

2 BACKGROUND TO THE PROPOSED DEVELOPMENT

2.1 Site Description

2.1.1 Site Location and Access

The Barrow Blueway project proposes to develop and enhance the existing navigation towpath along the banks of the Grand Canal Barrow Line and existing trackway along the River Barrow between Lowtown, Co. Kildare and St Mullins. Co., Carlow. The intention is to upgrade the existing towpath and track to a multi-use shared leisure route which measures approximately 115 kilometres in length and follows the route of the existing Barrow Waymarked Trail on the banks of the Grand Canal Barrow Line and River Barrow. The path has a proposed typical width in most areas of 2.5 metres, using the existing Barrow Waymarked route along the majority of the route. Short sections of local road are also used. The proposed Blueway route passes through the counties of Kildare, Laois and Carlow.

Table 2.1 Townlands Traversed by the Proposed Route: Co. Kildare

No.	Townland Name	No.	Townland Name
1	Lowtown (Connell By)	27	Passlands
2	Littletown	28	Monastervin
3	Grangeclare West	29	Skirteen
4	Ballyteige North	30	Clogheen (Ed Monastervin)
5	Ballyteige South	31	Ballyroe (Narragh and Reban West By)
6	Cloncumber	32	Castlereban North
7	Feighcullen	33	Castlereban South
8	Drumsru (Offaly East By)	34	Moatstown
9	Glennaree	35	Milltown (Narragh and Reban West By)
10	Cloncurry (Offaly East By)	36	Cardington
11	Drinnanstown North	37	Cardington Demesne
12	Kilmoney North	38	Townparks (Narragh and Reban West By)
13	Bonaghmore	39	Woodstock North
14	Rathangan Demesne	40	Woodstock South
15	Mullantine	41	Bleach
16	Mountprospect	42	Athy
17	Kiltaghan North	43	Coneyburrow (Narragh and Reban West By),
18	Kiltaghan South	44	Ardree
19	Clonmoyle West	45	Grangemellon
20	Ummeras More	46	Levitstown (Ed Grangemellon),
21	Mullaghroe Upper	47	Levitstown (Ed Dunmanoge)
22	Mullaghroe Lower	48	Maganey Lower
23	Coolatogher	49	Newtownpilsworth
24	Coolsickin (Quinsborough)	50	Jerusalem
25	Millfarm (Ed Monasterevin)		

No.	Townland Name	No.	Townland Name
26	Oldgrange (Offaly West By)		

Table 2.2 Townlands Traversed by the Proposed Route: Co. Laois

No.	Townland Name	No.	Townland Name
1	Killinure	9	Vicarstown (Dodd)
2	Ballintogher	10	Vicarstown (Crosby),
3	Killaglish	11	Derrybrock
4	Jamestown or Ballyteigeduff	12	Ballymanus
5	Kilbrackan	13	Bawn
6	Fisherstown	14	Crossneen
7	Courtwood	15	Ballyhide
8	Rosnamullane	16	Clogrenan

Table 2.3 Townlands Traversed by the Proposed Route: Co. Carlow

No.	Townland Name	No.	Townland Name
1	Newacre	19	Moneybeg
2	New Garden,	20	Kilree
3	Bestfield	21	Sliguff
4	Strawhall	22	Kilgraney
5	Carlow	23	Clomoney
6	Graigue	24	Ballyellin
7	Clogrenan	25	Tomdarragh
8	Killeeshal	26	Ballyteigelea
9	Ballinabrannagh	27	Borris
10	Ballygowan	28	Ballynagrane
11	Tomard upper	29	Cournellan
12	Tomard lower	30	Ballykeenan
13	Rathornan	31	Harristown
14	Rathvinden	32	Tinnahinch
15	Ballyknockan	33	Knockeen
16	Leighlinbridge	34	Carriglead
17	Rathellin	35	Bahana
18	Dunleckny	36	St Mullins.

The proposal will include tailored surface finishes, information, directional, and safety signage, and all other associated ancillary works. The route commences in Lowtown, County Kildare, passes through County Laois and finishes in St. Mullins, County Carlow. Approximately 47km of the route is in County Kildare, 16km in County Laois and 52km in County Carlow. The existing trail runs through the settlements of Rathangan, Monasterevin, Vicarstown, Athy, Carlow, Leighlinbridge, Bagenalstown, Goresbridge, Graiguenamanagh and St. Mullins.

2.1.2 Physical Characteristics of the Study Area

The waterway runs through a variety of landscape contexts, both urban and rural, and a variety of character areas.

Lowtown to Athy

The proposed Blueway runs from Lowtown in Co. Kildare, to St. Mullins in Co. Carlow. From Lowtown to Athy, Co. Kildare, the route is along the Grand Canal (Barrow Line) and it runs through a number of settlements, including Rathangan, Monasterevin, Vicarstown and Athy, but the landscape along the route is primarily that of rural agricultural areas. The landscape in the immediate vicinity of this area is relatively flat. The elevation ranges from 80-90 metres OD near Lowtown, to approximately 60 metres OD near Athy. The route runs through Counties Kildare and Laois, and through several Landscape Character Areas and Types as follows:

- Western Boglands (described as Medium Sensitivity) – Co. Kildare
- Southern Lowlands (described as Low Sensitivity) – Co. Kildare
- LCA 12 River Barrow (described as Special Sensitivity - Co. Kildare
- Lowland Agricultural Area (Co. Laois)

Athy to St. Mullins

In Athy, the Grand Canal (Barrow Line) meets the River Barrow (Barrow Navigation). From Athy to St Mullins, the landscape surrounding the river differs to that of the northern section. From Carlow south to St. Mullins in particular, the landscape is more undulating and the land surrounding the river corridor varies considerable in elevation, such as near Clashganny, Co. Carlow. The elevation ranges from approximately 60 metres OD near Athy, to approximately 10 metres OD at St Mullins, where the river lies in a steep sided valley.

South of Athy, the route runs through Counties Laois and Carlow, and through several Landscape Character Areas and Types as follows:

- Central Undulating Lands (described as Medium sensitivity) – Co. Laois
- Killeshin Hills (sensitivity varies)
- Central Lowlands (sensitivity varies)

The physical characteristics of the waterway are described in more detail in Chapter 9 Landscape.

2.2 Background to the proposed development & Justification

The Barrow River and Barrow Line of the Grand Canal are waterway corridors of National and International importance, and spectacular recreation and leisure amenities. Both the river and canal support a myriad of activities and sustain a rich and diverse built and natural heritage. The picturesque nature of the waterway combined with both canal and river navigation make it a unique experience. The existence of a towpath along the route of the navigation makes it an experience to be enjoyed by a wide diversity of recreational users.

The River Barrow was made navigable in the eighteenth century by the insertion of short sections of canal along its course. The 115 km long Barrow Way follows surviving towpaths and riverside roads from the hamlet of Lowtown to the monastic site and village of St. Mullins, along the canal and the meandering river.

It is designated as a National Waymarked Way by the National Trails Office of the Irish Sports Council and is managed by Waterways Ireland. The trail starts in Robertstown and follows the Barrow Line Canal, a branch of the Grand Canal, as far as Athy via the towns of Rathangan and Monasterevin. At Athy, the Way joins the River Barrow and follows its banks to St Mullins, taking in the towns of Carlow, Leighlinbridge, Muine

Bheag, Goresbridge, Borris and Graiguenamanagh. The Barrow Way connects with the Grand Canal Way at Robertstown. It also shares its route with that of the South Leinster Way between Borris and Graiguenamanagh.

Carlow and Kilkenny Local Authorities under the National Cycle Network (NCN) Programme provided a dedicated on road cycle route of approximately 35 km in length between Carlow and Kilkenny and this also links up with the Barrow Way.

Given the importance of these waterways, the existing National Waymarked Trail is not fit for purpose. It does not facilitate uninterrupted access for cyclists nor does it provide a suitable consistent surface for walkers of varying abilities and children. It is varied in both finish and dimensions and does not conform to any established or recognised standard of design and construction. In some locations, easy or safe passage is restricted due to poor surface quality and restricted visibility and proper safety signage at road interface areas and crossing points.

The proposed Blueway includes tailored surface finishes which will provide access for a wider range of users, along all sections of the trail, providing enhanced safety and accessibility in all weather conditions.

The proposed Blueway is supported by Carlow County Development Partnership, County Kildare Leader Partnership, the Department of Communications, Climate Action and Environment, The European Agricultural Fund for Rural Development and the Kilkenny Leadership Partnership.

This development would benefit local communities by providing a secure and safe environment for walkers and cyclists, leading to an increased opportunity for physical exercise. It would also provide a unique and novel experience for visitors to the area.

As part of Fáilte Irelands Tourism Product Development Strategy, a review of the Irish tourism product has shown that Ireland’s tourism industry needs to catch up with other European countries concerning its core tourism products such as:

- Heritage and culture
- Walking
- Cycling
- Marine Sports

Furthermore, the Regional Planning Guidelines for the South-East-Region 2010-2022, identifies the Barrow as an important regional amenity corridor for navigation and walking routes.

