Meath County Council

Laytown and Bettystown Walking and Cycling Study

Study Review

Final Issue | 13 October 2021

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 277809

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1 Introduction and background

This report is a review of the Laytown and Bettystown Walking and Cycling Network Study prepared in 2014 by Arup on behalf of Meath County Council (MCC). The study identified 14 primary and secondary routes along with a number of feeder routes, identified a preferred option along those routes and proposed a phasing plan for implementing the schemes.

Since 2014, there has been new policy published at national, regional and local levels which are relevant to the study area as well as new design standards which impact the scheme designs. In addition, new developments, infrastructure and public realm schemes have progressed to various stages which provide opportunities to amend and improve the walking and cycling network.

This review considers the impact of the above elements, recommends amendments to the previous schemes and routes, and proposes the inclusion of new routes to the network.

1.1 Previous Study

The primary and secondary routes proposed in the 2014 study are listed in Table 1 along with any progress or relevant studies along those routes. The network is also illustrated in Figure 1.

Table 1 Primary and Secondary Routes

Route no	Route	Progress
IU1	R132: Ballygarth Manor to north of Southgate Shopping Centre	None
P1	R150 and Colpe Road: Bettystown Square / Spine Road to R132 Roundabout	Construction commenced on Spine Road in 2020
P2	R150 and R151: Laytown Station to Tower Road	Draft public realm schemes developed for Laytown and Bettystown villages
P3	R151 and R150: Tower Road Junction to boundary	Incorporated in the Proposed Boyne Greenway
P4	R150: Julianstown to Laytown Station	None
P5	R150 Duleek Road: R132 to Study Area boundary	No works proposed as part of this route
S1	Narroways to R150 Bettaghtown Junction	None
S2	Pilltown Road: Between Minnistown Road and the R132	None
S3	Minnistown Road: Between Pilltown Road and R150	None
S4	L5615 Garra Road: Between R151 and R150 (Donacarney Village)	No progress. New roads identified in East Meath LAP 2014-2020
S5	Mill Road: Between Colpe Road and R151	New urban design framework plan prepared.
S6	Pilltown Road: Minnistown Road to R150 Bettaghtown junction	None
S7	Coastview Cottages Road	None
S8	Laytown Station to St Columba's Villas	None

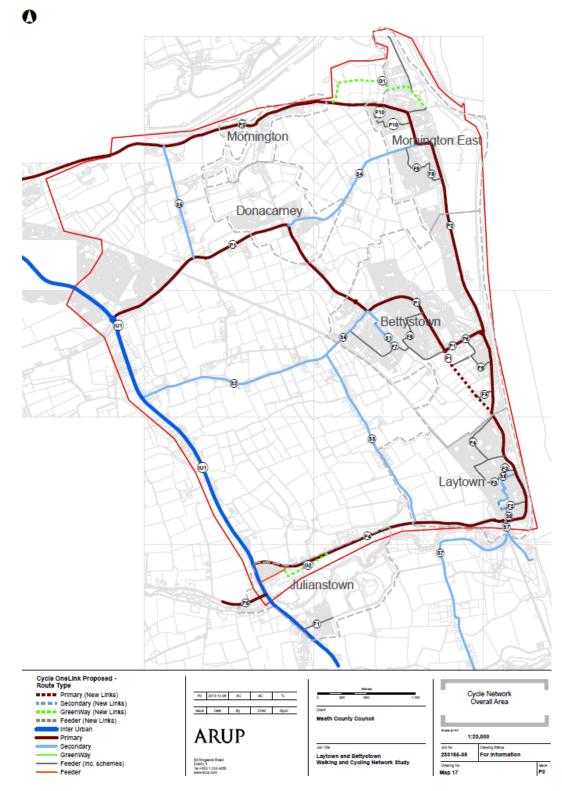


Figure 1 Proposed Primary Walking and Cycling Network

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1.2 Vision and objectives

The vision for the Laytown and Bettystown walking and cycling network is

"to create a safe, efficient and accessible transport network which meet both local needs and wider regional and national strategic aims"

The objectives identified in the previous Study are:

- Improved safety for all users through the introduction of traffic-calmed environments and dedicated facilities for cyclists and pedestrians;
- Improved linkages, connections and access to public transport, especially by pedestrians and cyclists;
- Maximise connectivity and permeability for pedestrians and cyclists through the development of coherent networks for walking, cycling, public transport, car and service vehicles;
- Increased uptake of walking and cycling in the region;
- Facilitate the future and continued sustainable growth and success of Laytown and Bettystown; and
- Enhance the heritage and cultural character of the Village Centre through public realm improvements.

In addition to the above objectives, this review has taken into account an additional objective in relation to school travel:

• Improve the linkages, connections and access between residential areas and schools.

2 Policy and Developments

2.1 Policy

2.1.1 National Planning Framework – Ireland 2040

The Laytown and Bettystown Walking and Cycle network must be consistent with National Policy Objective 27:

Ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments, and integrating physical activity facilities for all ages.

2.1.2 Draft Meath County Development Plan 2021-2027

The draft plan was published for public consultation which finished in March 2020. The Movement Strategy contained within the draft plan has been reviewed which contains both movement policies and objectives. It is stated that:

A key priority for this Plan is the development of a sustainable transport system, promoting measures to increase the use of public transport, while also increasing the modal share for walking and cycling in towns and villages across the County.

In relation to walking and cycling, the following policies and objectives are set out:

MOV POL 17:

To identify and seek to implement a strategic, coherent and high quality cycle and walking network across the County that is integrated with public transport and interconnected with cultural, recreational, retail, educational and employment destinations and attractions.

MOV POL 18:

To support the provision of a long distance inter-connecting walking/cycling route(s) between the Irish Republic and Northern Ireland.

MOV POL 19:

To support the NTA in the development of a strategic pedestrian network plan for the main urban centres of the County.

MOV POL 20:

To encourage, where appropriate, the incorporation of safe and efficient cycleways, accessible footpaths and pedestrian routes into the design schemes for town centres/neighbourhood centres, residential, educational, employment, recreational developments and other uses.

MOV POL 21:

To require that adequate facilities for the secure parking of bicycles be provided at convenient locations close to public transport nodes and public transport interchanges.

MOV POL 22:

To prioritise the safe movement of pedestrians and cyclists in proximity to public transport nodes.

MOV OBJ 25:

To implement, in conjunction with the NTA, the recommendations of the NTA strategy with regard to walking and cycling infrastructure.

MOV OBJ 26:

To revise road junction layouts, where appropriate, to provide dedicated pedestrian and cycling crossings, reduce pedestrian crossing distances, provide more direct pedestrian routes, and reduce the speed of turning traffic.

MOV OBJ 27:

To implement at appropriate locations pedestrian permeability schemes and enhancements.

MOV OBJ 30:

To continue the development of a network of Greenways in the County in accordance with the Department of Transport, Tourism and Sport Strategy for Future Development of Greenways.

MOV OBJ 31:

To engage in the Compulsory Purchase Order process when required in order to facilitate the timely delivery of the Greenway programme within the County.

In addition to walking and cycling specific policies and objectives, it is noted that **MOV OBJ 5** seeks:

To facilitate the provision of a train station at Bettystown (in addition to the existing station at Laytown) as part of the DART expansion works to Drogheda through the planned electrification of the Northern rail line by Irish Rail.

It is important, therefore, to ensure that appropriate walk and cycling routes to the potential new station are identified and future proofed.

The 'Land Use Zoning' objectives have also been reviewed to identify new residential, enterprise, community (i.e. schools) and town centre land uses along each of the routes. Notable zoning which provides opportunities to enhance the walking and cycle network include:

- Enterprise and employment land uses west of Laytown Train Station (Route P4);
- Commercial, residential and community land uses adjacent to Mill Road and Colpe Road (Route P1 and S5); and
- Residential land uses east of Draycott Lodge along Pilltown Road (Route S6).

2.1.3 East Meath Local Area Plan (2014-2020)

This LAP provides a statutory framework for the future growth and development of Bettystown-Laytown-Mornington East-Donacarney-Mornington. The purpose of the LAP is to guide future development within these towns and villages in a sustainable and equitable manner and to inform members of the public, the local community, stakeholders and developers of the policies and objectives that will shape development within the plan area.

Key policies and objectives relevant to this Study are:

TM POL 1:

To provide in cooperation with the NTA, other agencies, bodies and developers/landowners, an integrated network of designated walking and cycling routes to provide safe, convenient and pleasant routes between the main residential areas, schools and Bettystown Town Centre.

TM POL 5:

To encourage modal change from private car use towards increased use of public transport, cycling and walking, and facilitate an integrated network of safe and convenient cycle and pedestrian routes throughout the East Meath area subject to the availability of finances, resources and physical constraints.

TM POL 7:

To promote the integration of a cycle network into the regional and national cycling networks.

TM POL 9:

To ensure that in all new development areas, a cycling network will be incorporated in the initial design stage, establishing links with adjoining development areas.

TM POL 10:

To facilitate and cooperate with the NTA in the delivery of the recommendations set out in the emerging Walkway and Cycleway Strategy for the North East Meath area

TM OBJ 24:

To provide, in co-operation with the NTA, other agencies, bodies and developers/landowners, an integrated network of designated walking and cycling routes to provide safe, convenient and pleasant routes between each main residential area, schools and the town centre areas. The network will, wherever possible, be developed as a segregated, traffic free, sustainable transport facility incorporating best practice design and shall be integrated with the network of Green Infrastructure.

TM OBJ 26:

To provide and/or upgrade footpaths within the development boundary.

The LAP also includes specific objectives in relation to new links, junction upgrades etc. At locations where these objectives interact with one of the proposed (or new) walking and cycle routes, they have been reviewed for consistency with the LAP objective.

As the LAP was prepared in 2014, some of the objectives may no longer be relevant or are superceded by new plans (e.g. draft development plan).

2.1.4 GDA Transport Strategy 2016 - 2035

This transport strategy provides a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area over the next two decades. The strategy has identified that since the 1990's car ownership in Meath has consistently risen even through the recession years and is now reaching saturation point. Cycling mode share in the County is low. The strategy emphasises the need for additional walking and cycling infrastructure in the region and outlines the improvements required to achieve this.

2.2 Proposed Developments

2.2.1 Laytown and Bettystown Draft Public Realm Plan

BDP have prepared a draft public realm scheme for Laytown and Bettystown Square which has published for public consultation in March 2020, 'setting out the future approach to the streets and spaces of both areas'.

