permits, licensing, or permissions from local authorities.
- Assess the potential market demand in the remote area. Consider the preferences and needs of the local community, as well as any tourist or visitor numbers
- Rest areas could provide good areas for temporary food and beverage vendors as they will also provide seating.
- Emphasise sustainable practices in the dedicated locations, such as using eco-friendly packaging & minimising waste.
- Consideration of suitable seating and sheltered areas where temporary food and beverage providers will be located to accommodate change in weather.













Konfect Coffee Dock, Portumna Forest Park, Co Galway Image source: irelandscontentpool.com



Forest

Upland & bog

Lowland & rural

Waterways & coastal

Urban edges

#### Pocket recreation areas

Key considerations:

- Pocket recreation areas including bike tracks, climbing walls and outdoor gyms will be appropriate at major trailheads.
- The facilities should complement available recreational facilities within the local area, to ensure over provision is not an issue.
- The design and siting of equipment should be influenced by the locality in order to convey local distinctiveness.
- Materials should be robust and fit for active purpose. Consultation with the local community is advised to understand need.
- Consideration should be made for the safety of users and insurance requirements. This should be at the discretion and responsibility of the local authority, state landowner, or community group.
- Access for all is a key consideration.



Please refer to Page 15 in Greenways and Cycle Routes Ancillary Infrastructure Guidelines' document for more detail. Find here



Natural play equipment, Waibling Image source: Landzine

Project credit: Talauenpark, designed by RMP Stephan Lenzen Landschaftsarchitekten









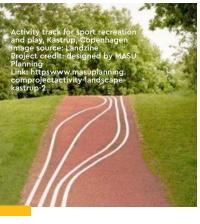
### Forest Upland & bog Lowland & rural Waterways & coastal Urban edges

#### Pocket recreation areas























#### Forest

Upland & bog

Lowland & rural

Waterways & coastal

Urban edges

#### **Rest areas**

Key considerations:

- As a minimum, rest areas should provide seating for 2 4 people and include two Sheffield stainless steel type bike stands.
- Where possible, a rest area should offer shelter from the rain.
- Rest areas located at a popular point on a route or an appropriate halfway or turning point might include a picnic area.
- Rest areas should ideally be located at, or adjacent to, visitor attractions.
- Some rest areas might include supporting facilities such as play or outdoor gym infrastructure.
- Rest areas should only include litter bins where there are resources and a management plan in place to maintain these.
- Leave no Trace principles should always apply regardless of bin facilities.
- Ideally, major rest areas (e.g. at a halfway point on a 50km Greenway) should have somewhere on or close to the route to get basic food and drink and toilet facilities (e.g. pub, shop or restaurant). If not obvious, signposting to such facilities from the route should be provided.
- Rest areas should ideally include a map of the route and a 'you are here' symbol.

Please refer to Page 12 in Greenways and Cycle Routes Ancillary Infrastructure Guidelines' document for more detail.















#### Play areas

Key considerations:

- The design of play areas should be influenced by the locality in order to convey local distinctiveness.
- The principles of natural play shall be applied in the concept and design of the play area.
- Incorporate formal play spaces where access opportunity is greatest.
- Consideration to maintaining sight lines for natural surveillance and siting of benches in proximity to equipment.
- Use of natural materials is advised within areas where the natural environment features prominently.
- Robustness of materials will be essential in areas of high population.
- Small 'play-on-the-way' features would provide a complement to rest areas to provide a range of on-route activities.
- Embracing an all-weather approach to play, incorporate shelter, water play and sensory elements.
- Siting for maintenance access will be a key consideration to ensure successful ongoing use.
- Consideration shall be given to incorporating SuDS into the overall design for the play area, where practical.





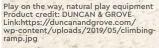


















Waterways & coastal **Urban edges** 















#### Forest

- Upland & bog
- Lowland & rural
- Waterways & coastal
- Urban edges

#### **View points**

Key considerations:

- Key view points should be accentuated through the siting of nodal points, seating and interpretation.
- Elements should be sensitively designed to ensure the view is not impaired by the proposed infrastructure.
- Interpretation should encourage greater understanding of the view and its importance.
- Consider how creating view points could encourage and invite visitors to explore further, could mapping show further routes or installations that can be seen from the point?





























The Look Out - Surface Design inc.