2.3 Planning Policy

2.3.1 Midland Regional Planning Guidelines 2010 – 2022

The Regional Planning Guidelines for the Midlands formulate public policy for the region, covering Counties Laois, Westmeath, Offaly and Longford integrating land-use, transport, economic growth and investment, to enable the region to continue to grow as a sustainable high quality location for investment and one in which to live, work and visit. The RPGs provide a strategic policy framework designed to steer the future growth of the region over the medium to long term and work to implement the strategic planning frameworks set out in the National Spatial Strategy (NSS) published in 2002

and National Development Plan 2007-2013. The RPG sets out high-level strategies, in line with the NSS and promotes the overall sustainability and growth of the region over the period 2010-2022.

The broad vision for the Midland Region as set out in the RPGs is;

‘By 2022, the Midland Region will be a successful, sustainable and equitable region full of opportunities for its expanded population.’

One of the key principles identified in the RPGs as underpinning this vision includes promotion and development of the tourism sector in a sustainable manner.

The Strategic Goals of the RPGs sets out the key planning and development issues facing the region. Goal 7 in the list states:

‘To expand the tourism sector by creating an integrated approach to facilitate the development of the Midland Region as a unique visitor destination, promoting and developing all areas in a balanced and sustainable manner.’

Section 3.3.4.4 of the RPGs states:

‘Tourism growth for the rural areas of the Midland Region is dependent on enhancing the quality and supporting the development of the rural tourism product on offer, including the development of walks, water based activities, tourism infrastructure (including the provision of accommodation) and rural led initiatives.’

The Region is divided into 4 no. different Development Area’s, namely East, West, North and South each area recognises the importance of tourism to the rural economy.

Chapter 5 of the RPG’s *Transport and Infrastructure Strategy* seeks to promote and develop walking and cycling facilities and to prove regional cycling routes in the area.

TIP4 *Local Authorities should support, through policies and design provisions, the development and promotion of cycling and walking facilities in the region.*

TIP5 *Support the development of regional cycling routes in addition to the cycling routes identified in the National Cycle Policy Framework and Fáilte Ireland’s ‘Strategy for the Development of Irish Cycle Tourism’.*

Section 7.3 of the RPG’s identifies the importance of inland waterways to tourism in the region.

TP4 *Build on the amenity potential of the inland waterways throughout the region.*

TP5 *Protect access to and support proposals for upgrading inland waterways and associated facilities for recreation use in accordance with relevant management strategies and in cooperation with Waterways Ireland.*

In summary, the Regional Planning Guidelines for the Midlands is very supportive of tourism initiatives involving existing waterways.

2.3.2 Greater Dublin Area Regional Planning Guidelines 2010 – 2022

The Regional Planning Guidelines for the Greater Dublin Area formulate public policy for the region, covering Dublin City, Dun Laoghaire- Rathdown, Fingal, South Dublin, Kildare, Meath and Wicklow integrating land-use, transport, economic growth and investment, to enable the region to continue to grow as a sustainable high quality location for investment and one in which to live, work and visit. The RPGs provide a strategic policy framework designed to steer the future growth of the region over the medium to long term and work to implement the strategic planning frameworks set out in the National Spatial Strategy (NSS) published in 2002 and National Development Plan 2007-2013. The RPG sets out high-level strategies, in line with the NSS and promotes the overall sustainability and growth of the region over the period 2010-2022.

The broad vision for the Greater Dublin Region as set out in the RPGs is;

‘The GDA by 2022 is an economically vibrant, active and sustainable international Gateway Region, with strong connectivity across the GDA Region, nationally and worldwide; a region which fosters communities living in attractive, accessible places well supported by community infrastructure and enjoying high quality leisure facilities; and promotes and protects across the GDA green corridors, active agricultural lands and protected natural areas.’

One of the key principles identified in the RPGs as underpinning this vision includes promotion and development of the tourism sector in a sustainable manner. Several policies and objectives exist in the RPG’s including;

‘ER15 Promote sustainable tourism practices and leisure activities at appropriate locations and the delivery of a high quality built environment to support the attractiveness of the region for commerce.’

‘GIR9 Seek protection, enhancement and sensitive integration/re-use, as may be appropriate, of heritage transport corridors, including rail, road and water corridors, to ensure their long term future and their role in relation to access provision, tourism development, biodiversity space and development buffers.’

In summary, the Regional Planning Guidelines for the Greater Dublin Area is very supportive of tourism initiatives involving existing waterways.

2.3.3 South East Area Regional Planning Guidelines 2010 – 2022

The Regional Planning Guidelines for the Greater Dublin Area formulate public policy for the region, covering Carlow, Kilkenny, South Tipperary, Waterford and Wexford integrating land-use, transport, economic growth and investment, to enable the region to continue to grow as a sustainable high quality location for investment and one in which to live, work and visit. The RPGs provide a strategic policy framework designed to steer the future growth of the region over the medium to long term and work to implement the strategic planning frameworks set out in the National Spatial Strategy (NSS) published in 2002 and National Development Plan 2007-2013. The RPG sets out high-level strategies, in line with the NSS and promotes the overall sustainability and growth of the region over the period 2010-2022.

The broad vision for the South East Region as set out in the RPGs is;

“By 2020 the South-East will be recognised as a distinct and cohesive region that is prosperous and competitive, where the benefits of economic success are shared equitably throughout the region and throughout society and which offers a good quality of life in an environment rich in heritage and landscape value.”

One of the key principles identified in the RPGs as underpinning this vision includes promotion and development of the tourism sector in a sustainable manner. Section 2.1.3 Agriculture, Marine and Rural Development identifies the importance of inland waterways and in particular the river Barrow for tourism potential;

“The amenity and tourism potential of this waterway has significant scope for development. It is clearly recognised that the economic and social contribution of the waterway to sustainable tourism, both as an attraction in its own right and as a link to related local businesses, has considerable potential for expansion.”

In summary, the Regional Planning Guidelines for the South East Region is very supportive of tourism initiatives involving existing waterways.

2.3.4 Kildare County Development Plan 2017-2023

The Kildare County Development Plan 2017-2023 (referred hereafter as the Plan) was adopted on the 1st March 2017. The principal aim of the plan is to provide a blueprint for the development of County Kildare with its visions and main aims underpinned by the core principles of sustainability, social inclusion, quality of design and climate change adaptation.

A key aim of the Plan is to ensure the development of tourism sector within Kildare, Chapter 14 relates to Landscape, Recreation and Amenity and states the following as one of its aims;

“To develop recreation areas and the amenities of County Kildare in an equitable, environmental and sustainable way.”

ECD 28 *Promote, protect, improve, encourage and facilitate the development of tourism throughout the county as an important contributor to job creation in accordance with the proper planning and sustainable development of the area;*

ECD 33 *Facilitate the development of tourism infrastructure such as accommodation, restaurants, car and coach parking and toilet facilities in the designated hubs throughout the county;*

EO 49 Work with the National Transport Authority (in conjunction with relevant objectives in Chapter 6), Kildare Fáilte, Fáilte Ireland, Waterways Ireland and all stakeholders to develop a co-ordinated approach to the selection, delivery and servicing of future greenways, blueways, trails and routes throughout the county;

EO 52 Promote and develop the towpaths along the Grand Canal, the Royal Canal (including from Maynooth to the Dublin County Boundary as part of the Dublin to Galway Greenway project), the Barrow Line and the Corbally Line as cycleways, in co-operation with Waterways Ireland and neighbouring Local Authorities

***WC 5** Promote the amenity, ecological and educational value of the canals and rivers within the county while at the same time ensuring the conservation of their fauna and flora, and protection of the quantity and quality of the water supply*

***CR 5** Investigate the possibility of developing long distance walking routes, within the lifetime of the Plan, along disused sections of railway lines (e.g. Tullow line) and canals in the county (Corbally Line, Blackwood Feeder, and Mountmellick Line).*

***CR 7:** Facilitate, where appropriate, the provision of cycle-ways or walkway along the extent of the canals and watercourses in the county in co-operation with landowners, Waterways Ireland, Government Departments and other Local Authorities.*

***CR 11:** Support and promote public access to upland areas, rivers, lakes and other natural amenities which do not endanger the conservation of such natural amenities*

***RAO 13:** Develop long distance walking routes throughout the county including along: – The Royal Canal – The Grand Canal – The River Barrow*

E0 57 Develop, in conjunction with the relevant authorities, berthing and other ancillary infrastructure at key locations along the canal systems, particularly in areas where tourism is underdeveloped at present.

2.3.5 Laois County Development Plan 2017-2023

The Laois County Development Plan 2017-2023 (referred hereafter as the Plan) was adopted on the 24th July 2017. The principal aim of the plan is to provide a blueprint for the development of County Laois with its visions and main aims underpinned by the core principles of sustainability, social inclusion, quality of design and climate change adaptation.