The aim of the vision statement for Laytown is to:

Improve the public realm through the reintroduction of a beach front park (...) and the relocation and control of commuter parking. Links to improved amenities and regeneration opportunities will help enhance the character of the town.

The aim of the vision statement for Bettystown is to:

Improve the public realm through a reorganisation of the centre of the town with better connections to the beach. Parking should be better organised along the main routes with enhanced gateways to the town and the identification of opportunities for regeneration.

These schemes are particularly relevant to Routes P1 and P2. The proposed interventions are presented in Figure 2 and Figure 3.

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Figure 2 Bettystown Square public realm scheme (source: BDP)



Figure 3 Laytown Park -option 1 (source: BDP)

2.2.2 Mill Road, Marsh Road Urban Design Framework Plan (2017)

An Urban Design Framework Plan (UDFP) has been developed for the Mill Road, Marsh Road lands. The vision for the overall lands is:

for a vibrant sustainable mixed use urban quarter which is well connected to public transport particularly Drogheda Train Station and community infrastructure, is accessible from Drogheda Town Centre, the Southern Environs and the wider hinterland of East Meath, and provides a high quality residential and employment environment to deliver on the significant economic development and employment potential of the area.,

The key transport proposals are listed below and presented in Figure 4:

- The delivery of the Link Street connecting Colpe Road and Marsh Road as well as tying into the existing Mill Road;
- The delivery of a Link Street running east west across the Plan Lands is proposed to provide a link to the future Drogheda Transportation and Development Area (DTDA);
- Vehicle access to the Gaelscoil an Bhradain Feasa will be provided via the new Mill Road/Marsh Road Link Street which will in turn result in a traffic calming feature along the Mill Road;
- Pedestrian and cycle access to the Gealscoil will continue to be provided via the Mill Road;
- Upgrade the Mill Road and Marsh Road to provide for pedestrian footpaths and to provide on street cycle tracks along the entirety of these roads; and
- Provide a segregated pedestrian and cycle link from the Mill Road/ Marsh Road Area to Drogheda train station.

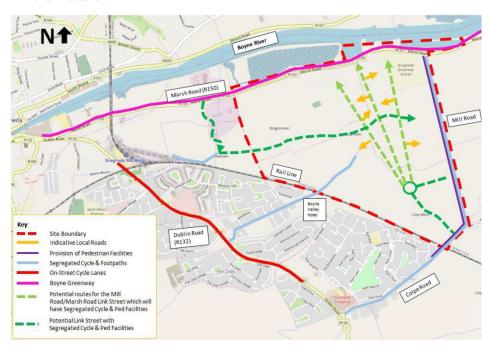


Figure 4 Mill Road, Marsh Road UDFP Movement Plan

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These UDFP for these lands is particularly relevant to Routes P1 and S5.

An application has been submitted and approved for Phase 1 of the UDFP (i.e. a new commercial development in the southern part of the lands). The proposed road infrastructure includes a link street approximately 720m in length, including 3 no. roundabout junctions, and it is also proposed to extend a 230m long spur of the link street to the east to facilitate a connection to the existing school on Mill Road (Gaelscoil an Bhradáin Feasa).

The road infrastructure also includes the realignment of a section of Colpe Road and the realignment of the southern section of Mill Road, and includes proposed cycle lanes/paths, access road to the commercial development and associated car park, footpaths, grass verge, public lighting and the provision of a footpath and cyclepath / cycle lane on Colpe Road to tie-in with the existing shared footpath / cyclepath, to the south-west of the railway line.

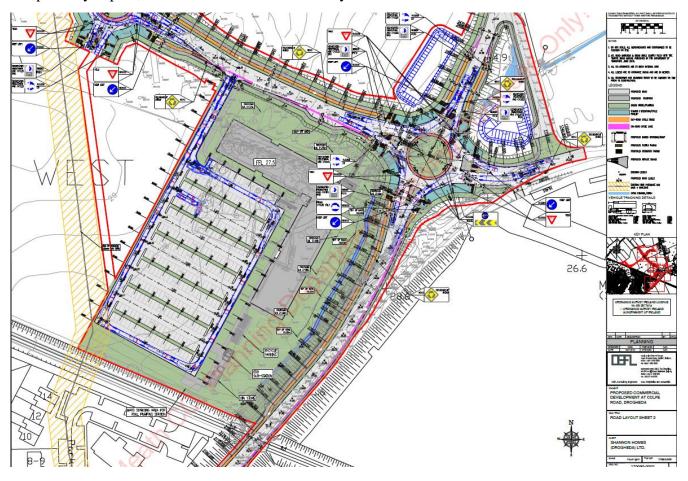


Figure 5 Proposed realignment of Colpe Road

2.2.3 R150 Laytown - Bettystown Spine Road

The R150 Laytown-Bettystown Spine Road scheme provides a new connection between the Bettystown Court roundabout (to the north) and the R150 (to the south). Segregated cycle tracks and footpaths will be provided along this new road (see Figure 6 and Figure 7).

The scheme is under construction and is expected to be completed in 2021. The scheme addresses Section 5 of Route P1 and is also relevant to Route P2.

The scheme also provides an opportunity to explore a one-way route along the R150 between Bettystown Square and the roundabout, allowing for the reallocation of road space along a constrained section of the R150.

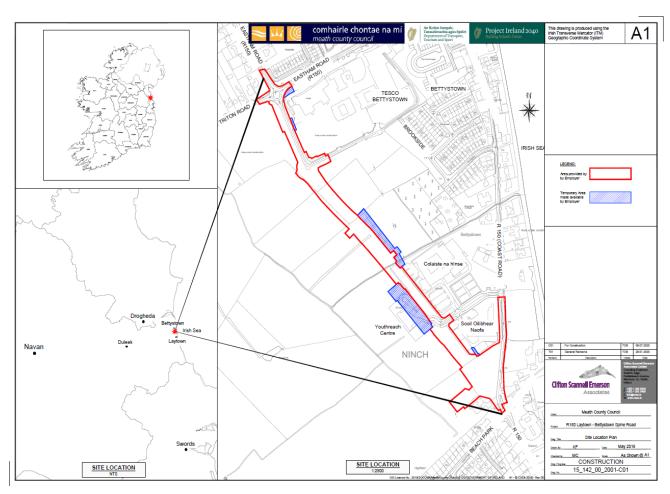


Figure 6 Extent of R150 Laytown-Bettystown Spine Road Scheme



Figure 7 R150 Laytown-Bettystown Spine Road Design

2.2.4 Boyne Greenway – Drogheda to Mornington

Meath County Council previously undertook a non-statutory public consultation of the 'emerging preferred scheme' for this project. It is described in the Route Options Assessment Report as follows:

The proposed design comprises a pedestrian and cycle route along the Boyne Greenway: Drogheda to Mornington route corridor (a minimum of 4m wide of a cycle and pedestrian path) which will provide a safe, traffic-free environment for tourists and local users to cycle or walk adjacent to the Boyne river, estuary and coast, extending from east of Drogheda (Ship Street, which is located adjacent to the railway viaduct Belfast - Dublin line) to Mornington, Co. Meath.

The proposed Boyne Greenway route generally follows the existing R150/R151 Regional Road, to ensure that open views to the Boyne Estuary are retained where possible and maximising the benefits of the greenway. A significant portion of the route falls within the boundary of the Boyne Estuary Special Protection Area and Special Area of Conservation.

The proposed route for the Boyne Greenway is approximately 5.9 km in length with approximately 4.1 km of the route directly alongside the Regional Road, and 1.8km off the Regional Road to ensure both a safe continuation of the route and the retention of the views across the Boyne Estuary.



Figure 8 Boyne Greenway – Preferred Route

The scheme is aligned with Route P3 that was proposed as part of the Study and is also relevant to Route P2 (see Figure 9) and S5 (see Figure 10) as a result of the connection points to those routes.

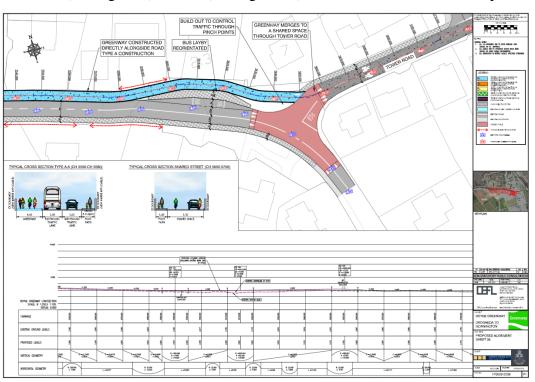


Figure 9 Boyne Greenway - Tower Road junction

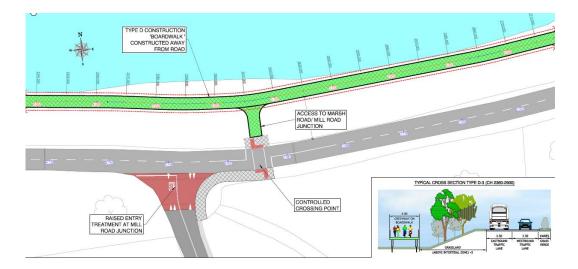


Figure 10 Boyne Greenway – Mill Road junction

2.2.5 Fingal Coastway Project

Fingal County Council is proposing to develop the Fingal Coastal Way, which will provide a high quality, safe, attractive and environmentally sympathetic coastal walking and cycling route to serve Newbridge Demesne, Donabate, Rush, Loughshinny, Skerries and Balbriggan. The proposed rural and urban greenway will encourage tourism and recreation while offering an attractive alternative transport choice for school children and commuters, bringing significant environmental, economic and health benefits to Fingal.

The ambition to extend the Boyne Greenway to tie in with the Fingal Coastway project is noted in the Movement Strategy of the draft Development Plan, stating:

'The Council has the opportunity to work in conjunction with Fingal and Louth County Council in relation to Joint proposals to develop a cycle route between Newgrange and Newbridge House, Donabate'.

It is important, therefore, that Route P2 and S7 are future-proofed to accommodate this connection in the future.

