



CHURCH FIELDS LINK ROAD & CYCLE NETWORK

Part 8 Planning Application Report



MDT0875-RPS-00-XX-RP-Z-RP0020
Part 8 Planning Application Report
S4 P02
28th January 2020

CHURCH FIELDS LINK ROAD & CYCLE NETWORK

Document status

Status	Revision	Purpose	Authored by	Reviewed by	Approved by	Review date
S4	P01	Stage Approval	Mike O'Donnell	Shane Fanning	Michael Noonan	29/11/19
A1	C01	Issue for Planning	Mike O'Donnell	Shane Fanning	Shane Fanning	30/01/20

Approval for issue

Shane Fanning  30 January 2020

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1 INTRODUCTION

1.1 Purpose of this Report

This report describes the proposal to be submitted for planning approval for a new link road from an existing roundabout on Damastown Avenue connecting to Wellview Avenue, an upgrade of the existing Wellview Avenue, a new combined cycle track and footway along Damastown Avenue and through the future parkland area adjacent to Church Road, and a new cycle route link from the Damastown Avenue / Church Road Roundabout to Powerstown Educate Together National School, along Powerstown Road. The background to the scheme, the existing route, including key features, and the proposal are described in this report.

1.2 Background Information

Fingal County Council, as part of its commitment under Rebuilding Ireland, has developed a programme of new-build housing on land in its ownership in the Mulhuddart, Dublin 15 area, including improving the environment in existing estates in the area.

The Draft Church Fields Land Management Plan is being developed in the context of the Fingal County Council Development Plan 2017-23, objective RS (provide for residential development and protect and improve residential amenity).

A new link road from an existing roundabout on Damastown Avenue connecting to Wellview Avenue will be required to service the development lands. It is also proposed to upgrade the existing Wellview Avenue as far as, and including, Ladyswell Road Roundabout in accordance with the Draft Church Fields Land Management Plan. A new combined cycle track and footway along Damastown Avenue and through the future parkland area adjacent to Church Road is also proposed. This also includes the upgrade and provision of vulnerable road user (VRU) facilities through and around Church Road / Damastown Avenue Roundabout to tie in with other existing facilities in the area, and including the provision of a cycle route link from this roundabout to the Powerstown Educate Together National School along the Powerstown Road.

Figure 1-1 – Church Fields Development Lands



1.3 Purpose of the Scheme

The over-riding purpose of the scheme is to open up access to, and facilitate the development of, the lands zoned for residential use within the Draft Church Fields Land Management Plan study area. This will be achieved by providing a new link road from the existing roundabout on Damastown Avenue connecting to Wellview Avenue, and upgrading Wellview Avenue. It will also allow for the safe movement of pedestrians, cyclists, public transport and private cars in accordance with the guidance of the Draft Church Fields Land Management Plan. The scheme further includes the following:

- A new combined two-way cycle track and adjacent footpath along southern side of Damastown Avenue and through the future parkland area to the east adjacent to Church Road,
- The upgrade and provision of vulnerable road user (VRU) facilities through and around the Church Road / Damastown Avenue Roundabout to tie in with other existing facilities in the area,
- The upgrade of existing poorly constructed cycle tracks on the roundabout to tie in to existing cycle tracks on the R121 and R121 Cruiserath Road. On the south-western and northern sections around the roundabout will be a two-way cycle track. However, owing to space limitations on the southern and south-eastern sections, these small sections of cycle lanes will be one-way cycle lanes, therefore cyclists are required to make use of dedicated crossing points to venture around the roundabout;
- An upgrade to the southern side of the Powerstown Road footpath to include a two-way cycle track to provide a link from the above roundabout to as far as Powerstown Educate Together National School. This is the only section of the entire scheme that will require a sliver of land-take, which will be by agreement with the Department of Education.
- The existing pelican crossing on the eastern approach of Damastown Avenue to the Church Road / Damastown Avenue Roundabout is to be upgraded to a Toucan crossing, and new Toucan crossings are proposed on each of the other arms of this roundabout;
- New Toucan crossings are proposed on the eastern and western side of the Damastown / Church Field Link Road roundabout at the top of the new link road section;
- New replacement street lighting is proposed on the new and upgraded link road sections, while along the new Damastown Avenue cycle track, the existing street lighting is to be relocated closer to the road, with additional lighting provided on the back to light the new cycle track and footpath. There is minimal existing lighting in the parkland areas along the existing footpath, which is proposed to be replaced with more frequent pathway lighting.
- The existing road markings and signage would be refreshed, and new signage and road markings installed as required.