The development of tourist facilities in County Laois is part of the development plan and it is an objective of the council to;

***OBJ6** Explore the potential for rural recreational tourism in conjunction with Tourism bodies, Waterways Ireland, Fáilte Ireland, National Trails Office and National Parks and Wildlife to diversify the range of tourist experience and extend the tourist season;*

***NRA 6** Recognize the role played by natural amenities as a major resource for visitors and local people and support, protect and promote public access to mountains, Natura 2000 sites, nature reserves rivers, lakes and other natural amenities that have been traditionally used for outdoor recreation and to the countryside generally and ensure that any plan or project associated with open space planning, recreation or tourism is subject to Appropriate Assessment Screening in compliance with the Habitats Directive, and subsequent assessment as required;*

The Barrow Blueway is referenced several times throughout the document and it is an objective of the Development Plan to investigate the feasibility of any such proposal,

***OBJ13** Investigate the feasibility, subject to compliance with the Habitats and Birds Directives of a River Barrow Blueway development;*

***TM 22** Promote and investigate the feasibility of, subject to compliance with the habitats and Birds Directives, Sustainable developing and improving of facilities and infrastructure supporting water based tourism activities, (including shore side interpretive centres and jetties). Development proposals outside settlement centres will be required to demonstrate a need to locate in the area and will be required to ensure that the ecological integrity and water quality of the river or lake, including lakeshore and riparian habitats, is not adversely affected by the development;*

***TM 23** Support in principle and investigate the feasibility of, subject to compliance with the Habitats and Birds Directives, developing and marketing the Barrow Blueway by Waterways Ireland and if consented facilitate related commercial opportunities in Vicarstown, Portarlinton, Graiguecullen and Portlaoise as well as opportunities to link the Barrow Blueway with Portarlinton or Portlaoise;*

***TM 25** Seek to maintain existing walking and cycling trails as well as facilities associated with angling and examine the feasibility of setting up additional walking/cycling trails or canoe/bridle trails and support the development and funding for general enhancements along trails and in collaboration with the National Trails Office, provide up to date information on trail locations and routes;*

***TRANS 44** Designate and promote the Barrow Navigation as an Activity Hub;*

***TRANS 45** Designate on-road cycling trails to link the Barrow Navigation with Portlaoise, Stradbally and Portarlinton and to link the Barrow Navigation with the Killeshin Plateau. Trails to include points of interest such as Emo Court, the Rock of Dunamaise, Killeshin Romanesque Doorway and the Dancing Boards viewing point;*

2.3.6 Carlow County Development Plan 2015-2021

The Carlow County Development Plan 2015-2021 (referred hereafter as the Plan) was adopted was adopted in August 2015. The principal aim of the plan is to provide a blueprint for the development of County Carlow with its visions and main aims underpinned by the core principles of sustainability, social inclusion, quality of design and climate change adaptation.

Chapter 2 of the Plan recognises the importance of tourism to the economy of the county;

SDO 6 Tourism

The benefits that tourism can bring to the County are very significant. A policy framework for sustainable tourism in the County will be developed focusing on the following three broad tourism assets that the County has to offer;

The waterways product builds on the attractive nature of the Rivers Barrow and Slaney. Key requirements needed to build on this opportunity are identification of trails along and linking into the waterways corridor, assessment of visitor's requirements, identification of services hubs and nodes along the canal corridor and planning for appropriate commercial uses at these locations. Design guidance as to how to accommodate development whilst protecting the quality of the 34 natural and built heritage, including the safeguarding of the Natura 2000 network of sites is also important. Tourism development, particularly involving waterways will be subject to Appropriate Assessment in accordance with Article 6 of the Habitats Directive.

Chapter 8 of the Plan *Tourism Recreation and Amenities* sets out objectives for the development of the tourism industry in Carlow;

Tourism – Objective 1

Carlow County Council will promote, encourage and facilitate the development of sustainable tourism through the conservation, protection and enhancement of the built and natural heritage, the protection of sensitive landscapes and cultural and community environments in order to maximise upon the economic benefits arising from the industry.

8.10.5 River Barrow and other potential Linear Open Spaces;

The River Barrow and other potential Linear Open Spaces The River Barrow, River Slaney and River Burren hold huge potential for open space and recreation. Essentially the river bank and floodplains are largely undeveloped, with the exception of certain locations in urban areas. Along the River Barrow, River Slaney and the River Burren there is huge potential for linear open space. There is potential to link the open space along the River Burren back to the River Barrow walking route and also develop a similar park along the River Slaney and potentially linking towns to surrounding countryside. There are many river courses throughout the county and there is scope to form an interconnecting network of routes along these courses and as part of a network of walking and cycling routes. The Barrow Corridor is a significant natural asset to County Carlow with great potential for tourism and recreation, subject to a sustainable approach to all development. The Corridor provides particular opportunities for;

- *Boating and cruising development;*
- *Nature and Wildlife Sites of interests;*
- *Cultural tourism;*
- *Activities along tourism trails;*
- *Enhancement of the Barrow Way and South Leinster Way Trail and walks along old railway lines such as the Borris Viaduct;*
- *Fishing and Angling*

Recreation Objective 2

All proposals for new cycling or walking routes should be assessed in accordance with appropriate environmental assessments including Habitats Directive Assessment.

In summary, the relevant County Development Plans are supportive of development that will attract inward investment to the region.

2.3.7 Rathangan Local Area Plan 2002

The study area lies within the functional area of the Rathangan Local Area Plan 2002. This document is consistent with the Kildare County Development Plan and establishes a settlement hierarchy and zoning provisions for the towns and villages within its functional area based on the national, regional and county-wide requirements.

Section 2.2 of the LAP seeks to enhance tourism initiatives within the town of Rathangan, it is an objective of the council to;

2.2.4 Tourism Policy

Rathangan town has a range of tourism assets including the Grand Canal and Slate River and an attractive streetscape. The Barrow tow path walking route connects with both the Wicklow Way and the South Leinster Way. The Robertstown Countryside and the Bog of Allen have considerable tourism potential which has yet to be fully realized.

***P2.2.4** It is the policy of the Council to develop Rathangan as a tourism centre within the county.*

2.3.8 Monasterevin Local Area Plan 2015-2021

The study area lies within the functional area of the Monasterevin Local Area Plan 2015-2021. This document is consistent with the Kildare County Development Plan and establishes a settlement hierarchy and zoning provisions for the towns and villages within its functional area based on the national, regional and county-wide requirements.

Section 5.1 (i) and (vi) of the LAP seeks to enhance the economy of Monasterevin through tourism initiatives;

(i) 'The plan focuses on the need to develop Monasterevin as a tourism destination, not only for angling and boating enthusiasts but for the wider community. The development of walking and cycling routes will be encouraged.'

(vi) 'A key objective of the plan is to facilitate the delivery of an integrated walking and cycle network along the banks of the Grand Canal and River Barrow (The Barrow Blueway) as a recreational and tourism initiative led by Waterways Ireland.'

2.3.9 Athy Local Area Plan 2012-2018

The study area lies within the functional area of the Athy Local Area Plan 2012-2018. This document is consistent with the Kildare County Development Plan and establishes a settlement hierarchy and zoning provisions for the towns and villages within its functional area based on the national, regional and county-wide requirements.

Section 3.12.2 of the LAP seeks to enhance tourism initiatives within the town of Athy, it is an objective of the council to;

***TS01:** To support the provision and development of walking and cycling trails which give access to river and canal banks and towpaths, subject to Appropriate Assessment where appropriate and in conjunction with Waterways Ireland and the National Parks and Wildlife Service of the DoAHG.*

TS02: *To promote the National Trails Network, Sli na Sláinte and other defined walking trails and cycle routes.*

ST07: *To upgrade and construct continuous walkways and cycle ways along both sides of the River Barrow and Grand Canal, to provide attractive leisure routes and alternative routes to the town centre.*

RA05: *To support the development of a linear walkway along the banks of the Canal and River Barrow. Any proposed cycling or walking routes along the Grand Canal and River Barrow will be subject to a feasibility study and Appropriate Assessment in accordance with Article 6(3) of the Habitats Directive.*

It is a policy of the council to;

TS2: *To recognise and improve the existing tourism potential of Athy such as the Grand Canal and River Barrow waterside amenity activities such as walking, fishing boating and to facilitate further enhancement through specific objectives of this Plan.*

WC5: *To realise the potential of cycling and walking routes along the Grand Canal and River Barrow.*

A1: *To continue the development of riverside and canal side walking routes with the creation of a linear park along the River Barrow and canal in conjunction with the relevant statutory bodies.*

A4: *To ensure that any future development along the Canal and the River provides walking routes and does not disproportionately affect their amenity value.*

A7: *To facilitate, where practicable, the provision of cycle-ways or walkways along the extent of the canal, in cooperation with landowners, Waterways Ireland and government departments. Any proposed cycling or walking routes along the Grand Canal and River Barrow will be subject to a feasibility study and Appropriate Assessment in accordance with Article 6(3) of the Habitats Directive.*

2.3.10 Joint Spatial Plan for the Greater Carlow Graiguecullen Urban Area 2012-2018

The study area lies within the functional area of the Joint Spatial Plan for the Greater Carlow Graiguecullen Urban Area 2012-2018. This document is consistent with the Carlow County Development Plan and establishes a settlement hierarchy and zoning provisions for the towns and villages within its functional area based on the national, regional and county-wide requirements.