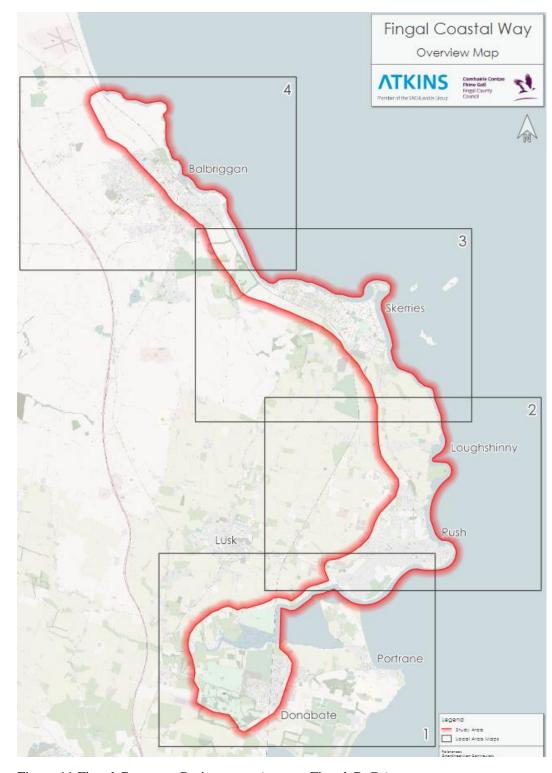


Figure 11 Fingal Coastway Project route (source: Fingal CoCo)

3 Route review process

The process for reviewing each of the preferred schemes and the overall network can be categorised as follows:

- Suitability of proposed schemes;
- Identification of additional measures; and
- Identification of new routes.

A site visit was also undertaken in March 2021 to identify any recent improvements to pedestrian and cycling infrastructure These are discussed in further detail in the following sections.

3.1 Suitability of proposed routes

We reviewed the suitability of each the proposed schemes to determine if they require any changes in relation to:

- Alignment (i.e. does it serve the correct locations?);
- Location (i.e. is it on the e.g. which side of the road?);
- Facility type (e.g. shared path or segregated facilities, see Figure 12); and
- Aligned with various policies and takes account of new or proposed developments.

This suitability review was undertaken in the context of new policy, land use zoning and new and future developments

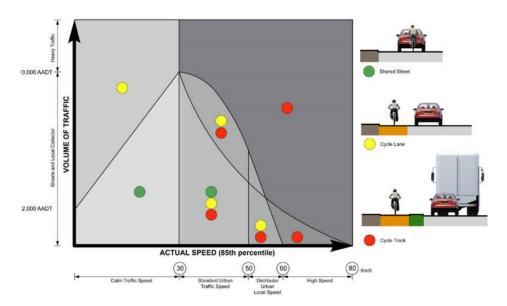


Figure 12 Extract from the National Cycle Manual (2011) which illustrates the appropriate use of integrated or segregated cycle facilities according to the volume and speed of traffic

3.2 Identification of additional measures

We reviewed if additional or new measures were required, especially at junctions and outside of schools. This was carried with the objective of ensuring that each of the routes are safe, coherent, direct, attractive and comfortable.

Technical guidance from DMURS and the National Cycle Manual in addition to emerging best practice has been used to review the proposed schemes and to put forward new recommendations. Examples of the new recommended interventions include:

- Tightened radii at junctions (see Figure 13);
- Raised crossings at roundabout (see Figure 14);
- Transition zones on approach to urban areas (see Figure 15); and
- School Zones (see Figure 16).



Figure 13 Example of tightened radii at junction with raised crossing (Source: DMURS Cross Avenue case study)



Figure 14 Example of upgraded crossings at Sallins Road roundabout in Naas (Source: Google Maps)



Figure 15 Example of transition zone, R640 Clonmel Road, Cahir (Source: Google Maps)



Figure 16 Example of 'school zone' outside of St. Peters NS, Phibsoro (Source: Green Schools Ireland)

3.3 Identification of new routes

Based on new and planned developments, infrastructure and zoning, the need for new routes has been considered as part of this review and identified. This can take the form of permeability measures required to complete a new route in the short term or identifying a longer-term opportunity.

4 Route review

This section of the report reviews the preferred scheme proposed along each of the primary and secondary routes.

4.1 Route IU1 Ballygarth Manor to Drogheda Road North of Southgate

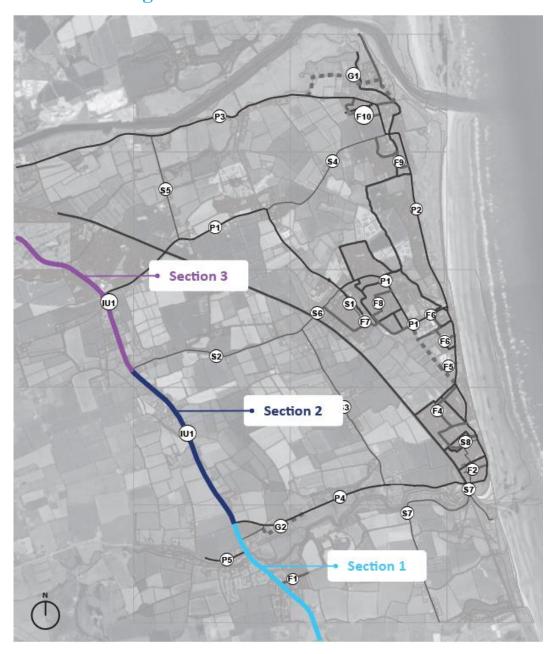


Figure 17 Route IU1

Table 2 Route IU1 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Ballygarth Manor to R150 Laytown Road	Replacement of existing footway and verge with new 3 m wide shared footway and cycleway on both sides of the road Relocation of existing pedestrian crossing at Ballygarth Manor approximately 30 m north west along R132	Provides good pedestrian and cycle access to Whitecross National School Pedestrian crossing relocated to closer match desire line and also improve safety issues associated with proximity of Ballygarth Manor
2	R150 Laytown Road to L5615 Pilltown Road	Conversion of hard shoulders to 2 m wide off-road cycle tracks on both sides of the road Existing speed limit maintained No further footpaths proposed. Existing footpaths to be upgraded to a min width of 2.0 m if required.	Provides safe environment for cyclists traveling in both directions
3	L5615 Pilltown Road to north of Southgate	Conversion of hard shoulders to 2 m wide off-road cycle tracks on both sides of the road to tie into existing facilities in the vicinity of Southgate Existing speed limit maintained No further footpaths proposed. Existing footpaths to be upgraded	Provides safe environment for cyclists traveling in both directions

For the purpose of this review, Section 3 has been split further as follows

- Section 3A: From Pilltown Road to Colpe Road roundabout; and
- Section 3B: From Colpe Road roundabout to MCC boundary.

This will allow for the improvement of existing facilities between the Southgate Shopping Centre and the MCC boundary to be considered in more detail.

There have been no significant new developments along this route since the study. Planning applications and zoning for new residential developments in Julianstown and residential zoning east of the Colpe Avenue estate is noted. Outside of those areas, the zoning is mainly rural.

4.1.1 Section 1 Ballygarth Manor to R150 Laytown Road

The proposed scheme along this section was to replace the existing footway and verge with a new 3 m wide shared facility on both sides of the road and the relocation of the existing pedestrian crossing near Whitecross Primary School. The existing speed limit on this road is 50km/h.

There is a limited amount of development and residences on the western side of the road and therefore the demand for a facility on that side of the road is low. It is considered that an enhanced facility on the eastern side of the road would provide the greatest benefit along, with new crossing opportunities provided to access developments on the western side of the road.

As a result, it is recommended this option be revised as follows:

- Provide a 3 4m wide shared path along the eastern side of the R132;
- Provide a 1.8m footpath along western side of road across bridge (between L56221 and R150 Duleek Road);
- Provide uncontrolled crossing point close to R150 Duleek Road;
- Implement a periodic special speed limit of 30km/h outside of Whitecross Primary School (coinciding with school start and finishing times); and
- Tighten the junction radii at the following junctions to improve the pedestrian environment
 - R150 Duleek Road;
 - L56221:
 - L5622; and
 - Ballygarth Manor.

Traffic calming measures along Ballygarth Manor (between Castlegrove and the R132) should be considered also.



Figure 18 Periodic speed limit sign

4.1.2 Section 2 From R150 Laytown Road to L5616 Pilltown Road

The proposed scheme along this section was to convert both hard shoulders into 2m off road cycle tracks. The existing speed limit along this section of this road is 80km/h, reducing to 50km/h approximately 200m north of the Laytown Road junction.

The preferred option does not provide adequate pedestrian facilities along this section of the route. For cohesion and to increase the attractiveness and safety of the route, it is recommended that this option be revised as follows:

- Provide a 3 4m wide shared path along the eastern side of the R132. Space for this may be a mix of reducing the median width or use of the hard shoulder. Where feasible, a buffer should also be provided to improve the attractiveness of the route;
- Reduce the speed limit to 50km/h between the Glenside hotel and Blacks Garden Centre. This can be achieved by providing uncontrolled crossing points with a pedestrian refuge/ traffic island and narrowing of traffic lanes locally; and
- Provide an uncontrolled pedestrian crossing at northern end of Julianstown Village.

4.1.3 Section 3A From Pilltown Road to Colpe Road roundabout

Similar to Section 2, the proposed scheme along this section was to convert the hard shoulders of the road into 2m off road cycle tracks on both sides of the road. The speed limit on this road increases from 60km/hr to 80km/h just south of Woodgrange estate. Similar to Section 2, the preferred option does not provide adequate pedestrian facilities along this section of the route.

It is recommended that this option be revised as follows:

- Provide a 3 4m wide shared path along the eastern side of the R132. Space for this may be a mix of reducing the median width or use of the hard shoulder. Where feasible, a buffer should also be provided to improve the attractiveness of the route;
- Create a 'transition zone' along the R132 between Moorehall Lodge and the southern roundabout;
- Provide uncontrolled crossing points with pedestrian refuge at key points to facilitate crossing to Woodgrange residential development and Moorehall Lodge. This also assist will traffic calming along the route;
- Removal of the left-turn lane on approach to Pilltown Road junction; and
- Tighten the junction radii at the Pilltown Road junction (thus helping to reduce the crossing distance for pedestrians).

4.1.4 Section 3B Colpe Road roundabout to Meath County Council boundary

No improvements were proposed along this section of the route. There is, however, significant existing and potential demand for walking and cycling given the presence of attractors such as Drogheda Train Station, the Southgate Shopping Centre and a large residential population. North of the Shopping Centre on the R132, the speed limit is 60km/hr. The traffic lanes are wide with a painted median encouraging higher vehicle speeds.

The existing cycling facilities are a mix of protected cycle lanes and on-street cycle lanes.

It is recommended that the proposals for this section are revised as follows

- Upgrade sections of on-street unprotected cycle lanes to protected facilities;
- Improvements to the Southgate Shopping Centre entrance junction off the R132 for pedestrian and cyclists (e.g. removal of slip lanes);
- Rationalisation of junction with Colpe Avenue estate (e.g. potential removal of dedicated left-turn lane);
- Improve pedestrian crossings on northern and eastern arms of the Colpe Roundabout to raised, controlled crossings; and
- Consider the provision of a permeability connection from Park Heights to R132 Dublin Road (see Figure 19).