#### Forest

- Upland & bog
- Lowland & rural
- Waterways & coastal
- Urban edges

#### **Biodiversity areas**

Key considerations:

- Making space for nature and biodiversity is as important as making space for people and place.
- Minimising the impact of the development on nature and biodiversity is a key consideration.
- Use of natural materials is advised within areas where the natural environment features prominently.
- Use of board walks to minimise compaction of the ground where considered appropriate.
- Interpretation should encourage a greater understanding of the habitats and various species in the local area, and their importance.
- Use of natural motifs as placemaking features within interpretation.
- Place information at relevant locations on environmental designations (SAC, SPA, etc.)
- Protecting and supporting biodiversity and ecosystems by adopting nature based solutions approaches.















#### Forest

- Upland & bog
- Lowland & rural
- Waterways & coastal
- Urban edges

#### Toilets, changing & shower facilities

Key Considerations:

- The sharing of facilities should be encouraged (using any existing building, facilities and existing infrastructure) provision of toilets, changing facilities, external water supply, drinking water, etc.
- Rainwater harvesting should be explored to encourage sustainable water use for cleaning purposes.
- Provision of external water tap is recommended for drinking.
- Toilets and water facilities with access to wastewater facilities is the suggested, however, in remote areas compost toilets may be the best solution.

Please refer to Page 18 in Greenways and Cycle Routes Ancillary Infrastructure Guidelines' document for more detail.





















#### Forest

- Upland & bog
- Lowland & rural
- Waterways & coastal
- Urban edges

#### Camping

#### Key Considerations:

- Camping facilities are likely to be appropriate at major trailheads and may be provided by local land owners close to the trailhead.
- Camp facilities should ideally cater for a range of users - tents, camper vans and motorhomes.
- Camp facilities should be sited close to existing energy and water supply.
- Deployment of renewable technologies should be considered as they will provide lower maintenance costs, provide power to remote locations, etc.









#### Clean water access













#### Bike stands & locks

Key considerations:

- The design of bike stands should be influenced by the locality in order to convey local distinctiveness and should consider additional space required by 3 wheeled and all ability bikes.
- Accessible cycle parking should provide sufficient room to allow an additional access needs cyclist to enter, turn, and leave a parking bay without dismounting.
- Bike parking should be considered at all nodal points including major and minor trailheads and rest areas.
- Robustness of materials will be essential in areas of high population.
- Facilities including E-Charging points, bike repair stations and bike hire should be considered at major trailheads.
- Bike hire locations should be actively advertised on leaflets and signposted from the trailhead.

Please refer to Pages 13 - 15 in 'Greenways and Cycle Routes Ancillary Infrastructure Guidelines' document for more detail. Find here





#### Bike hire



#### **Bike repair stations**



#### E-Bike charging

Urban edges

Forest Upland & bog Lowland & rural

SMARTPOLE - E-Bike charging station Image source: https://www.behance. net/gallery/55405903/SMARTPOLE-E-Bike-charging-station

Waterways & coastal











Key considerations:

#### Shelter

- Secure cycle storage should be considered at major trailheads.
- Bike storage should be integrated into the setting using green and blue infrastructure.
- Shelters should be designed in to all nodal spaces to encourage an all-weather approach.
- The design of shelters should be influenced by the locality in order to convey local distinctiveness.
- Bespoke designs with sculptural qualities should be considered at high impact sites.
- A hierarchy of shelter styles is recommended which are appropriate to the setting and scale of the space.
- External seating and bike storage facilities should be considered as companion design features.

Please refer to Pages 13 - 15 in 'Greenways and Cycle Routes Ancillary Infrastructure Guidelines' document for more detail.

#### Secure bike storage



















Waterways & coastal

Forest Upland & bog Lowland & rural

Urban edges









#### Forest

- Upland & bog
- Lowland & rural
- Waterways & coastal
- Urban edges

#### **Rubbish bins**

Key considerations:

- Waste disposal located at major and minor trailheads only.
- The 'Leave No Trace' principles apply to all parts of the Greenway and Blueway, and should be encouraged in every instance, regardless of bin provision.
- Where possible, rubbish bins should be grouped together to minimise impact on wider landscape and appropriately located to enable ease of collection.
- Waste separation is imperative at all bin locations and should be consulted on with the local authority.
- Improving the appearance of bin storage must be actively considered within all areas, but particularly in architecturally sensitive or natural environments.