The Spatial Plan identifies the importance of the river Barrow and in particular the recreational and amenity benefits from the river;

The Barrow Track – a towpath running along the River Barrow, developed as part of a navigation system in the late eighteenth and early nineteenth century, which linked the Grand Canal in Dublin with the River Barrow in Athy providing access to the South-East Region. The Grand Canal, Barrow River and related towpaths are now used by pleasure-crafts, anglers and walkers for amenity

and leisure purposes. The tow path locally is known as the Barrow Track, but is also part of the much larger National Way-marked Trail known as the Barrow Way.

The Barrow river navigation extends from Athy to St. Mullins, where the river becomes tidal. For this length, the river is accompanied by a towpath, often known as 'the line' or 'the Barrow Track'. The River Barrow is identifiable as one of the prime tourist assets of County Carlow, and has a pivotal role to play in the development of tourism in the county. The recently-completed upgrading of the towpath walk provides significant opportunity for tourism associated with walking. The attractiveness of such walks is enhanced by their relative flatness, the opportunity they provide for accessing rural environments away from road traffic, the association with the water, and the interest provided by features of wildlife and industrial archaeology.

The Spatial Plan also recognises the importance through several objectives and policies;

CTP 25 *Promote the active use of the Barrow Track walkway and the provision of additional riverside walks and related signage, in particular a linear river walk and cycle path along the eastern/northern bank of the River Burrin, dependent upon clear demonstration that there will be no impact on the integrity of a Natura 2000 site in accordance with Article 6 of the Habitats Directive or significant adverse effects on other environmental receptors.*

TRANS P28 *Provide a network of green recreational routes, high quality pedestrian and cycling transport corridors with dedicated space in the following locations: 1. Along the Barrow Track within the Greater Urban Area 2. Between Barrow Track and Oak Park.*

REC P18 *Seek to establish a linear public open space linking the Barrow Track with Oak Park in the interests of public amenity, tourism and nature conservation.*

2.3.11 Muinebheag/Royal Oak Local Area Plan 2016-2022

The study area lies within the functional area of the Muinebheag/Royal Oak Local Area Plan 2016-2022. This document is consistent with the Carlow County Development Plan and establishes a settlement hierarchy and zoning provisions for the towns and villages within its functional area based on the national, regional and county-wide requirements.

Chapter 11 of the plan relates to Tourism and a number of policies and objectives are supportive of the development of tourism related infrastructure;

EC 13: *To promote, protect, improve, encourage and facilitate the development of tourism in Muine Bheag / Royal Oak as an important contributor to job creation in the town.*

LU 6: *To reinforce tourism, related facilities and services and to actively market Muine Bheag.*

TP 4: To protect the natural resources upon which tourism is based through relevant policy in relation to resource protection, such as landscape character assessment, water quality and biodiversity.

Objectives TO 1: To provide where feasible, and support the provision of tourism infrastructure and services including, walking, cycling and water based infrastructure and short-term guest accommodation facilities throughout the settlement in appropriate locations.

TO 2: To encourage and assist the sustainable development of the tourism potential of Muine Bheag / Royal Oak in a manner that respects, builds on, protects and enhances the cultural, built and natural heritage of the town and the local amenities within the plan area.

TO 4: Support the provision and augmentation, of sporting, boating, kayaking and angling facilities, pony trekking routes, adventure centres and associated ancillary uses in appropriate locations.

2.3.12 Tinnahinch Local Area Plan 2010-2016

The study area lies within the functional area of the Tinnahinch Local Area Plan 2010-2016. This document is consistent with the Carlow County Development Plan and establishes a settlement hierarchy and zoning provisions for the towns and villages within its functional area based on the national, regional and county-wide requirements.

The development plan seeks to improve the tourism industry in the town of Tinnahinch;

‘A sustainable tourism industry capable of increasing the inflow of tourists and associated revenues in order to realise the full economic potential of tourism in County Carlow.’

The Local Area Plan also designates the Barrow Valley area as Open Space / Amenity Lands. In summary the Tinnahinch Local Area Plan 2010-2016 is supportive of the proposed Barrow Blueway.

2.3.13 Greater Dublin Area Cycle Network Plan

Although the proposed Blueway will be a multi-use leisure trail, it is consistent with the proposed cycleway route identified in the Greater Dublin Area Cycle Network Plan which describes the *‘Development of a cycleway along the canal corridors south-westwards from Dublin towards Carlow and beyond as a long-distance national cycle route would provide access to several large towns along the route including, Naas, Newbridge, Kildare and Athy. The works involved would simply consist of upgrading the existing towpath to provide a suitable gravel or macadam surface and typically 3m wide. As such, there should be minimal impact on the ecology of the canal waterway in terms of land take or on the hedgerow corridors along the route’*.

2.4 Cumulative Impact Assessment

The EIA Directive requires that the description of likely significant effects of a project includes an assessment of cumulative impacts that may arise. The factors to be considered in relation to cumulative effects include human beings, flora and fauna, soil, water, climatic factors, landscape, cultural heritage and material assets.

The potential for cumulative impacts arising from the proposed development in combination with other Plans and Projects has therefore been fully considered throughout this EIS. This section of the EIS provides an overview of other projects located within the wider area that have been considered within the cumulative impact assessments, and also details the relevant Plans that have been considered, to ensure all cumulative impacts are fully assessed.

2.4.1 Methodology for the Cumulative Assessment of Projects

The potential for cumulative effects to arise from the proposed development was considered in the subject areas of human beings, flora and fauna, soil, water, climatic factors, landscape, cultural heritage and material assets. To comprehensively consider potential cumulative impacts, the final section of each relevant chapter within this EIS includes a cumulative impact assessment where appropriate.

The potential cumulative impact of the proposed project and other relevant developments has been carried out with the purpose of identifying what influence the proposed development will have on the surrounding environment when considered cumulatively and in combination with relevant permitted, proposed and constructed projects in the vicinity of the proposed site.

The Cumulative Impact Assessments (CIA) of projects has four principle aims:

1. To establish the range and nature of existing projects within the cumulative impact study area of the proposed Blueway.
2. To summarise the relevant projects which have a potential to create cumulative impacts.
3. To establish anticipated cumulative impact findings from expert opinions within each relevant field. Detailed cumulative impact assessments are included in each relevant section of the EIS.
4. To identify the projects that hold the potential for cumulative interaction within the context of the proposed development and discard projects that will neither directly or indirectly contribute to cumulative impacts.

Assessment material for this cumulative impact assessment was compiled on the relevant developments within the vicinity of the proposed development. The material was gathered through a search of the Kildare, Laois and Carlow County Council's online Planning Register, reviews of relevant EIS documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts.

2.4.2 Projects Considered in Cumulative Assessment

The comprehensive review of the Kildare, Laois and Carlow County Council's planning register documented relevant general development planning applications within the redline boundary of the proposed development. The nature of the project, which proposes a narrow development corridor, means that only a small number of live planning applications are considered in the cumulative effects study.

County Kildare

- **Pl. Ref. No. 13/1002:** Extension of Duration to Pl. Ref. No. 07/148, in which Mary Herbert applied to Kildare County Council for permission to;

'build a bungalow, garage for domestic use and Septech 2000 effluent treatment plant at Lowtown, Robertstown, Co. Kildare.'

Planning permission was granted by the planning authority on the 19th January 2009 after an appeal to An Bord Pleanála was withdrawn. An extension of duration application was lodged by the applicant on the 16th December 2013. Kildare County Council granted permission for the extension of duration for 5 no. years on the 17th February 2014.

County Laois

- **PL. Ref. No. 15/132:** Peter Luttrell applied to Laois County Council on the 27th April 2015 for the following development;

'construct a Lean-To Shed (Agricultural Building), construct an open silage pit, concrete yard and associated site work.'

The planning authority granted planning permission on the 14th July 2015, subject to 14 no. conditions, no commencement notice is available on the inline planning register.