In the longer term, co-ordination with Louth County Council is also recommended in order to extend the facilities along the R132 to the Rail Station, Bus Station and Drogheda Town Centre.

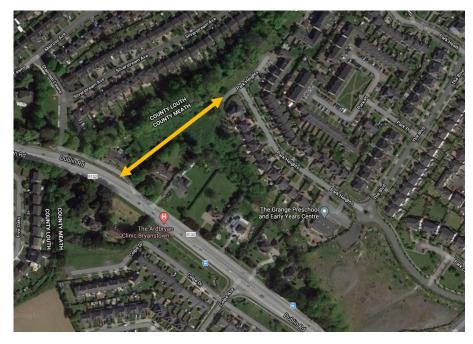


Figure 19 Proposed new link to Park Heights connection

4.2 Route P1 Bettystown Square / Colaiste na Hinse to R132 Roundabout

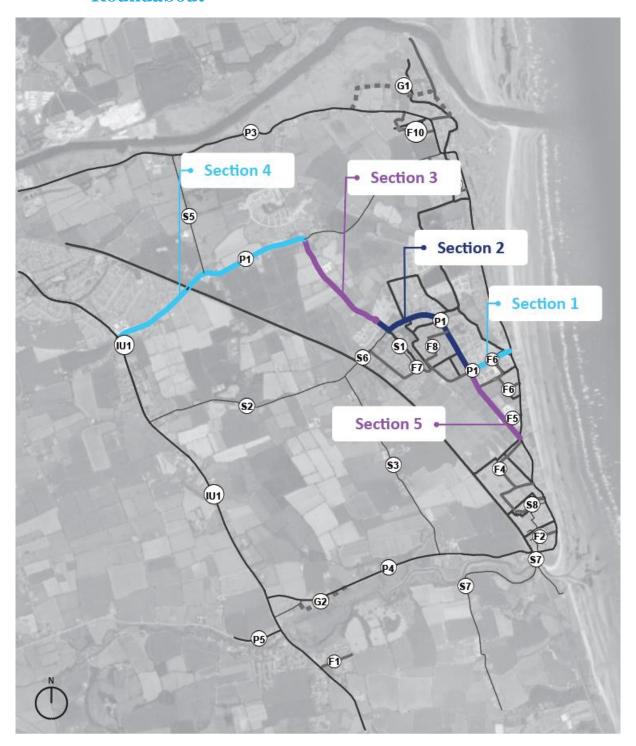


Figure 20 Route P1 alignment

Table 3 Route P1 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Bettystown Sq. to Bettystown Court Roundabout	Reduction to 30 kph along the section closer to Square which will tie in with the Square traffic calming scheme, maintain 50kph elsewhere Shared surface at Square with a paved surface finish Mixed shared street (5.5 m wide road) + retain existing off-road cycle track near Bettystown Court Roundabout	Creates significantly safer and more attractive town centre for all road users. Improvements cater for high cyclists and pedestrian demand
2	Bettystown Court Roundabout to Bettystown Cross Roundabout	Shared 3.0 m pedestrian/cycle facility provided on the western/southern side of Eastham Road as far as Wellesley Manor. Shared facility then switches also provided on northern side of Eastham Road between Eastham Village and the R150 New toucan crossing at bus stop near Eastham Village New toucan crossing near Wellesley Manor New mini roundabout at the junction of R150 and Eastham Road	Safer environment for pedestrian and cyclists Mini roundabout improves safety for motorists
3	Bettystown Cross Roundabout to Donacarney	Shared pedestrian/cycle facility provided on both sides of R150 tie into existing facilities near roundabout at the Whitefield Manor New 3.0m shared pedestrian cycle facility on eastern side of R150 between Whitefield Manor and Donacarney New pedestrian crossing across R150 at Donacarney Realt Na Mara school New mini roundabout at the junction of R150 and the Cottages	Provides safe pedestrian and cycle facility to Donacarney Realt na Mara boys and girls national schools Safe crossing point for pedestrians in front of school Safety improved for motorists with the introduction of the new mini roundabout
4	Donacarney to Colp Cross Southgate	New mini roundabout at the junction of R150 and Park Drive New 3.0 m shared pedestrian cycle facility on northern side of entire route section	Safe pedestrian/cycle facility provided along route where none currently exists Safety improved for motorists with the introduction of the new mini roundabout
5	New Link through Colaiste na Hinse to Bettystown Court Roundabout	New shared pedestrian cycle facility through green fields between Colaiste na Hinse and R150 along corridor where link road is proposed. Shared facility to be provided independent of delivery of the road. New footpath provided on western side of new road	Safe pedestrian/cycle facility provided along route Inviting environment for cyclists and provides alternative to using Bettystown Main Street (Coast Road) where cyclists must share with traffic.

For the purpose of this review, Section 4 has been split further as follows

- Section 4A Between Donacarney and the new Mill Road roundabout; and
- Section 4B Between the new Mill Road roundabout and the Southgate Shopping Centre.

4.2.1 Section 1 Bettystown Square to Bettystown Court roundabout

The proposed scheme along this section was to retain the existing off-road cycle track near Bettystown Court Roundabout, reducing the speed limit to 30km/h on approach to the Square with a shared space scheme at the Square. Cyclists would be mixed on street between Tesco and the Square.

As noted in Section 2.2.1, a draft public realm study has been undertaken for Bettystown Square, proposing several new features incorporating the following key principles:

- A pedestrian friendly environment: widen pavements, safe crossing points and creation of defined pedestrian spaces;
- Rationalisation of vehicular movement: tightening of junctions where possible, introduction of a mini-roundabout, reorganisation and rationalisation of car parking, raised tables to the central portion of the carriageway; and
- A green and sustainable square: introduction of rain gardens and coastal tolerant tree planting.

Key changes also include a new mini-roundabout at the square along with converting the western approach to the roundabout to two-way.

It is recommended that the proposals for this section of the route are revised as follows:

- Adopt the proposed public realm scheme for the Square;
- Continuous footpath treatments and tightened junction radii at the following entrances:
 - o Bettystown Court Hotel entrance;
 - o Tesco entrance;
 - The Anchorage;
 - o Caravan park entrance; and
 - o Roseville.
- Convert the bus stops to 'in-line' stops and widen pavement; and
- Provide a raised pedestrian crossing at the Bettystown Court roundabout (eastern arm).

One-way system study

The provision of continuous segregated facilities for the entire length of this section is possible with the implementation of a one-way traffic system east of The Anchorage development. This option should be investigated further as part of a wider traffic circulation plan that could be implemented following the completion of the proposed R150 Laytown to Bettystown Spine Road.



Figure 21 Bettystown Square

4.2.2 Section 2 Bettystown Court Roundabout to Bettystown Cross Roundabout

The proposed scheme along this section was to provide a 3m wide shared facility along the westerns/southern side of Eastham Road as far as Wellesley Manor before switching to the northern side of the road between the village and the R150. New crossings and a new mini-roundabout were also proposed.

It is noted that new residential areas are zoned and under construction in the vicinity of Bettytown Cross roundabout (e.g. Whitefield Hall). New residences at Eastham Heights have also been constructed with frontage to Eastham Road.

A 3m wide shared facility will not provide a good level of service along this section for pedestrians. There is a pinch point between Bettystown Cross roundabout and Eastham Cove estate, making it difficult to provide dedicated facilities along that section.

It is recommended that the proposals for this section of the route are revised as follows:

• Provide 2m wide northbound cycle track on the western/southern side of the road from north of Eastham Cove, reducing to shared facility at pinch points only;

- Continuation of footpath between Eastham Heights and Bettystown Cross roundabout on eastern side of the road;
- Provide 2m wide footpath where missing along the eastern/northern side of the road;
- Continuous footpath treatments and tightened junction radii at the following entrances:
 - The Cloisters; and
 - Eastham Village.
- Raised table junction treatment at Eastham Road/Castlemartin Close;
- Improved surfacing of laneway west of Wellesley Manor and new permeability connection between Whitefield Hall residential development and Castlemartin Green) – also forms part of a new route \$9:
- Provide raised crossing on eastern arm of Bettystown Cross roundabout;
- Traffic calming along Eastham Road and Castlemartin Close;
- New pedestrian crossing near Wellesley Manor; and
- New mini roundabout at the junction of R150 and Eastham Road.

4.2.3 Section 3 Bettystown Cross Roundabout to Donacarney

The proposed scheme along this section was to provide a 3m shared facility on the eastern side of the road between the Whitefield residential development and Donacarney, with a new pedestrian crossing outside of Realt Na Mara school. New mini-roundabouts were also proposed at Donacarney village junction.

Given the existing pedestrian and cycling facilities in place at Realt Na Mara, the scheme is considered appropriate as it ties in with Bettystown Cross Roundabout to the south and Donacarney Village.

Recent improvements between Donacarney Village and Realt na Mara school include:

- Yellow bar line markings on approach to the Realt Na Mara which assist in traffic calming; and
- Sections of new footpath and cycle lanes associated with new residential developments (e.g. Ard na Mara).

It is recommended that the proposals for this section of the route are revised as follows:

- Provide a 4m wide shared facility on the eastern side of the road; and
- Introduce a periodic special speed limit of 30km/h outside of Realt Na Mara School be implemented (coinciding with school start and finishing times) along with complimentary traffic calming measures.

As noted in the East Meath LAP, a new road which would indicatively route south of the school is proposed. A cycle facility along this road should be included to provide a connection with Garra Road and Colpe Road.

4.2.4 Section 4A Donacarney to New Mill Road Roundabout

The proposed scheme along this section was to provide a 3m shared facility on the northern side of the route, with a new mini roundabout at the junction of the R150 and Park Drive.

On the northern side of the road in Donacarney, there is approval for a new mixed-use retail, commercial and residential development which is presently under construction. A new 3.5m shared cycle and pedestrian facility will be provided as part of the development.

It is recommended that the previous proposal for a 3m shared facility on the northern side of the road is retained (increasing to 4m where feasible). The facility should tie into the new Mill Road roundabout layout.

4.2.5 Section 4B New Mill Road Roundabout to the Southgate Shopping Centre

As noted in Section 2.2.2, there is an Urban Design Framework Plan for the Mill Road, Marsh Road lands which include new roads. A planning application has been submitted and approved for a new commercial development in the southern part of the lands (i.e. Phase 1). A new roundabout is proposed at Mill Road as part of this application.