#### Dog waste stations













#### Forest

- Upland & bog
- Lowland & rural
- Waterways & coastal
- Urban edges

#### Seating

#### Key considerations:

- The design of seating should be influenced by the locality in order to convey local distinctiveness.
- Materials should be robust and fit for purpose, whilst also reflecting the setting.
- Incorporating a range of seating styles, with back and arm rests, will be important to meet the needs of all users.
- Encouraging picnic benches which are wheelchair accessible will encourage access for all.
- Integrating seating opportunities within other facilities, such as shelters or boundary treatments will minimise clutter.
- Integrating art and sculptural qualities into bespoke seating designs will help to convey a sense of place and create something truly unique.

Please refer to Pages 13 in 'Greenways and Cycle Routes Ancillary Infrastructure Guidelines' document for more detail. Find here

















#### Picnic benches















#### Biosecurity 'wash-down' facilities

Key considerations:

Blueways users should be provided with access to high quality and well-maintained cleaning facilities and equipment. Such systems should be installed to support the implementation of Check-Clean-Dry protocol. Cleaning facilities do not always need to be elaborate or expensive, but they should be appropriate to the task for which they are intended. Please refer to **biodiversityireland.ie** for further information.

- Drainage is the most critical consideration for an effective and biosecure wash-down facility.
- The availability of drainage will dictate if 'Check and Clean' is encouraged to be performed by 'Blueways users' when arriving at or leaving the site.
- If drainage that isolates waste water from flowing [directly] back to the water body is not available, then cleaning should only be applied when users are leaving the site and wash-down on arrival should be prohibited.
- If effective drainage is available, then biosecurity can be applied to movements both on and off of the site.
- A clean heated water connection is the most favourable option for Blueways biosecurity; however, this may not always be feasible.

Please refer to Pages 15 in 'Blueways Developer Biosecurity Summary' document here for more detail.







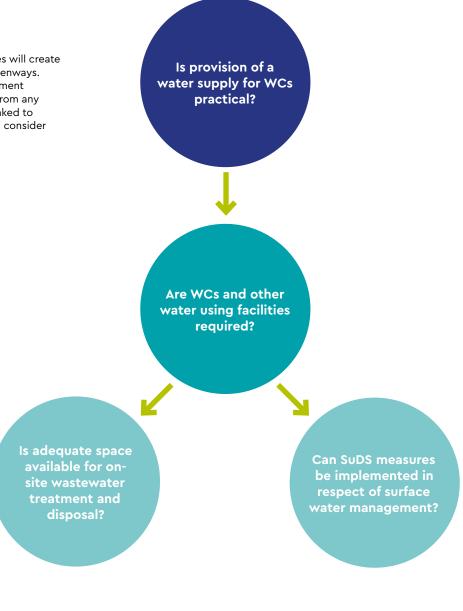


# 3.18 Waste and water management

### **Key principles**

- Waste collection and wastewater management should aid the design of climate-resilient landscapes.
- 'Leave No Trace' principles should be used at all Greenway and Blueway locations and routes.
- Waste disposal located at major and minor trailheads
- Managing surface water run-off and contamination through formally designed Sustainable urban Drainage Systems (SuDS) appropriate to site specific ground conditions and constraints. This will be a key

- consideration at all trailheads and routes.
- The integration of water and green spaces will create attractive and biodiverse urban edge greenways.
- Protecting people and the urban environment from increased risk of flooding resulting from any surface treatments such as car parking linked to major trailheads. Car park designs should consider incorporating SuDS principles.



Is it feasible to provide waste bins?

Is there access for waste collection vehicles?

Will there be a scheduled waste collection service to empty any bins?



## 3.18 Waste and water management

Forest

Upland & bog

Lowland & rural

Waterways & coastal

Urban edges

#### **SuDS**

SuDS, or Sustainable urban Drainage Systems, are eco-friendly methods for managing surface water. They mimic natural drainage processes, reduce flooding, improving water quality, and promoting sustainable water management and support biodiversity. Techniques include permeable pavements, green roofs, rain gardens, swales, infiltration trenches, and detention basins. They help control run-off, enhance biodiversity, improve air quality, mitigate the urban heat island effect, and create visually appealing environments.