- **PL. Ref. No. 16/119:** Coillte Teoranta applied to Laois County Council on the 22nd March 2016 for permission to;

develop a 40.6km bike trail within Co. Laois which is part of a 72.8km mountain bike trail project, the remainder being the subject of a planning application to Offaly County Council and the two sets of trails are proposed to be linked by an on-road section along the R440 in the townland of Baunreagh, Co. Laois and Glenregan, Co. Offaly. The bike trail, approximately 0.6m wide (within a corridor width of 100m) including boundary treatments, signage, and structures for river and road crossings and all associated works, will be constructed in the townlands of Baunreagh, Monicknew and Bockagh, with a road crossing of the R440 in the twland of Baunreagh, and second road crossing of a public road in the townlands of Baunreagh and Monicknew. The proposed development will also include the demolition of an existing building; the renovation and extension of existing building into a facilities building to include a cafe, bicycle hire facilities; the construction of parking areas; a bike wash; the installation of a waste water treatment plant and percolation area and all associated works, boundary treatment; signage; water connection/supply from a bored well and associated services at Baunreagh, Co. Laois. A Natura Impact Statement will be submitted to the planning authority with the application. The Natura Impact Statement will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy during office hours at the office of Laois County Council

The application was deemed by the planning authority to be incomplete.

- **PL. Ref. No. 16/125:** Coillte Teoranta applied to Laois County Council on the 30th March 2016 for permission to;

develop a 40.6km bike trail within Co. Laois which is part of a 72.8km mountain bike trail project, the remainder being the subject of a planning application to Offaly County Council and the two sets of trails are proposed to be linked by an

on-road section along the R440 in the townland of Baunreagh, Co. Laois and Glenregan, Co. Offaly. The bike trail, approximately 0.6m wide (within a corridor width of 100m) including boundary treatments, signage, and structures for river and road crossings and all associated works, will be constructed in the townlands of Baunreagh, Monicknew and Bockagh, with a road crossing of the R440 in the twland of Baunreagh, and second road crossing of a public road in the townlands of Baunreagh and Monicknew. The proposed development will also include the demolition of an existing building; the renovation and extension of existing building into a facilities building to include a cafe, bicycle hire facilities; the construction of parking areas; a bike wash; the installation of a waste water treatment plant and percolation area and all associated works, boundary treatment; signage; water connection/supply from a bored well and associated services at Baunreagh, Co. Laois. A Natura Impact Statement will be submitted to the planning authority with the application. The Natura Impact Statement will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy during office hours at the office of Laois County Council

Further Information was requested by the planning authority on the 23rd May 2016 and received on the 14th November 2016.

County Carlow

Pl. Ref. No. 14/364: Waterways Ireland applied to Carlow County Council for permission to;

‘erect signage, construct floating jetties and modify existing jetties at ten separate locations from the lock at Clashganny, Co. Carlow to the lock at St. Mullins on the boarder of Co. Carlow and Co. Kilkenny. The proposed works include the introduction of mapboard and/or directional signage at Clashganny, Ballykeenan, Graiguenamanagh slipway, Carriglead, Bahana and St. Mullins, also floating jetty’s are proposed for upper Tinnahinch and at St. mullins, also jetty extensions are proposed at Lower Tinnahinch with a fixed platform proposed at St. Mullins. The proposed works area lies within the River Barrow and River Nore cSAC (Code 002162), thus an Natura Impact Statement (NIS) has been included with this submission’.

The application was deemed to be withdrawn on the 19th August 2015.

Pl. Ref. No. 13/6565: Robert & Peter Archbold applied to Carlow County Council on the 26th June 2013 for permission to;

EOD of PD Ref: 07/5959 - (i) The restoration and refurbishment of the existing house, which is a Protected Structure (Ref. 71, Reg No. 10000866, Map Ref. 4356-20), return and stable structures on the site, and a change of use of the existing buildings from a hostel to commercial use. (ii) The demolition of the existing extensions and addendums to the existing house and return and the construction of a 3 storey link extension between the existing retained structures, providing a gross floor area of 477 m². (iii) The Construction of a 2 storey block to the northern boundary of the site to provide for, together with the restored and refurbished stables, 2 No. two-bedroom live work units, 1 No. one-bedroom live work units with commercial space of a total gross floor area of 337 sqm. (iv) The construction of 59 residential units with a gross floor area

of 5322.5 sq.m including balconies and terraces, arranged in 5 blocks, ranging in height from 3 storeys to a maximum of five storeys to the Barrow River. Block 1 comprises of 12 No. two-bedroom, and 2 No. three-bedroom apartments. Block 2 comprises of 11 No. two-bedroom and 1 No. three-bedroom apartments; Block 3 comprises 4 No. one-bedroom apartments, 14 No. two-bedroom apartments and 1 No. three bedroom apartments; Block 4 comprises of 2 No. two-bedroom apartments and 1 No. three-bedroom duplex apartment; Block 5 comprises 4 No. own-door two-bedroom apartments and 4 No. three-bedroom duplex apartments. (iv) The provision of a basement car park with ramped vehicular access providing for 104 No. car-parking spaces, 84 bicycle spaces, bin stores & biomass boiler and fuel store and associated services. (v) The provision of a basement car park with ramped vehicular access providing for 104 No. car-parking spaces, 84 bicycle spaces, bin stores & biomass boiler and fuel store and associated services. (vi) The provision of 7 No. surface car-parking spaces and all associated site works including landscaping and a pedestrian access to the river bank. (vii) The modification of the existing boundary to the Kilkenny road including the removal of the existing boundary wall, the relocation & modification of the bus stop and the existing vehicular entrance from Kilkenny Road. (viii) The construction of a new ESB sub-station and switch room.

An extension of duration was granted by the planning authority until 23rd August 2018.

Other Projects and Ongoing Maintenance:

Waterways Ireland Projects

Waterways Ireland are undertaking studies regarding the essential repair of the Lower Tinnahinch weir. The works will include the provision of a fisheries rock ramp. This has the potential to result in a potential positive impact given that it will improve upstream passage for aquatic Qualifying Interests of the SAC.

Banks repair works are underway at Cloydagh. The works have temporarily ceased. The remaining 70-80m will be completed in early 2018 which is likely in advance of the proposed Blueway works.

Waterways Ireland are undertaking studies with regard to bank repair at five locations along the Barrow navigation. Four of these locations occur within the main River Barrow system with the fifth (27th Lock Lower), located in the Barrow Line of the Grand Canal. The locations and works proposed are described in Table 2.4 below:

Table 2.4 Proposed Bank Repair Works Locations

Location	Proposed Works – Canal/River Bank	Co-ordinates
27 th Lock Lower	Repair eroded bank over full length (23m) of jetty	E267906 N193712
Below Ardreich Lock	Repair 18m length of eroded bank behind jetty	E268588 N192235
Maganey Bridge	Repair eroded bank over full length (36m) of jetty	E271710 N184,626
Below Rathellin Lock	Repair eroded bank over full length (18m) of jetty	E270280 N163032

Above Lr. Tinnahinch Lock	Repair eroded bank over full length (24m) of jetty	E271710 N142479
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All of the above Waterway Ireland projects have been subject to Ecological Impact Assessment and Appropriate Assessment.

Waterways Ireland General Maintenance

In order to maintain the Barrow Way and associated navigation in their current navigable state a number maintenance works are carried out on a regular basis. The typical works required include:

- Grass trimming
- Hedge/bush trimming
- Tree surgery
- Aquatic plant control
- Structural repair: including repair and maintenance of locks, bridges and walls
- Routine bank/channel/drain maintenance and repairs, as required.

Loop Walks

There are several loop walks located in the wider vicinity of the proposed Blueway including;

Laois

- The Barrow Way;
- Abbeyleix Loops - Collins Bog loop;
- Abbeyleix Loops - Killamuck Bog loop;
- Ballyroan Slí;
- Clonaslee - Brittas Forest Loop;
- Cullahill - Binniane Loop;
- Durrow Leafy Loops - Dunmore Woods loop.
- Emo Slí
- Oughaval Wood
- Portloaise Slí
- Mountmellick Alternative Slí
- Emo Slí

Kildare

- Royal Canal Way;
- Grand Canal Way;
- Athy Slí;
- Celbridge/Hewlett Packard/Leixlip Slí;
- Clane Slí;
- Donadea Forest Park - Alymer Walk;
- Donadea Forest Park – Lake Walk;
- Donadea Forest Park - Nature Walk;
- Donadea Forest Park Slí;
- Kilcock Slí;
- Leixlip Slí - Saint Catherines Park;
- Leixlip West Slí;
- Mullaghreelan Wood - O'Tuathail walk;

- Mullaghreelan Wood - Rath walk;
- Barrow Way.

Carlow

- Carlow Slí - Rathnapish/Askea;
- Carlow Town Slí;
- Clogrennane Wood Loop;
- Clonegal Slí;
- Kilbrannish Loop;
- Oak Park loop;
- Rathanna Slí;
- St. Mullins Slí;
- Walshestown Slí;
- Windfarm Loop;
- South Leinster Way;
- Barrow Way;
- Wicklow Way.

Other projects considered in the Cumulative Assessment include the use of the waterway as canoe trails.