The proposed Mill Road roundabout includes raised crossings which will allow pedestrians and cyclists to safely move through the junction. Between the railway bridge and the roundabout, a segregated footpath and cycle track are proposed (northbound) and an on-road cycle lane (southbound).

The on-road cycle lane is not a suitable facility and, given the lack of development on the southern/eastern side of Colpe road, it is recommended that facilities are focused on the northern/western side of the road (e.g. a wider shared facility or footpath and two-way cycle track).

It is recommended that the proposals for this section of the route are revised as follows:

- Remove the on-road cycle proposed as part of the Mill Road roundabout;
- Provide a 4m wide share facility on the northern side of the road;
- Provide an uncontrolled crossing be provided outside of the Presbyterian Church; and
- Provide a footpath on the southern/eastern side of the road between the Church and the neighbouring property (approximately 150m).

It is noted that a temporary path has been recently constructed on the northern side of the road between Park Ridge estate and the Educate Together School entrance (see Figure 22).



Figure 22 Temporary path on northern side of Colpe Road (facing north-east)

4.2.6 Section 5 R150 Laytown-Bettystown Spine Road

This section of the route is the R150 Laytown-Bettystown Spine Road scheme which is provides a new connection between the Bettystown Court roundabout (to the north) and the R150 (to the south). Segregated cycle tracks and footpaths will be provided along this section.

The scheme is under construction and is due to be completed in 2021. There are no additional recommendations regarding this route.

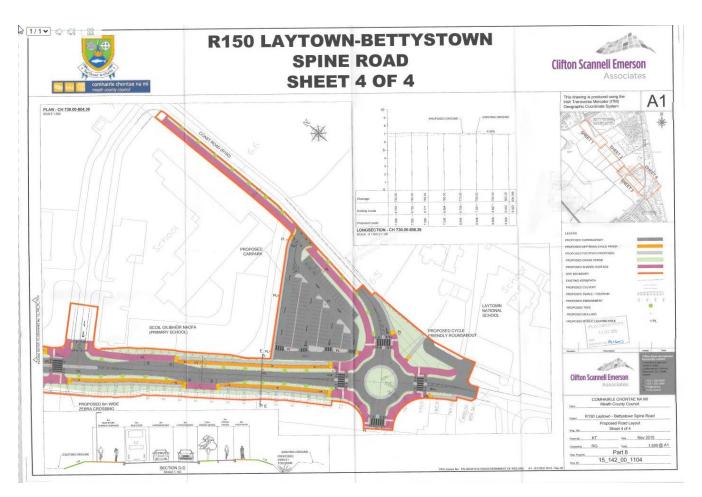


Figure 23 R150 Laytown-Bettystown Spine Road Design

4.3 Route P2 Laytown Rail Station to Tower Road Junction

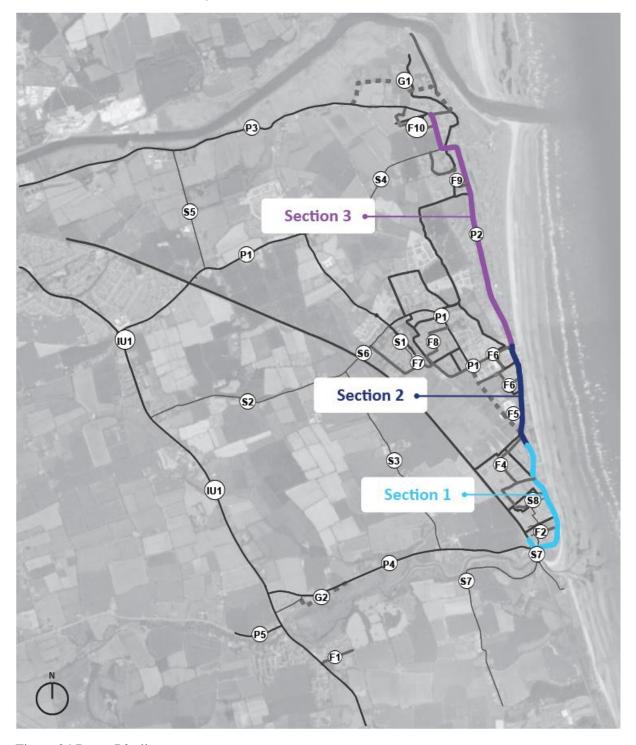


Figure 24 Route P2 alignment

Table 4 Route P2 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Laytown Rail station to Laytown Church	New 2.2 m shared pedestrian cycle facility on eastern side and 2.0 m min width footpath on west side along of entire route section	Safe pedestrian/cycle facility provided along route
2	Laytown Church to Bettystown School/Bettysto wn Square	Replacement of existing footpath with new 2.0 m wide footpath on both sides Road shared by bicycles and vehicles New toucan crossings provided at Bettystown Square	Safe pedestrian/cycle facility provided along route
3	Bettystown Square to R151/Tower Road Junction	Replacement of existing footway and verge with 3 m wide shared footway/cycle way along western side of Golf Links Road 2.0 m wide footpath along east side of R150 in between Coney Hall Road and Tower Road New mini roundabout at Mornington Towers/Golf Links Road Junction New mini roundabout at R151/Coney Hall Road junction	Safe pedestrian/cycle facility provided along route New mini roundabouts improve safety at what is currently a dangerous bend

4.3.1 Section 1 Laytown Rail station to Laytown Church

The proposed scheme along this section was to provide a new 2.2m shared facility on the eastern side of the road and a minimum 2m wide footpath along the western side. A shuttle signal control system was also proposed under the bridge along with a new footpath on the northern side of the road.

As described in Section 2.2.1, a public realm scheme has been developed for Laytown village with two options presented (although it should be noted that the delivery of this route is not dependent on the delivery of the public realm scheme). In both options the bus turn-around area is removed, and improved paths are provided on the southern side of the road with three new crossing points proposed.

It is also noted that a new Aldi supermarket has opened in the village along Strand Road.

For the purpose of this review, Section 1 has been extended further north to the new Spine Road roundabout.



Figure 25 Laytown public realm scheme

The provision of a 2.2m shared facility on the eastern side of the road is not an appropriate facility for mixing pedestrians and cyclists in a busy pedestrian area. It is therefore proposed for cyclists to mix onstreet with traffic is a more traffic calmed environment.

Pinch points along the route make it difficult to provide a cohesive cycle route Laytown Village and the new Spine Road roundabout.

It is recommended that the proposals for this section of the route are revised as follows:

- Incorporate the new crossings proposed as part of the public realm scheme;
- Provide a 3-4m wide shared path on the southern/eastern side of the road as part of the village public realm scheme and extend it along the R150 to St. Columba's Villas;
- Between St. Columba's Villas and Seaview, reduce roadway to 5.5m in width and widen path on eastern side of the road;
- North of Seaview, provide a 3-4m wide shared path on the eastern side of the road. Where
 additional space is available, provide a buffer between pedestrians and cyclists (e.g. near Inse Bay
 estate;
- Provide a new crossing south of St. Columba's Villas; and
- Implement a periodic special speed limit of 30km/h outside of Scoil na Spioraid Naoimh (coinciding with school start and finishing times) complementary traffic calming should also be considered.

4.3.2 Section 2 Laytown Church to Bettystown School/Bettystown Square

The proposed scheme along this section was to provide a 2m wide footpath on both sides of the road, with cyclists mixed on-street.

The R150 Spine Road scheme includes a new roundabout with crossings on all arms along with a shared walking and cycling facility on the western side of the road (between the roundabout and the access road to Colaiste Na Hinse).

As noted in Section 1 of Route P1, a public realm scheme has been prepared for the Bettystown Square (although it should be noted that the delivery of this route is not dependent on the delivery of the public realm scheme).

The previous recommendation of a 2m wide footpath on both sides of the road should be retained, tying in with the Spine Road scheme facilities.

It is recommended that the following proposal is also included:

• Implement a periodic special speed limit of 30km/h outside of Colaiste na Hinse (coinciding with school start and finishing times). Complimentary traffic calming measures should also be considered.

One-way system study

In addition to the above, it is recommended that a study is undertaken examining the feasibility of providing a new one-way system along the Coast Road (between Bettystown Square and the Spine Road roundabout) following the opening of the new R150 Spine Road scheme. This would allow for the provision of continuous segregated facilities for cyclist for the entire length of this section, connecting residential areas with schools along the R150.

4.3.3 Section 3 Bettystown Square to R151/Tower Road Junction

The proposed scheme along this section was to provide a 3m wide shared facility along the western side of Golf Links Road and a 2m wide footpath along east side of R151 (between Garra Road and Beacon View). New mini roundabouts were also proposed at the following two junctions:

- R151 / Morning Tower; and
- R151 / Garra Road.

A key consideration of this route is how best to tie in with the Boyne Greenway scheme which terminates at Tower Road. The scheme is a 4m wide shared facility (see Figure 26).

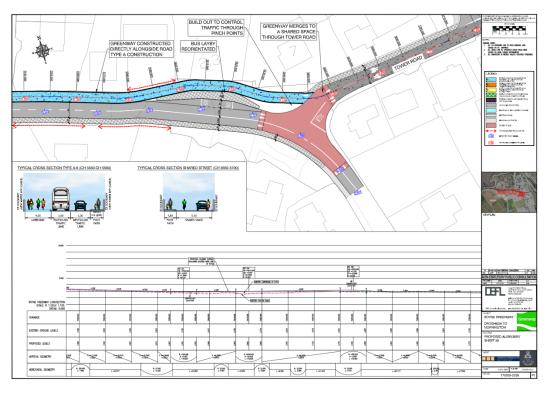


Figure 26 Boyne Greenway layout at Tower Road

Following a review, it would appear to be more feasible to provide a shared facility along the eastern side of the road which would also allow for a more cohesive continuation of the proposed Boyne Greenway route.

It is recommended that the proposals for this section of the route are revised as follows:

- Provide a 3m-4m wide share facility along the eastern/northern side of the road (between Tower Road and Bettystown Square);
- Raised table junction design at Morning Tower/Golf Links Road junction;
- Provide a new crossing at Brabazon Drive (connecting with a new east-west route, see Route S9);
- Retain previously proposed crossing near service station on R151; and
- Retain previously proposed mini roundabout at R151/Coney Hall Road junction.

4.4 Route P3 R151/Tower Road Junction to Study Area Boundary

Route P3 is the essentially the Boyne Greenway (from Drogheda to Mornington) which has progressed to the planning stage. The scheme considers connectivity to the Route S5 (Mill Road) and ties in with the proposals for the northern end of Route P3. No additional recommendations are proposed along this route.