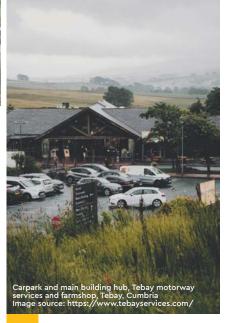






















#### **Key principles**

- Surfacing treatments should be considered in accordance with TII Rural Cycleway Design (Offline and Greenway) minimum requirements.
- Route geometry should be considered in accordance with TII Rural Cycleway Design (Offline and Greenway) minimum requirements.
- Construction specification should be fit for purpose and accommodate identified user groups, including multi-user access requirements.
- Soft landscape treatments should allow for optimum sightlines and natural surveillance, as well
  as responding to ecological opportunities, biodiversity enhancements and ongoing maintenance
  requirements.
- Designing and maintaining a minimum 1m wide verge either side of the route (grass or low plant growth) will ensure vegetation does not encroach and restrict access for users.
- Boundary treatments may also be a requirement alongside access control and land ownership considerations.
- Bound surfaces may be more appropriate for multi-user access at the urban edge.
- Soft landscape treatments including tree planting and species rich grass / wildflower mixes and
  use of local seed varieties may be appropriate at the urban edge at major and minor trailheads
  to create a sense of arrival and emphasise access to the route whilst providing visual screening /
  setting for visitor facilities including car parks and buildings.
- Lighting may be a consideration at urban edges, particularly in association with major trailheads. Ecological sensitivities and planning considerations will need to be reviewed.
- Boundaries at urban edges should make reference to local character, materiality, security and
  enclosure (e.g. livestock) requirements. Opportunities for fencing, walls and hedges should be
  explored to ensure appropriate treatment and scale, particularly in reference to neighbouring
  land owners.





#### Lighting

Key considerations:

- Consideration of glare, sky glow, light trespass and clutter in rural and coastal
- Minimise inappropriate or excessive use of light in ecologically and environmentally sensitive areas.
- Deployment of renewable technologies should be considered as they will provide lower maintenance costs, provide power to remote locations, etc.







#### **Surface treatments**

Key considerations:

- These considerations relate to off-route interventions. For materiality relating to the Greenway route itself, please refer to TII Publication 'Rural Cycleway Design (Offline & Greenway) DN-GEO-03047' -2022 - Find here
- Bound surfaces within urban edge settings should ideally drain to SuDS and incorporate a camber to drain surface water run-off.
- Rural and forest surface treatments should make use of locally sourced aggregate and retain permeability, avoiding bound surface treatments.
- Blueways and upland bog settings should incorporate surfaces that are raised above the water table such as timber or composite boardwalks, to reduce deterioration.









Forest Upland & bog Lowland & rural

Urban edges

Waterways & coastal











#### **Soft landscaping**

Key considerations:

- Minimise inappropriate species selection and due consideration for establishment and future management. Consider local species via seed saving, and native species.
- Tree lines and hedge planting may form a soft boundary between the Greenway and neighbouring land, providing a linear corridor for wildlife.
- Amenity spaces such as pocket parks and orchards will increase visitor interest.
- Fruiting species and pollinators provide wider environmental benefit to both wildlife and people.





















#### Sustainable drainage

Key considerations:

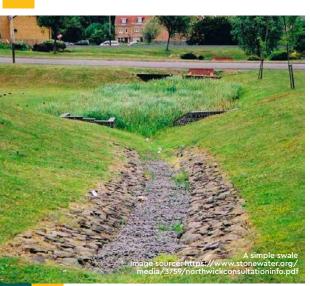
- Rain gardens, swales and attenuation ponds may be required to capture, move and store water in areas where there is a prevalence of hard standing such as at trailheads.
- When surfacing large areas of hard standing for vehicle use, consideration should be made to permeable paving and grass grids.
- Rural routes should utilise over-edge drainage wherever possible.
- Bridge crossings may be required where the Greenway intersects pre-existing watercourses and swales, this may provide opportunities to insert interpretation or animate the bridge, and could inform visitors about SuDS via interpretation signage.
- Blueways may require SuDS, particularly in areas where hard standing surfaces align with protected waterways. Consultation will be required with key stakeholders.













**Forest** Upland & bog Lowland & rural

Urban edges

Waterways & coastal









#### **Boundary treatments**

Key considerations:

- Walled boundaries should make use of sustainably sourced local stone to preserve and reinforce local landscape character.
- Timber post and rail or hedgerow should be used along the boundary of the Greenway in rural settings.
- Boundary treatment within rural settings to be agreed with adjacent landowners to determine if stock proof fencing or access is required.
- Raised decking in upland bog areas may only require a small raised edge as vertical fence posts will deteriorate quickly in wet conditions.
- Soft landscaping boundaries such as native hedgerow species should be favoured where possible for their multiple climate resilient benefits: air quality, carbon capture, flood mitigation and wildlife corridors.
- The creation of mammal crossings in fencing, for example, small holes opposite each other in fencing to allow for hedgehogs, etc. to use. This applies to chain link fencing, used near watercourses, etc.
- Modal boundaries may be required at stretches where safety may become an issue due to speed of travel. The Greenway may make use of floor markings or grass verge separation of cyclists and pedestrians.