2.4.3 Cumulative Review of Plans

The EIA directive does not require an assessment of the cumulative effect of plans however a review of plans has been carried out and considered in the EIS. Furthermore, a number of plans specifically relating to activities such as cycling which are relevant to the area were considered. The relevant plans considered comprised of national, regional and local spatial plans, whose hierarchical nature provide a more focussed and localised set of policy provisions adhering to national and regional planning policies and objectives. Accordingly, in the context of the development, the most pertinent planning policy documents to consider are:

- South East Regional Planning Guidelines 2010 – 2022;
- Midland Regional Planning Guidelines 2010 – 2022;
- Greater Dublin Regional Planning Guidelines 2010 – 2022;
- The Kildare County Development Plan 2017-2023;
- The Laois County Development Plan 2017-2023;
- The Carlow County Development Plan 2015-2021;
- Rathangan Local Area Plan 2002;
- Monasterevin Local Area Plan 2015-2021;
- Athy Local Area Plan 2012-2018;
- Joint Spatial Plan for the Greater Carlow Graiguecullen Urban Area 2012-2018;
- Muinebheag/Royal Oak Local Area Plan 2016-2022;
- Tinnahinch Local Area Plan 2010-2016;

Assessment material for the CIA was compiled on the relevant planning and sectoral plans within the vicinity of the proposed development. The material gathered comprised National, Regional Plans and Guidance as well as the relevant Development and Local Area Plans as set out above and served to identify their relationship with, as well as influences and impacts on the proposed development. The potential for cumulative interactions with these Plans are summarised in Table 2.5 below.

Table 2.5 Potential for Cumulative Interactions with Plans

Plans	Potential for Cumulative Interaction with Blueway Development
South East Regional Planning Guidelines 2010 – 2022	Yes –South-East Regional Planning Guidelines 2010-2022 makes reference to tourism policies in the region and the benefit that the tourism sector will bring to the region’s economy.
Midland Regional Planning Guidelines 2010 – 2022	Yes - The Midland Regional Planning Guidelines 2010 – 2022 makes reference to tourism policies in the region and the benefit that the tourism sector will bring to the region’s economy.
Greater Dublin Regional Planning Guidelines 2010 – 2022	Yes - The Greater Dublin Regional Planning Guidelines 2010 – 2022 makes reference to tourism policies in the region and the benefit that the tourism sector will bring to the region’s economy.
The Kildare County Development Plan 2017-2023	Yes – The Kildare County Development Plan 2017-2023 makes reference to the potential to harness tourism for economic benefit.
The Laois County Development Plan 2017-2023	Yes - The Laois County Development Plan 2017-2023 makes reference to the potential to harness tourism for economic benefit.
The Carlow County Development Plan 2015-2021	Yes - The Carlow County Development Plan 2015-2021 makes reference to the potential to harness tourism for economic benefit.
Monasterevin Local Area Plan 2015-2021	No potential for cumulative interaction with specific policies and objectives of the Monasterevin Local Area Plan 2015-2021
Rathangan Local Area Plan 2002	No potential for cumulative interaction with specific policies and objectives of the Rathangan Local Area Plan 2002
Athy Local Area Plan 2012-2018	No potential for cumulative interaction with specific policies and objectives of the Athy Local Area Plan 2012-2018
Joint Spatial Plan for the Greater Carlow Graiguecullen Urban Area 2012-2018	No potential for cumulative interaction with specific policies and objectives of the Joint Spatial Plan for the Greater Carlow Graiguecullen Urban Area 2012-2018
Muinebheag/Royal Oak Local Area Plan 2010 – 2016	No potential for cumulative interaction with specific policies and objectives of the Muinebheag/Royal Oak Local Area Plan 2010 – 2016
Tinnahinch Local Area Plan 2010-2016	No potential for cumulative interaction with specific policies and objectives of the Tinnahinch Local Area Plan 2010-2016
Greater Dublin Area Cycle Network Plan	Yes, the proposed Blueway forms one of the routes identified in the Plan for future development and so has the potential for positive effects cumulatively with the identified cycle network plan.

Each relevant chapter within this EIS concludes with a cumulative impact assessment where appropriate.

2.5 Alternatives

2.5.1 Introduction

Article 5 of the Environmental Impact Assessment (EIA) Directive (85/337/EEC) states that the information provided in an EIS should include an outline of the main alternatives studied by the developer and an indication of the main reasons for the final choice, taking into account the environmental effects. The consideration of alternatives typically refers to alternative sites, layouts, designs, processes and mitigation measures. As noted in Chapter 1, this revised EIS has been completed with cognisance of the *Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, August 2017).

This section of the EIS contains a description of the alternatives that were considered for the proposed development, in terms of doing nothing, route selection, materials and construction methodologies.

The consideration of alternatives is an effective means of avoiding environmental impacts and is a key measure in the Draft Guidelines mentioned above, as well as Draft *Revised Guidelines on the Information to be contained in Environmental Impact Statements*, 2015. The EPA document *'Guidelines on the Information to be Contained in Environmental Impact Statements'* (2002) states that it is important to acknowledge however the existence of difficulties and limitations when considering alternatives. These include hierarchy, non-environmental factors and site-specific issues, as described below.

Hierarchy

EIA is concerned with projects. The EPA guidelines state that in some instances neither the applicant nor the competent authority can be realistically expected to examine options that have already been previously determined by a higher authority, such as a national plan or regional programme for infrastructure.

Non-environmental Factors

EIA is confined to the environmental effects that influence consideration of alternatives. However, other non-environmental factors may have equal or overriding importance to the developer of a project, for example project economics, land availability, engineering feasibility or planning considerations.

Site-specific Issues

The EPA guidelines state that the consideration of alternatives also needs to be set within the parameters of the availability of the land, i.e. the site may be the only suitable land available to the developer, or the need for the project to accommodate demands or opportunities that are site-specific. Such considerations should be on the basis of alternatives *within* a site, for example design and layout.

2.5.2 Alternative Land-Uses

In the Do Nothing scenario Waterways Ireland would continue to maintain the existing paths principally for Waterways Ireland maintenance requirements and as the Waymarked Trail which limits public access, in light of the varied standards, to potentially significant lengths of pathway. This is not considered a viable option.

An alternative is to upgrade the path to a standard suitable for a multiuse function and opening the route to all types of users which is not currently the case. This development will provide access for a wider range of users, along all sections of the trail, providing enhanced safety and accessibility in all weather conditions.

The proposed Blueway is a standard to which paths on the navigations could be maintained providing basic but safe access for the general public to Waterways Ireland pathways. The Blueway design has been informed by comprehensive baseline ecology and would be overlaid upon the existing Waymarked Trail, currently a wider design width. This is a viable option and is the preferred option.

A further option is to upgrade to a National Cycleway Standard. This standard is a high standard principally for cyclists with a bound surface with significant environmental impacts at a high cost. This is not considered a viable option.

2.5.3 Alternative Routes

The proposed route represents an upgrade of an existing walking and cycling National Waymarked trail, which represents the most practical, accessible and scenic option between Lowtown and St. Mullins. It also maximizes the use of an existing resource.

In considering alternatives, the constraints include land ownership, access and minimizing the number of road crossings. While in some locations, particularly along the Grand Canal (Barrow Line) there are tracks on both sides of the waterway which could be used, the current Barrow Waymarked Trail minimizes the number of locations where the waterway is crossed to minimize exposure to vehicular traffic.

The upgrading of the existing towpath and associated works follow the route of the existing Barrow Waymarked Trail on the banks of the Grand Canal and River Barrow. This is considered the most efficient, least environmentally intrusive and cost effective method.

Several alternatives are proposed in response to the Further Information Request. During the design of the route, several alternatives were explored. For example, at Rathangan, the route was amended to minimise road crossings and potential conflicts by the provision of a new pedestrian bridge to the south of Spencer Bridge, and relocating the walkway to the northeastern bank.

2.5.4 Alternative Materials & Construction Methods

Tailored surface finishes shall be employed to ensure a durable and fit for purpose trail. Several documents which accompany this application, including the Preliminary Design Report (Appendix 3-3) contains further detail on the design rationale for the proposed Blueway, as well as alternatives considered.

The proposed surface types to be used on the path from Lowtown to St. Mullins are as listed below and are described in detail in Chapter 3. The percentages are as follows:

- Type A: Compacted Stone and Dust (unbound) - 83.3%
- Type B: Bitmac / Asphalt (bound) - 8.5%
- Type C: Surface Dressing (bound) - 5.5%
- Type D: Concrete (bound) - 2.7%

The first type (Type A) which will be the most commonly employed surface is an unbound surface of compacted stone and dust and will be constructed primarily in rural areas. The second type (Type B) will be a bound surface of either asphalt or bitmac and will be constructed primarily in urban areas, areas of road widening incorporating shared use surfaces and approximately 15m either side of approaches to road crossings. The third type (Type C) is surface dressing and will be applied to any existing deteriorated bound surfaces. The fourth type (Type D) is a new reinforced concrete roadway that will be constructed over the existing access roadway downstream of St. Mullins Lock which is prone to erosion from tidal and flooding effects and also along a 2 km stretch of the route north of Leighlinbridge, Co Carlow.