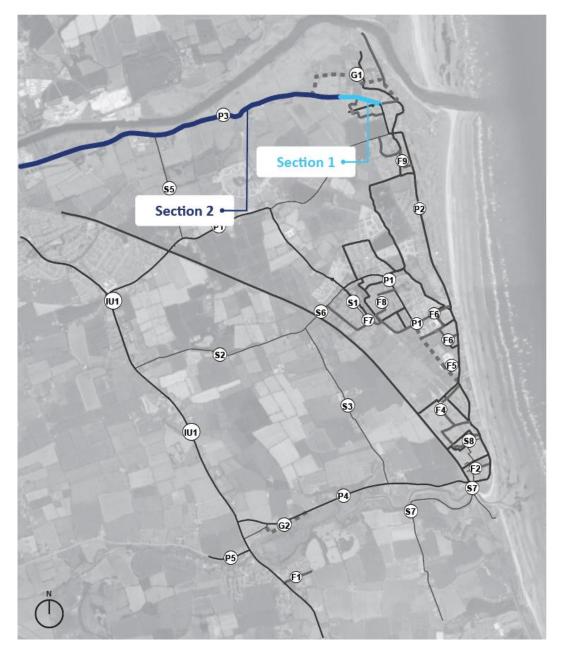


Figure 27 Route P3 alignment

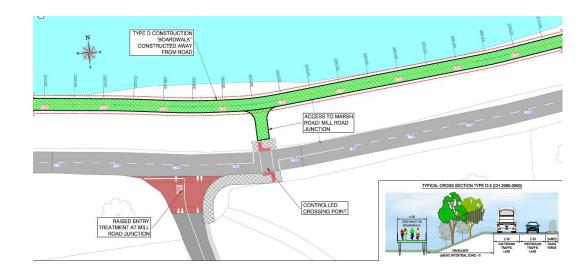


Figure 28 Proposed crossing from Boyne Greenway to Mill Road

4.5 Route P4 R150 Julianstown Junction to Laytown Station

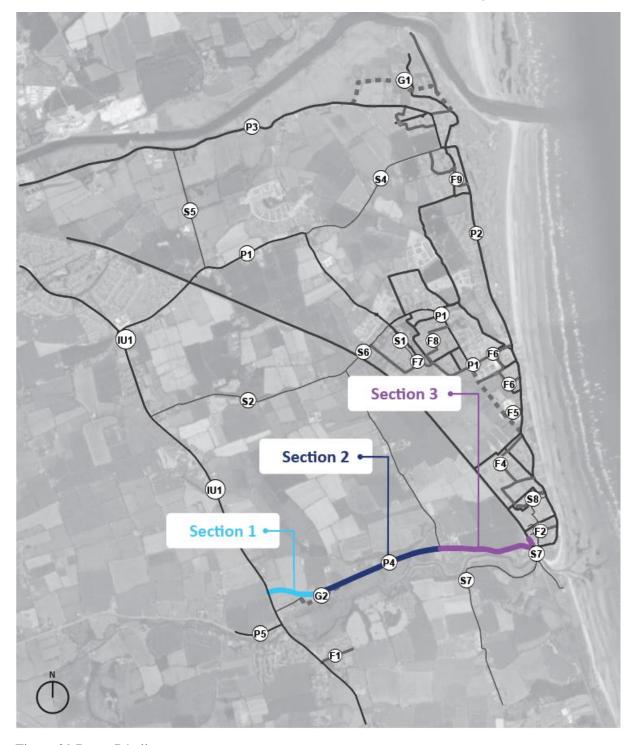


Figure 29 Route P4 alignment

Table 5 Route P4 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	R150 Julianstown Junction to Julianstown Church	Replacement of existing footway and verge with 3 m wide shared footway/cycle way on both sides of the road	Safe pedestrian/cycle facility provided along route
2	R150 Julianstown Church to Sonairte	Replacement of existing footway and verge with 3 m wide shared footway/cycle way on the northern side of the R150	Safe pedestrian/cycle facility provided along route
3	R150 Sonairte to Laytown Station	Replacement of existing footway and verge with 3 m wide shared footway/cycle way on the northern side of the R150	Safe pedestrian/cycle facility provided along route

4.5.1 Section 1 R150 Julianstown Junction to Julianstown Church

The proposed scheme along this section was to provide a 3m wide share facility on both sides of the road. An important consideration is how this section ties into the proposals along the R132 (i.e. Route IU1). There are no changes to lands uses proposed along this section.

Although there is residential development on the southern side of the road along this section, there is a limited amount of development along this route generally. To provide a continuous cycle route, it is considered that an enhanced facility on the northern side of the road would provide the greater benefit along with new crossing opportunities provided to access developments on the southern side of the road where required.

It is recommended that the proposals for this section of the route are revised as follows:

- Provide 3-4m wide shared path on the northern side of the road only, with an uncontrolled crossing at Preston Park;
- Provide footpaths for 30m along Hillcrest on approach to the junction (potentially extending to Main Street);
- Provide a raised uncontrolled crossing just west of Hillcrest;
- Traffic calming measures along this section (e.g. speed humps); and
- Tightened junction radii at Hillcrest.

4.5.2 Section 2 R150 Julianstown Church to Sonairte

The proposed scheme along this section was to provide a 3m wide share facility on the northern side of the road. There are no changes to lands uses proposed along this section. The speed limit along this section of the road is 80km/h, therefore segregated facilities are recommended.

The gradients along this section of the road may lead to high speeds among cyclists along the shared path, creating an uncomfortable environment for pedestrians. Other constraints include pinch points at the western end of this section which are likely to require land acquisition, loss of trees etc.

It is recommended that the proposals for this section of the route are revised as follows:

- 3m-4m shared path on northern side of the road, only where constrained;
- Segregate pedestrians and cyclists where additional space is available and higher cycling speeds are expected; and
- Traffic calming measures along this section (e.g. speed humps).

4.5.3 Section 3 R150 Sonairte to Laytown Station

The proposed scheme along this section was to provide a 3m wide shared facility on the northern side of the road.

There is a land use planning objective for 'general enterprise and employment' at the lands just west of the train station, on the northern side of the road.

Similar to Section 2, the gradients along this section of the road may lead to high speeds among cyclists, creating an uncomfortable environment for pedestrians.

It is recommended that the proposals for this section of the route are revised as follows:

- 3m-4m shared path on northern side of the road, only where constrained;
- Segregate pedestrians and cyclists where additional space is available and higher cycling speeds are expected;
- Provide a direct path through the land west of Laytown Train Station; and
- Provide a transition zone on approach to rail station (i.e. where 60km/h speed limit begins).

4.6 Route P5 R150/R132 Junction to Study Area Boundary



Figure 30 Route P5 alignment

Table 6 Route P5 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Junction of R150/R132 to Study Area Boundary	Convert existing footpath on northern side of Duleek road to shared footway/cycleway (no works required)	Safe pedestrian/cycle facility provided along route

The proposed scheme for this route was to provide designate the existing footpath on the northern side of Duleek Road as a shared facility (approximately 170m) through the provision of signage.

This footpath has pinch points which makes it unsuitable to be shared between pedestrians and cyclists (and unlikely to be used by cyclists).

Following a review, it is noted that there are along this footpath which do not make it appropriate to be shared

It is recommended that the proposals for this section of the route are revised as follows:

- Provide traffic calming on approach to the junction with the R132 (e.g. speed bumps); and
- Reduce the junction radii at the Duleek Road/R132 junction (previously recommended as part of Section 1 of Route IU1).

4.7 Route S1 Narroways to R150 Bettaghtown Junction



Figure 31 Route S1 alignment.

Table 7 Route S1 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Narroways to R150 Bettaghtown Junction	New 3.0 m wide shared footway/cycle way between The Avenue and the R150 New 3.0 m wide shared footway/cycle way between the Avenue and The Grove Relocate existing uncontrolled pedestrian crossing further west along Narroways to improve sightlines of crossing	Improved permeability through neighbouring residential estates Improved safety by relocating

The proposed scheme along this route was to utilise the existing local access road at the junction of Pilltown Road and the R150 before creating a new connection with the Avenue (requiring a new path through a green area). In addition, a new path connecting the Avenue and the Grove was proposed.

This route is important in terms of providing a connection to Route P1 from existing and zoned residential areas to the south. It can also accommodate a future connection between Eastham Road and the lands identified for a future Bettystown Train station.

Improvements to facilities along Eastham Road are proposed as part of Route P1, Section 2.

It is recommended that the proposals for this section of the route are revised as follows:

- Improved signage and surfacing along the route as it is not an intuitive public route; and
- Confirm extent of 'right of way' (see Figure 32).

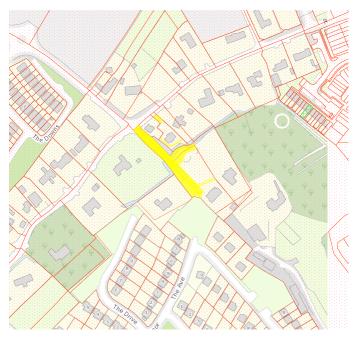


Figure 32 Land direct 'right of way' zone

4.8 Route S2 Pilltown Road between Minnistown Road and the R132



Figure 33 Route S2 alignment

Table 8 Route S2 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Drogheda Road/Minnisto wn Road to R132/Drogheda Road	Replacement of existing verge with 3 m wide shared footway/cycle way and post and rail fence on the northern side of the Drogheda Road	Safe pedestrian/cycle facility provided along route where there is currently none

The proposed scheme along this route was to provide a 3m shared facility along the northern side of the L5615 Pilltown Road between the R132 and Minnistown Road. Existing and zoned land uses along this section are rural, except for St. Colmcilles GAA club.

There is a clear benefit in providing a safe pedestrian and cycle connection between the GAA club and nearby residential areas – the majority of which are towards Bettystown -east of the Railway line.

The previously proposed scheme is considered to appropriate for this route given the anticipated demand. Priority should be delivery of the route between the GAA club and Bettystown residential areas (incorporating route S6).

It is recommended that the proposals for this section of the route also incorporate the following:

• Traffic calming in the vicinity of the GAA club with the speed limit reduced to 50km/h.