Rural gateway, use of local stone Image source: https://www. transpenninetrail.org.uk/







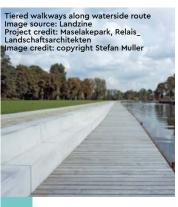




Forest

















# 4. Concept designs

Concept designs illustrated in the following pages provide an indication of how the key design principles set out within this document can be translated.

These are provided for:

- Major trailheads
- Blueway trailheads
- Rest areas

The designs are intended to guide, and should be considered aspirational rather than prescribe the content of designed nodal spaces, providing an approach to design and implementation. All facilities illustrated may not be required in every scenario, but are intended to provide an aspirational checklist of what could be included.

The 'Rural Cycleway Design (Offline & Greenway) DN-GEO-03047' document sets out minimum criteria for TII Greenways, and these concept plans highlight additional facilities that are suggested to improve the overall visitor experience.





## 4.0 Concept designs

#### Major trailhead



#### Key

- Destination
- Cafés
- Temporary food and beverage vehicles
- Recreation focus areas natural play and
- Bike hire
- Viewing points
- Convenience
- Toilets
- Changing facilities
- Bike stands / cycle parking
- Lockers
- Shelter
- Parking
- Rubbish bins
- Dog waste station
- Bike locks
- (3) Rest
- Seating
- Picnic
- Stay
- Camping
- Drinking water
- Showers
- Maintenance
- Bike repair
- E-Bike charging
- 6 Play
- Outdoor gyms
- Play Areas
- Pocket recreation
- Signage and mapping
- Arrival and gateway
- Information, directional and en-route distance marking signage to show routes and how far away destinations are
- Route mapping showing the route, nearby connections, and trail specific mapping
- Public art and interpretation



## 4.0 Concept designs

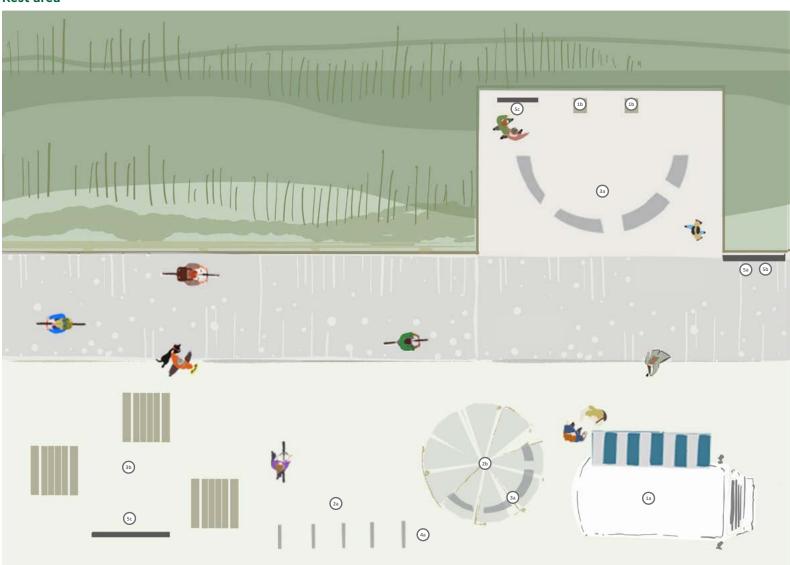
#### Blueway trailhead





## 4.0 Concept designs

#### **Rest area**



Key

- Destination
- 1a) Temporary food and beverage vehicles
- (1b) Viewing points
- 2 Convenience
- Bike stands
- 2b Shelter
- 3 Rest
- 3a Seating
- (3b) Picnic
- 4 Stay
- Drinking water
- Signage and mapping
- Information, directional and en-route distance marking signage to show routes and how far away destinations are
- Route mapping showing the route, nearby connections, and trail specific mapping
- Sc Public art and interpretation



The following decision making chart is aimed at developers, local authorities and consultants involved in the planning and design of Greenways and Blueways. The list of amenities and implementations should not be considered necessary in every scenario or location, and is not intended as a fully prescriptive solution.

This toolkit shall be used to guide the planning of new Greenways and Blueways, and also as an aid when looking for opportunities to improve a visitor experience and amenity for an existing Greenway or Blueway.