An option of reinforced grass was considered for a number of locations but it was considered that this type of surface was not robust and durable enough for the Blueway given the types of foot and cycle traffic which the Blueway needs to be able to cater for. Reinforced grass can be used on projects where an aesthetic is required and where traffic is light and intermittent. Research has showed that this type of surface was difficult to establish and maintain in a suitable condition for foot and cycle traffic and so this option was least preferred. This option was also considered from a landscape and visual impact perspective and it was considered that using this type of surface as mitigation was not warranted given the minimal visual impact of the proposed path surfacing at these locations. On balance this option was discounted.

The proposed construction method is described in Chapter 3. The proposed mitigation measures are tried and tested measures which have proved robust over many years of implementation.

In certain locations where bank repairs are proposed (three locations at Milford, Co. Carlow, an alternative solution to using rock armour has been found, and 'soft' engineering solutions are now proposed.

2.5.5 Alternative Path Widths

The design path width of 2.5m has been selected based on safety, operation, economic and environmental effects and sustainability. It is justified on the basis of the largely rural setting and the need to minimise the environmental impacts and also negate disproportional construction costs for the proposal. The preferred standard width of 2.5m may be locally reduced at 'pinch points' where existing fixed infrastructure would make the provision of a 2.5m wide path disproportionately expensive. These areas shall be kept to an absolute minimum. The selection of a 2.5m wide path has also been informed by the fact that Waterways Ireland has already developed other Blueway Trails along the North Shannon, the Shannon Erne Canal and the Royal Canal which have a preferred path width of 2.5m, which have proven fit for purpose.

The rationale for path surfacing and width is referred to in The Preliminary Design Report, Appendix 3-3 of this EIS.

2.6 Scoping and Consultation

2.6.1 Scoping Document

Scoping is the process of determining the content, depth and extent of topics to be covered in the environmental information to be submitted to a competent authority for projects that are subject to an Environmental Impact Assessment (EIA). This process

is conducted by contacting the relevant authorities and Non-Governmental Organisations (NGOs) with interest in the specific aspects of the environment likely to be affected by the proposal. These organisations are invited to submit comments on the scope of the EIA and Environmental Impact Statement (EIS) and the specific standards of information they require. Comprehensive and timely scoping helps ensure that the EIA refers to all relevant aspects of the proposed development and its potential effects on the environment and provides initial feedback in the early stages of the project, when alterations are still easily incorporated into the design. In this way scoping not only informs the content and scope of the EIA, it also provides a feedback mechanism for the proposal design itself.

A scoping document providing details of the proposed development and proposed scope of the EIS was prepared McCarthy Keville O’ Sullivan (MKO). This document was circulated by on 22nd March 2016, to the consultees listed in Table 2.6 below.

2.6.2 Scoping Responses

Table 2.6 lists the responses received to the scoping request circulated in March 2016. Copies of all scoping responses received by 8th December 2016 are included in Appendix 2-1 of this EIS. The recommendations of the consultees have informed the impact assessment process and the contents of the EIS.

Table 2.6 Scoping Response Summary

	Consultee	Response
1	An Taisce	No response received as of 08/12/16
2	Aubrey Fennell – Champion Trees	No response received as of 08/12/16
3	BirdWatch Ireland	No response received as of 08/12/16
4	Bat Conservation Ireland	No response received as of 08/12/16
5	Carlow County Council – Planning Department	Response Received 22/04/2016
6	Carlow County Council – Environment Department	No response received as of 08/12/16
7	Carlow County Council – Roads Department	No response received as of 08/12/16
8	Carlow County Council – Water Services Unit	No response received as of 08/12/16
9	Carlow County Council – Heritage Officer	No response received as of 08/12/16
10	Department of Agriculture, Food and the Marine	No response received as of 08/12/16
11	Department of Arts, Heritage and the Gaeltacht	Response received 17/06/2016.
12	Eastern RBD Project Office	No response received as of 08/12/16
13	Environmental Protection Agency	No response received as of 08/12/16
14	Fáilte Ireland	Response Received 04/04/2016.
15	Geological Survey of Ireland	No response received as of 08/12/16
16	Health & Safety Authority	No response received as of 08/12/16
17	Health Service Executive	No response received as of 08/12/16
18	Inland Fisheries Ireland	No response received as of 08/12/16

	Consultee	Response
19	Irish Wildlife Trust	No response received as of 08/12/16
20	Irish Sports Council	No response received as of 08/12/16
21	Kildare County Council – Planning Department	No response received as of 08/12/16
22	Kildare County Council – Environment Department	Response received 04/05/2016.
23	Kildare County Council – Roads Department	No response received as of 08/12/16
24	Kildare County Council – Water Services Unit	No response received as of 08/12/16
25	Kildare County Council – Heritage Officer	No response received as of 08/12/16
26	Kilkenny County Council (Planning Section)	Response Received 20/04/2016
27	Kilkenny County Council (Environment Section)	No response received as of 08/12/16
28	Kilkenny County Council – Roads Department	No response received as of 08/12/16
29	Kilkenny County Council – Water Services Unit	No response received as of 08/12/16
30	Kilkenny County Council – Heritage Officer	No response received as of 08/12/16
31	Laois County Council – Planning Department	No response received as of 08/12/16
32	Laois County Council – Environment Department	No response received as of 08/12/16
33	Laois County Council – Roads Department	No response received as of 08/12/16
34	Laois County Council – Water Services Unit	No response received as of 08/12/16
35	Laois County Council – Heritage Officer	No response received as of 08/12/16
36	Irish Water – Water Services	Response Received 15/04/2016.
37	Transport Infrastructure Ireland (TII, previously NRA)	Response Received 24/03/2016
38	Office of Public Works	Response Received 18/04/2016
39	The Heritage Council	No response received as of 08/12/16
40	Tree Council of Ireland	No response received as of 08/12/16
41	Southern and Eastern Regional Assembly	No response received as of 08/12/16
42	South Eastern RBD Project Office	No response received as of 08/12/16

A total of 8 scoping responses were received. The list of responses of the consultees are summarised following Table 2.7 below:

Table 2.7 Review of Scoping Responses

	Consultee	Key Scoping Response Comments
1	Carlow County Council – Planning Department	<ul style="list-style-type: none"> ▪ Strategic Policy: Response notes policy which supports the development of the ‘Barrow Corridor’ and recognises the potential of the River Barrow for linear open space and also refers to its recreational and tourism potential. ▪ The Scoping response includes a number of other considerations for proposals for outdoor recreational use, as well as a list of factors to be taken into account when considering proposals along the riverside (Section 8.11.8 of the Plan).
2	Department of Arts, Heritage and the Gaeltacht	<ul style="list-style-type: none"> ▪ Response refers to concerns and recommendations relating to Archaeology and archaeological monitoring, underwater archaeology, and nature conservation. ▪ Refers to the River Barrow and Barrow Line as an ecological corridor and refers to potential impacts on flora and fauna (in particular bats, otter and kingfisher), habitats, and notes cSAC and pNHA designations, ▪ Response includes details on baseline data, impact assessment, invasive species, water quality, green infrastructure, and CMPs, ▪ References to items to be included in the AA/AA screening and licenses are also included.
3	Fáilte Ireland	<ul style="list-style-type: none"> ▪ This submission consists of a copy of Fáilte Ireland’s Guidelines on the treatment of tourism in an Environmental Impact Statement.
4	Kilkenny County Council (Planning Department)	<ul style="list-style-type: none"> ▪ Issues in particular include: River Barrow is significant element of Green Infrastructure in Kilkenny and notes the importance of an ecological corridor. ▪ Also noted that the project has potential to increase invasive species and must be addressed at all stages in the EIS. ▪ Suggests additional sources of information
5	Kildare County Council (Environment Section)	<ul style="list-style-type: none"> ▪ The Council’s Environment Section advise that consideration shall be given to any waste management issues during construction phase. ▪ When towpath is upgraded, where litter/ waste receptacles are proposed, the

	Consultee	Key Scoping Response Comments
		servicing of same shall be agreed in advance by the relevant agency.
6	Irish Water – Water Services	<ul style="list-style-type: none"> ▪ Includes a general list of issues to be considered in an EIS ▪ These aspects include the potential impacts of the development on the capacity of water services, changes to infrastructure or discharges, and physical impacts on Irish Water assets or catchments.
7	Transport Infrastructure Ireland	<ul style="list-style-type: none"> ▪ Response notes road crossings with M7, M9, N78 and N80. ▪ TII notes no objection in principle but recommends that the principle objectives are followed: Avoid the creation of traffic hazards and maintain safety of National Roads, and maintain the function, efficiency and carrying capacity of national roads. A list of issues to be considered is included.
8	Office of Public Works	<ul style="list-style-type: none"> ▪ Response notes 10m maintenance strip along edge of channel should not be planted or paved in any way which would prevent access; to assist in prevention of flooding ▪ Response notes that Section 50 consent must be sought for construction, replacement or alteration of bridges or culverts over a water channel.

IFI did not provide a formal scoping response, however they provided fisheries assessment data for the study area on the 01/12/2016.