4.9 Route S3 Minnistown Road between Drogheda Road and R150

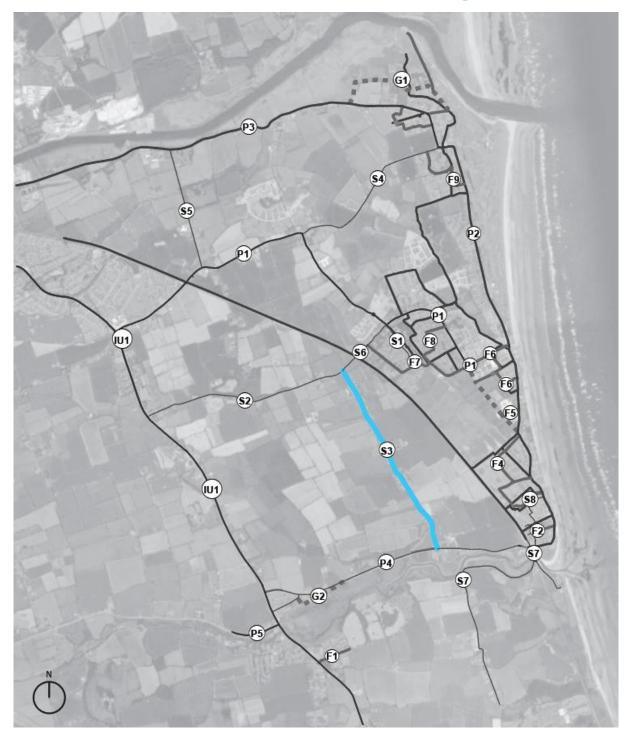


Figure 34 Route S3 alignment

Table 9 Route S3 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Drogheda Road/ Minnistown Road to R150/ Minnistown Road	Speed reduced to 50 kph along entire route section Cyclists shared with traffic on road Existing footpaths improved to provide a minimum width of 2. 0m	Improvements to safety for all road users owing to speed reduction

The proposed scheme for this route was to reduce the speed to 50km/h and improve existing footpaths to a minimum width of 2m.

Existing and zoned land uses along this section are rural, with the main attractor of trips being East Meath Soccer club to the south. Improving this link for pedestrians is therefore considered to be the main priority.

In general, the concept previously proposed appears appropriate and it is recommended that the proposals for this section of the route be revised as follows:

- Provide a 2m footpath along the eastern side of the road (subject to further feasibility studies). If it is necessary to switch the facility, an uncontrolled crossing should be provided at 'straight' sections of the route where visibility is good; and
- Reduce the speed limit to 50km/h, with traffic calming (e.g. rumble strips) provided at sharp bends along this road.

4.10 Route S4 L5615 Garra Road between R151 and R150 (Donacarney Village)



Figure 35 Route S4 alignment

Table 10 Route S4 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Coney Hall Road/R151 to R150/ Coney Hall Road	Replacement of existing verge with 3 m wide shared footway/cycle way and post and rail fence on the southern side of the Coney Hall Road as far as the R151 junction	Safe pedestrian/cycle facility provided along route where there is currently none

The proposed scheme along this route was to provide a 3m shared facility along the southern side of the road. The existing land use and proposed zoning along this route is predominantly rural, except for Donacarney village.

The draft county development plan includes a zoning objective to 'provide for and improve open spaces for active and passive recreational amenities' for a land parcel towards the eastern end of this route, on the northern side of the road (although noted that it is zoned as a town centre in East Meath LAP)

The East Meath LAP also identifies an objective for strategic roads near this route which include

- a southern orbital route of Donacarney Village; and
- a realignment of Garra Road (east of Donacarney Village).

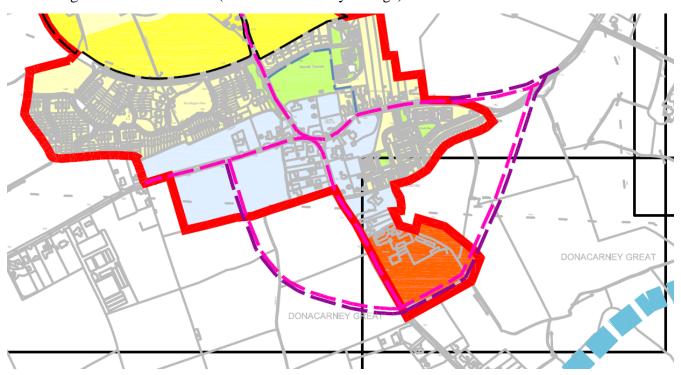


Figure 36 East Meath LAP – strategic road objective

This route is the main one between Donacarney and Mornington and the provision of high-quality facilities for pedestrians and cyclists would encourage active travel, especially to Realt na Mara school.

Following a review, it would appear to be more feasible to provide a shared facility along the northern side of the road, tying into the indicative realignment of Garra Road.

It is recommended that the proposals for this section of the route are revised as follows:

- Provide a 3-4m wide shared facility on the northern side of the road, switching to southern side of
 the road only if necessary, with an uncontrolled crossing provided at 'straight' sections of the route
 where visibility is good; and
- Retain proposed 'mini-roundabout' and raised pedestrian crossing at Donacarney village.

Route S5 Mill Road (between Colpe Road and R151) 4.11



Figure 37 Route S5 alignment

Table 11 Route S5 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Coney Hall Road/R150 to R150/ R151	Replacement of existing verge with 3 m wide shared footway/cycle way and post and rail fence on the western side of the Mill Road	Safe pedestrian/cycle facility provided along route where there is currently limited provision

The proposed scheme along this route was to provide a 3m wide shared facility along the western side of Mill Road.

The southern part of this route is bounded to the west by the future Whiteland's development (i.e. Phase 1 of the Mill Road, Marsh Road UDFP). A planning application has been approved for a commercial development, with new roads, footpaths and cycling facilities, including a new roundabout junction at Colpe Road as previously described in Section 2.2.2.

There are number of schools located along the eastern side of this road, including:

- Drogheda Educate Together Secondary School temporary secondary school;
- Gaelscoil Bhradain Feasa; and
- Drogheda Grammar School.

At the northern end of Mill Road, at the junction with the R150, a raised entry treatment is proposed with a crossing point to the east which provides access to the proposed Boyne Greenway (see Figure 38).

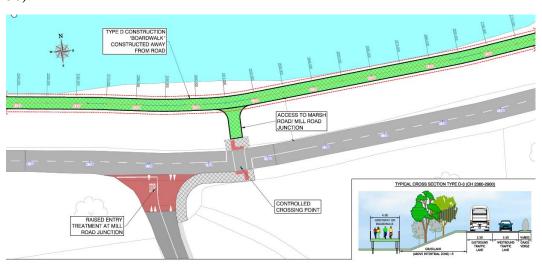


Figure 38 Boyne Greenway near Mill Road

Given the number of schools along this road, future development, gradients and connectivity to the proposed Boyne Greenway, it is recommended that a high-quality facility be provided to encourage active travel, with pedestrians and cyclists segregated from each other.

It is recommended that the proposals for this route are revised as follows:

- Provide a segregated two-way cycle track (minimum 2.5m wide) and 2m footpath on the western side of the road;
- Reduce to a 3-4m wide shared facility at local pinch points only; and
- Reduce the speed limit to 50km/h and introduce periodic speed limits outside of the schools along the route at school start and finishing times. Complimentary traffic calming measures should also be considered.

It is noted that a temporary path has been recently constructed on the western side of the road, between the junction with Colpe Road and the Educate Together school entrance (see Figure 39).



Figure 39 Temporary path along Mill Road

4.12 Route S6 R150 Bettaghtown junction to Minnistown Road



Figure 40 Route S6 alignment

Table 12 Route S6 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	R150 Bettaghtown Junction to Minnistown Road	Replacement of existing verge with 3 m wide shared footway/cycle way and post and rail fence on the northern side of the Drogheda Road as far as the R150 junction	Safe pedestrian/cycle facility provided along route where there is currently limited provision

The proposed scheme along this section was to provide a 3m wide shared facility on the northern side of the road. This proposal is appropriate based on the anticipated demand and is consistent with the proposals for S2, providing continuity along the route.

A pinch-point at the rail bridge is noted which will require a shuttle system be implemented locally to accommodate a footpath. This is a relatively straight section of the road with good visibility and therefore traffic signals may not be required to implement this (e.g. eastbound traffic yields to westbound traffic).

At the eastern end of the route (i.e. at the junction with the R150), a mini-roundabout is proposed as part of Route P1 Section 2.

Lands east of the railway line and Draycott Lodge, on the northern side of the road, are zoned for residential facilities. It is recommended that connectivity for pedestrians and cyclists from Pilltown Road through these lands to Whitefield Manon Lane is future proofed.

It is recommended that the proposals for this route are revised as follows:

- Retain 3m wide shared path along northern side of the road;
- Provide a 2m footpath beneath rail bridge and reduce to one lane (implementing a priority shuttle system for traffic); and
- Futureproof route through new zoned residential lands east of Draycott Lodge.



Figure 41 Residential lands zoned east of Draycott Lodge

4.13 Route S7 Coastview Cottages Road from R150 Rail Station to Study Area Boundary



Figure 42 Route S7 alignment

Table 13 Route S7 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Coastview Cottages Road from R150 Rail Station to Study Area Boundary	2.25m off-road cycle track along Coastview Cottages Road (between the Laytown United sports pitches and the Study boundary)	Safe pedestrian/cycle facility provided along route where there is currently limited provision

The proposed scheme along this route was a 2.25m off-road cycle track along Coastview Cottages Road (between the Laytown United sports pitches and the Study boundary). The existing and proposed zoning along the route is rural, apart from the playing pitches.

The proposed scheme is not appropriate as it does not accommodate pedestrians and is serving areas of limited residential development, especially south of the junction with Ballygarth Manor

It is recommended that the proposals for this route are revised as follows:

- Provide a 2-3m wide footpath path between the River Nanny bridge and playing pitches;
- Provide a 2m wide footpath along Coastview Cottages Road as far as Ballygarth Manor on the northern/western side of the road. If it is necessary to switch the facility, an uncontrolled crossing should be provided at 'straight' sections of the route where visibility is good;
- Provide a 2m footpath along Ballygarth Manor (northern side of the road) between R132 and Coastview Cottages Road; and
- Reduce speed limit to 50km/h along Coastview Cottages Road.

In addition to the above, it is recommended that a feasibility study is undertaken into the extension of a walking and cycling route along the coast which would tie in with the proposed Fingal Coastway at Balbriggan.

Note: Route S7 was omitted from the drawings in Appendix D and the implementation plan. Based on the Options Assessment section of the report, it is assumed that the proposed scheme is a 2.25m offroad cycle track along Coastview Cottages Road (between the Laytown United and the Study boundary).