What should be considered?	How often are they suggested?		See page(s)			
		Major trailhead	Minor trailhead	Rest area	Blueway trailhead	
Destination						
Purpose built cafés	Directional signage every 15km Online cafés at major and minor trailheads will be market led, but every 20km if remote from urban areas					<u>Pg. 39</u>
Temporary food & beverage vehicles	Market led at minor trailheads, depending on competition locally					Pg. 40
Pocket recreation areas	At major trailheads, no maximum spacing suggested, market led					<u>Pg. 41</u>
Bike hire & activity providers	Bike hire & activity providers are ideally placed at major trailheads (hubs)					<u>Pg. 49</u>
Viewing points	Dependent on identification of suitable viewing points					<u>Pg. 45</u>
Biodiversity areas	At major trailheads, no maximum spacing suggested, market led					<u>Pg. 46</u>
Convenience						
Toilets	At least at major trailheads, but every 15km if Greenway is remote from existing toilets facilities					Pg. 47
Changing facilities	At major trailheads, no maximum spacing suggested					<u>Pg. 47</u>
Bike stands & locks	As per table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'					<u>Pg. 49</u>
Lockers	At major trailheads, no maximum spacing suggested					<u>Pg. 50</u>
Secure bike storage	At major trailheads, no maximum spacing suggested					<u>Pg. 50</u>
Shelter	Determined by location of trailheads or rest areas, but at least every 15km					<u>Pg. 50</u>



What should be considered?	How often are they suggested?		See page(s)			
		Major trailhead	Minor trailhead	Rest area	Blueway trailhead	
Convenience						
Parking	At major trailheads, no maximum spacing suggested					<u>Pg. 31</u>
EV charging	At major trailheads, no maximum spacing suggested					<u>Pg. 32</u>
Rubbish bins	Max. 15km spacing					<u>Pg. 51</u>
Dog waste stations	At major trailheads, no maximum spacing suggested					<u>Pg. 51</u>
Water activity store / lockup	Determined by location of Blueway trailhead					<u>Pg. 35</u>
Rest						
Seating	As per seating requirements in table 6.1 of 'Rural Cycleway Design (Offline and Greenway)'					Pg. 52
Picnic benches	Max. 5km spacing					<u>Pg. 52</u>
Stay						
Camping	At major trailheads, no maximum spacing suggested					Pg. 48
Drinking water	Max. 15km spacing					<u>Pg. 48</u>
Showers	At major trailheads, no maximum spacing suggested					<u>Pg. 47</u>
Fixed accommodation with food						



What should be considered?	How often are they suggested?		See page(s)			
		Major trailhead	Minor trailhead	Rest area	Blueway trailhead	
Maintenance						
Bike repair stations	Air pump max. 15km spacing, repair tools max. 40km spacing					Pg. 49
E-Bike charging / power supply	Max. 15km spacing					Pg. 49
Water craft slipway & steps	Determined by location of Blueway trailhead					Pg. 63
Water craft staging & wash down areas	Determined by location of Blueway trailhead, boat wash down required at every Blueway trailhead					<u>Pg. 53</u>
Waste and water management	Determined by location					<u>Pg. 54</u>
Play						
Outdoor gyms	At major trailheads, no maximum spacing suggested					<u>Pg. 42</u>
Play areas	At major trailheads, no maximum spacing suggested					<u>Pg. 44</u>
Branding						
Greenway						<u>Pg. 16</u>
Blueway						<u>Pg. 16</u>
Landscaping						
Lighting						<u>Pg. 57</u>
Public art - local story relevance						<u>Pg. 26</u>
Trail start features						<u>Pg. 33</u>
Surface treatments						<u>Pg. 57</u>
Soft landscaping - biodiversity & rewilding						<u>Pg. 58</u>
Sustainable drainage						<u>Pg. 59</u>
Boundary treatments						<u>Pg. 60</u>



What should be considered?	How often are they suggested?	,	See page(s)			
		Major trailhead	Minor trailhead	Rest area	Blueway trailhead	
Signage						
Gateways / arrival signage	At major and Blueway trailheads, no maximum spacing suggested					<u>Pg. 20</u>
Mapping	At major and Blueway trailheads, no maximum spacing suggested					<u>Pg. 21</u>
Directional, reinforcing & en-route signage	At all trailheads and trails, no maximum spacing but should be reinforced at orientation points					Pg. 22
Statutory information / rules	Determined by location					<u>Pg. 22</u>
Interpretation & educational signage	At all trailheads, no maximum spacing					<u>Pg. 23</u>