A number of further submissions were received when the previous planning application was lodged. These included a submission from the IFI and also from the Development Applications Unit (DAU) of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DARHRRGA). These are referred to in Section 2.6.5 below.

2.6.3 Public Consultation

A number of types of public consultation were carried out. These included public information events, presentations to tourism and recreational bodies, presentations to elected members and senior management teams of Kildare, Carlow, Laois, and Kilkenny County Councils, as well as pre-planning meetings with Kildare and Laois County Councils. Following the lodgment of the planning application, further planning meetings and public consultation also took place. This is also contained in the Planning Application Supporting Information Document which accompanies this application.

Further information on the public consultation process can be found at the link below:

<http://www.waterwaysireland.org/Pages/Blueways/Barrow-Blueway.aspx>

2.6.3.1 Public Information Event

A number of public information events were held throughout 2014 and 2015. One event was held in Carlow, Kilkenny, and Laois while two meetings were held in Kildare. These locations and dates are included in Table 2.8 below.

Table 2.8 Public Information Events 2014/2015

Location	Date	Venue
Carlow	20/11/2014	Milford Room, Seven Oaks Hotel, Carlow
Kilkenny	21/11/2014	Scout Hall Graiguenamanagh
Laois	27/11/2014	Vicarstown Inn
Kildare	4/12/2014	Athy Community Library
Kildare	17/02/2015	Rathangan Community Centre

An information sheet was distributed at the public consultation event, and a presentation was given on the proposed route development, and a number of images of the proposed Blueway were displayed. Members of the public were given an opportunity to comment on the proposed works. An online survey was also carried out to determine users and attitudes to the proposed Blueway. This is referred to in Chapter 4.

2.6.3.2 Presentations to County Councils- Senior Management Teams

A number of presentations on the proposed Blueway were made to the senior management teams in Counties Kildare, Laois, Carlow and Kilkenny County Councils. The dates were as follows:

Table 2.9 Presentations to Senior Management Teams

Authority	Date
Kilkenny County Council	04/11/2014
Carlow County Council	10/11/2014
Kildare County Council	11/11/2014
Laois County Council	27/11/2014

2.6.3.3 Presentations to County Councils- Elected Members

A number of presentations on the proposed Blueway were made to Elected Members of Kilkenny, Carlow, Kildare and Laois County Council.

Table 2.10 Presentations to Elected Members

Authority	Date
Carlow County Council	10/11/2014
Kildare County Council	26/11/2014
Laois County Council	15/12/2014
Kilkenny County Council	19/01/2015

2.6.3.4 Presentations to Tourism and Recreational Bodies

A number of presentations on the proposed Blueway were made to the tourism and recreational bodies of Kilkenny, Carlow, Kildare and Laois County Councils. The locations and dates are included in Table 2.11 below:

Table 2.11 Presentations to Tourism and Recreational Bodies

Body	Date	Location
Carlow Tourism	10/11/2014	Members Room
Kildare Failte	12/02/2015	Athy Heritage Centre
Comhairle na Tuaithe	19/02/2015	Custom House Dublin
National Trails Advisory Committee NTAC	20/03/2015	Sports Council Blanchardstown

2.6.3.5 Pre-Planning Meetings

Pre-Planning meetings were requested will all Local Authorities through which the proposed Blueway passes – Co. Kildare, Co., Laois and Co. Carlow.

Pre planning consultations took place with Kildare County Council 10th May & 24th November 2016 (Reference PP / 3278). Pre planning consultations took place with Laois County Council 14th April & 24th November 2016 (Reference PP / 2829). Pre planning consultations took place with Carlow County Council 13th June & 24th November 2016.

2.6.3.6 Further Planning Meetings

Following the Further Information Requests for the previous application from the Carlow (Pl Ref 17/18), Laois (Pl Ref 17/37) and Kildare County Councils (PL Ref 17/81), a number of meetings were held with representatives of all Councils to discuss the terms of the FI request and the envisaged approach. These meetings were held in Kildare County Council offices in Naas, on August 1st and November 23 2017.

In addition to these meetings, extensive correspondence took place between Council representatives and Waterways Ireland in order to clarify the approach on a number of issues in the Further Information Requests.

2.6.3.7 Further Public Information Events

Following the lodgment of the planning application to the three local authorities, a number of public information events were held in Counties Kildare, (16 February 2017 in Athy Community Library) Laois, (17 February 2017 in Vicarstown Inn, Vicarstown), Carlow (15 February 2017 in Seven Oaks Hotel, Carlow, and Kilkenny (14 February 2017 in the Scout Hall, Graiguenamanagh). This provided an opportunity for the public to view proposals, design options and meet the staff who developed the proposals in order to discuss the project.

2.6.4 Third Party Submissions Received on Previous Application - Key Issues

A number of third party submissions (were received on the previous planning application. These submissions were reviewed, and it is noted that many issues raised were already covered in the previous application (17/18, 17/38 and 17/31). In addition, the majority of these submissions relate to issues contained in the Further Information Request Responses (See Appendix 1-1). These are briefly summarised below. A

number of issues relate to the towpath as a whole, therefore these are categorised in terms of the issues raised, as opposed to the County.

- **Usage:** A number of submissions refer to the proposed Blueway as a cycle trail, while issues regarding compatibility and potential conflicts of are also raised. The proposed Blueway, as described in Chapter 3 of the EIS, is a multi-use leisure trail, suitable for both walkers and cyclists, and the design of the path in terms of width and surfacing reflects this. The Preliminary Design Report (included in Appendix 3-3) and the Planning Application Supporting Information Document, also submitted with this application, include further details. Furthermore, the planning drawings in Appendix 3-1 include the provision of passing bays.
- **Detailed Design and topography:** A number of issues relate to the proposed works, path location and measurements and the inclusion of topographical features. A topographical survey has been carried out and the planning drawings (Appendix 3-1) have been updated to reflect this and other concerns including health and safety and accessibility. The drawings include details and labels on works proposed. Chapter 3 Description also described the proposed works.
- **Policy:** A number of submissions refer to policies which are cited as contradictory to the proposed development. Development Pan policies were extensively reviewed and it is contended that the proposed development is not in conflict with these policies.
- **Road safety and Access Roads:** A number of submissions referred to access, and car parking issues. Following the issuing of the Further Information requests, the applicant circulated intensively with the relevant Local Authorities to address road safety issues including access. These issues are raised in some detail in the Further Information Requests, and responses are included in Appendix 1-1.
- **Flora and Fauna:** A number of submissions relate to flora and fauna and biodiversity. The Further Information requests include a number of issues and these are listed and addressed in Appendix 1-1.
- **Other issues:** A number of other issues including issues relating to heritage, landscape and visual issues, maintenance, and private properties were received. These are all included under the items in the Further Information Request Response Appendix 1-1.

2.6.5 Statutory Body - Key Submissions/Observations on Previous Application

A number of submissions from statutory bodies were received in response to the previous application. The key submissions are summarised by topic below in Table 2.12. A number of other statutory bodies (TII, Irish Water) responded with observations but no project specific comments. The submission from the DAU, IFI and An Taisce are contained in Appendix 2-1.

Table 2.12 Statutory Body Key Submissions Summary

Body	Key Points	Addressed in current application/EIS
DAHRRGA	<ul style="list-style-type: none"> • Archaeology: • Nature Conservation: • General comments • Rock Armour and Bank Widening • Impacts on annexed habitats and species • CMPs and Temporary Compounds • Cumulative Assessment 	<ul style="list-style-type: none"> • These comments are noted. • Rock armour is now replaced with soft engineering measures, as set out in Appendix 1-1 and in Chapter 3 and the Chapter 5. • A CEMP has been prepared and included in Appendix 3-2. • Cumulative impacts are assessed in Chapter 5 and in the NIS.
IFI	<ul style="list-style-type: none"> • Grass surface preferred to proposed unbound surfacing • Vegetation buffer to water's edge • Widening of bank at Clogheen Bridge • Access for IFI personnel • Maintenance of the verge 	<ul style="list-style-type: none"> • The rationale for the proposed surfacing is discussed in Chapter 3, Appendix 1-1 and Appendix 3-3. • The topographical survey has been carried out and the drawings updated. The drawings indicates that a buffer of vegetation will be retained where possible, which will vary in width. • The proposed works at Clogheen Bridge have been amended and the non-native trees will be removed to avoid widening of the canal bank. • Maintenance is addressed in Chapter 3 and Chapter 5.
An Taisce	<ul style="list-style-type: none"> • Path width and user conflict • Natural Heritage and perceived impact on flora and fauna 	<ul style="list-style-type: none"> • The proposed Blueway is intended as a multi-use leisure trail. The rationale for the proposed surfacing and width is discussed in Chapter 3, Appendix 1-1 and Appendix 3-3. • The Further Information Request includes a number of issues relating to flora and fauna. The specific issues and responses are set out in Appendix 1-1. These are included both in Chapter 5 and in the NIS.