4.14 Route S8 R150 between Laytown Rail Station and St Columba's Villas



Figure 43 Route S8 alignment

Table 14 Route S8 description and benefits

Section No.	Section	Scheme Description	Scheme Benefits
1	Laytown Rail Station to St Columba's Villa	New 3.0 m shared footway cycle way linking Beach Grove to Alverno Heights New 2.0 m footway through Alverno Heights	Safe pedestrian/cycle facility provided along route where there is currently limited provision

The proposed scheme along this route was to complete the missing link between Laytown Rail station and St Columba's Villa by providing a 2m footpath through Alverno Heights and a 3m shared facility between Beach Grove and Alverno Heights.

The proposed scheme is considered appropriate, with the shared facility between Beach Grove and Alverno Heights being considered a key cycle and pedestrian link to the Train Station.

It is recommended that the proposals for this route are revised as follows:

- A minor realignment to the route of the 2m footpath within Alverno Heights is recommended; and
- Junction treatments to be considered at Seamount Crescent and Alverno Heights.

In the longer term, a new pedestrian bridge connecting Alverno Heights with Laytown Station should be considered, especially in the context of the new zoned enterprise and employment lands west of the station.

5 New routes

In addition to the network of 14 primary and secondary routes proposed as part of the 2014 Study, new routes have been identified as part of this review which contribute to the overall network.

These routes are described in the following sections along with any measures required to complete or enhance the route.

5.1 Route S9 Bettystown Cross to R151 Golf Links Road



Figure 44 Route S9 alignment

This route takes advantage of the newly constructed residential developments at Whitefield Hall, Castlemartin Green and Brabazon Drive to provide a new east-west connection and alternative route to Bettystown Square. By tying in with Route P1, Section 3 it connects existing and new residential areas with a safe route to Realt na Mara.

Cycle tracks have been provided along certain new roads as part of the residential development proposals.

It is recommended that the following measures are undertaken to complete the route:

- Provide a connection between Whitefield Hall and Castlemartin Green crossing an existing laneway;
- Provided segregated cycle tracks through Castlemartin Green; and

• Provided a segregated cycle track and footpath on the eastern side of Castlemartin Close (between Castlemartin Green and Brabazon Drive.

5.2 Route P6 R150 Church Road (Donacarney Village to Boyne Greenway)



Figure 45 Route P6 alignment

This route would connect Donacarney Village and the proposed Boyne Greenway via Church Road.

There is a mix of existing facilities along the route, with footpaths and cycle tracks provided for short sections near new residential estates followed by sections where there are no facilities provided.

Given new residential developments are under construction (and proposed) along this corridor, the provision of a safe route between the proposed Boyne Greenway and Donacarney Village should be provided. The route has also identified in the East Meath LAP.

The Boyne Greenway proposes traffic calming measures at the junction of Church Road/R151 to help with accessing the Greenway (see Figure 46).

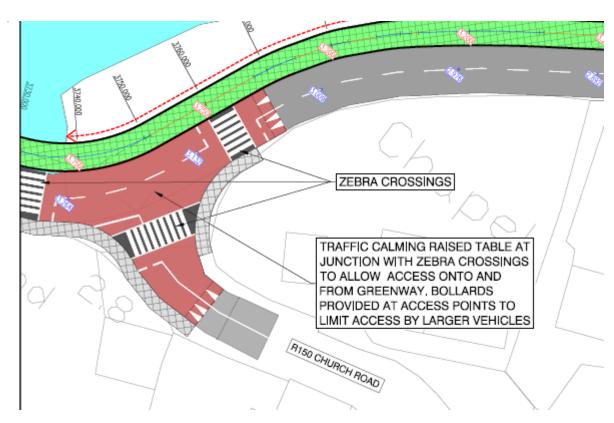


Figure 46 Boyne Greenway at junction with Church Road

It is recommended that the following measures are undertaken to complete the route:

- Provide segregated footpath and cycle track on the western side of the road between Donacarney Village and Maydenhayes Estate (noted some of this is already constructed as part of the Madenhayes development); and
- Provide a 3-4m side shared path on the western side of the road between Maydenhayes Estate and the Greenway.

In the longer-term, the feasibility of providing a direct pedestrian and cycling connection between the Maydenhayes Estate and Mill Road should be examined given the number of schools located on Mill Road (see Figure 47).



Figure 47 Potential future connection between Maydenhayes Estate and Mill Road

5.3 Route S10 New Bettystown train station to Bettystown Cross

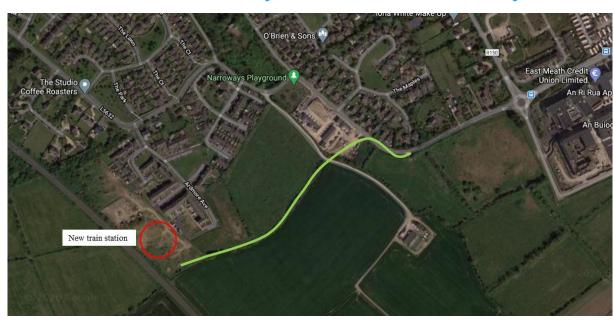


Figure 48 Route S10 alignment

This route would connect the proposed site for the new train station with Narroways Road through lands zoned for new residential development. The demand for the route would be dependent on the delivery of the new train station for Bettystown.

The alignment is indicative and will likely follow the main road network developed as part of any new development. The facilities for pedestrians and cyclists should be high quality and segregated to encourage rail users to interchange using active modes instead of driving.

It is recommended that this route be included in the next County Development Plan.

5.4 Route P7 East-west Strategic Road Corridor



Figure 49 Indicative Strategic Road Corridor (Source: East Meath LAP)

The East Meath LAP has identified an indicative strategic road corridor which connect the Dun Eimear estate with Colpe Road, running south of Donacarney. As this route has the potential to connect large residential areas with new development at the Marsh Road, Mill Road lands, the provision of high-quality pedestrian and cycling facilities should be provided along this route.

6 Action Plan

The methodology used for prioritising schemes from the 2014 study was based upon:

- Options assessment score;
- Cost Rank;
- Demand Rank; and
- Benefits/urgency rank.

Given the different stages of schemes and the significant amount of uncertainty around the criteria used (and sensitivity), a simplified method is proposed. Route sections have been listed as having a high, medium or low priority depending on how advanced they are and the alignment with study objectives. Any dependencies with other schemes or projects are also noted.

The following is a prioritised list of all the recommendations set out in this review and is envisaged to be implemented over the coming years as funding becomes available. There may be elements of certain sections that are not progressed in the shorter terms (e.g. junction redesigns).

The high, medium and low priority schemes are identified in Figure 50, Figure 51 and Figure 52.

Table 15 High Priority

Route No	Section	Dependencies/Timing
P1	Section 2	Subject to outcome of one-way study
P1	Section 3	None
P1	Section 4	Partially dependent on delivery of new Mill Road roundabout as part of Whiteland's development
P1	Section 5	Spine Road scheme is under construction
P2	Section 1	None
P2	Section 2	Subject to outcome of one-way study and Bettystown Public Realm scheme
P2	Section 3	To tie in with proposed Boyne Greenway*
P3	Section 1	Proposed Boyne Greenway is subject to planning approval
P4	Section 3	Potentially incorporated with any development of employment lands
P6	Section 1	None
S1	Section 1	None
S4	Section 1	Partially dependent on delivery of new road alignment
S5	Section 1	Partially dependent on delivery of new Mill Road roundabout as part of Whiteland's development
S9	Section 1	Agreement of new permeability connections
IU1	Section 3B	None

^{*}subject to planning approval

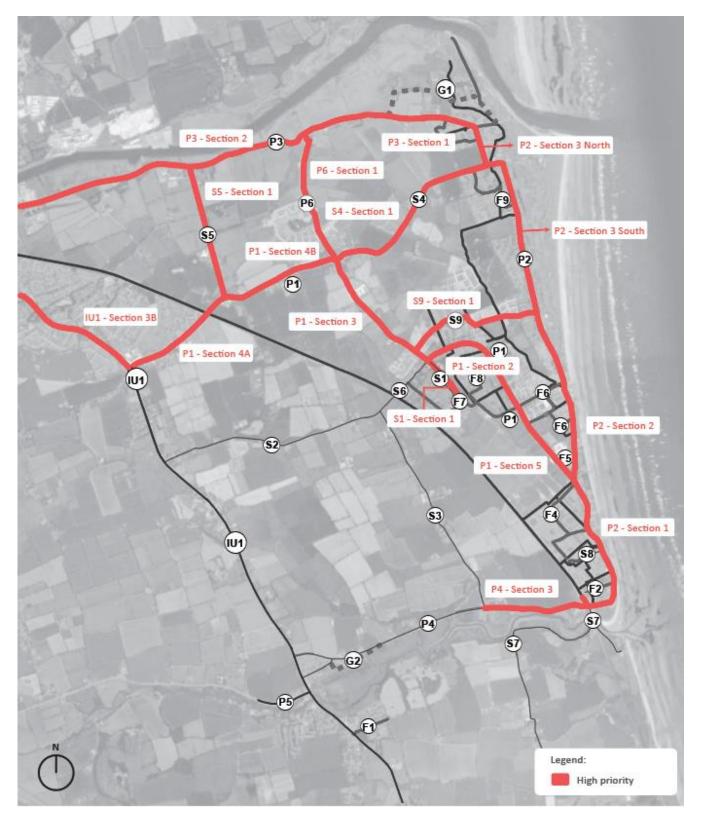
Table 16 Medium Priority

Route No	Section	Dependencies/Timing
P1	Section 1	None
P4	Section 1	None
P4	Section 2	None
S6	Section 1	None
IU1	Section 2	None
IU1	Section 3A	None

^{*}subject to planning approval

Table 17 Low Priority

Route No	Section	Dependencies/Timing
IU1	Section 1	None
P5	Section 1	None
P7	N/A	Delivery of strategic road corridor
S2	Section 1	To be delivered after S6
S3	Section 1	None
S7	Section 1	Subject to outcome of new coastal route connection to Fingal Coastway
S8	Section 1	Partially completed
S10	N/A	Delivery of new Bettystown Train Station – route to be included in the next county Development Plan.



P3 - Section 2 P6 - Section 1 F9 S5 - Section 1 P6 S4 - Section 1 P2 - Section 3 South P1 - Section 4B (P2) P1 IU1 - Section 3B P1 - Section 3 (U1) P2 - Section 2 P4 High priority Medium priority

Figure 50 High Priority Routes

Figure 51 High and Medium Priority Routes



Figure 52 High, Medium and Low Priority Routes