1.4 Aims and Objectives

1.4.1 Proposal Aims and Objectives

The primary objective of the scheme is to provide a new link road from the existing roundabout on Damastown Avenue to the north, connecting to Wellview Avenue including the upgrade of Wellview Avenue as far as and including Ladyswell Road Roundabout to the south, to allow the safe movement of pedestrians, cyclists, public transport and private cars in accordance with the guidance of the DRAFT Church Fields Land Management Plan to open up access to and facilitate the development of the lands zoned for residential use within the study area. The following are the scheme specific objectives;

- To provide access and improved road safety by delivering a design to current standards using guidance documents such as the Design Manual for Urban Roads and Streets (DMURS) 2013 and the National Cycle Manual 2011.
- To design appropriate access points to the proposed new development lands as indicated in the Draft Church Fields Land Management Plan.

- To incorporate and integrate the new link road and upgraded Wellview Avenue to the surrounding residential road network.
- To support smarter travel objectives by providing a suitable integrated hierarchy of roads to cater for pedestrians, cyclists and public transport.
- To provide for pedestrian and cycle connectivity between the existing developments and the proposed future development in accordance with the requirements of the Draft Land Management Plan.
- To reduce the potential for vehicular conflicts with vulnerable road users.
- To optimise junctions for vulnerable road users - pedestrian and cyclists.
- To assess transport and traffic impacts associated with the proposed new link road and the impacts on the surrounding environment and road network.

1.4.2 Proposal Constraints

A Constraints Study was compiled with reference to the TII planning guidelines and has also referenced the topics identified in Article 3 of the revised EIA Directive (2014/52/EU) and relates to the topics typically examined during an Environmental Impact Assessment. The main constraints outlined relate to the number of residential dwellings and commercial business located within the study area, and the numerous utilities found in the area. The key constraints which have been identified in relation to the environment are:

- Sensitives receptors such as residential properties and commercial developments within the study area.
- Community Facilities and Amenities including a Church, Cemetery, Accommodation and a number of Parks.
- Special Area of Conservation (SAC):
 - Rye Water Valley/Cartron SAC
 - Malahide Estuary SAC
 - South Dublin Bay SAC
 - North Dublin Bay SAC
 - Baldoyle Bay SAC
 - Rogerstown Estuary SAC
- Special Protection Areas (SPA):
 - Malahide Estuary SPA
 - South Dublin Bay and River Tolka Estuary SPA
 - The North Bull Island SPA
- Proposed Natural Heritage Areas (pNHA):
 - Royal Canal proposed NHA
- Several rivers and streams within the study area:
 - Pinkeen River

- Tolka River
- Various Wetlands
- Natural and Semi Habitats within the study area.
- Visual effects - removal or damage to hedgerows and trees.

1.5 Planning and Development

In accordance with the Planning and Development Act 2000 as amended (Part XI), Planning and Development Regulations 2001 – 2015 (Part 8), Fingal County Council is making available for inspection to members of the public, documentation and drawings describing the proposed works. The following drawings should be read in conjunction with this document.

Table 1.1 – Part 8 Planning Drawings

Drawing Number	Title	Scale
IX0000	Index Sheet	NTS
IX0001	Scheme Location Plan	As Shown @ A1, As Shown @ A3
DG0001	Site Layout Drawing	1:2000 @ A1, 1:400 @ A3
GA0000	General Arrangement Key Plan (Sheet 1 of 1)	NTS
GA0001	General Arrangement Drawing (Sheet 1 of 15)	1:250 @ A1, 1:500 @ A3
GA0002	General Arrangement Drawing (Sheet 2 of 15)	1:250 @ A1, 1:500 @ A3
GA0003	General Arrangement Drawing (Sheet 3 of 15)	1:250 @ A1, 1:500 @ A3
GA0004	General Arrangement Drawing (Sheet 4 of 15)	1:250 @ A1, 1:500 @ A3
GA0005	General Arrangement Drawing (Sheet 5 of 15)	1:250 @ A1, 1:500 @ A3
GA0006	General Arrangement Drawing (Sheet 6 of 15)	1:250 @ A1, 1:500 @ A3
GA0007	General Arrangement Drawing (Sheet 7 of 15)	1:250 @ A1, 1:500 @ A3
GA0008	General Arrangement Drawing (Sheet 8 of 15)	1:250 @ A1, 1:500 @ A3
GA0009	General Arrangement Drawing (Sheet 9 of 15)	1:250 @ A1, 1:500 @ A3
GA0010	General Arrangement Drawing (Sheet 10 of 15)	1:250 @ A1, 1:500 @ A3
GA0011	General Arrangement Drawing (Sheet 11 of 15)	1:250 @ A1, 1:500 @ A3
GA0012	General Arrangement Drawing (Sheet 12 of 15)	1:250 @ A1, 1:500 @ A3
GA0013	General Arrangement Drawing (Sheet 13 of 15)	1:250 @ A1, 1:500 @ A3
GA0014	General Arrangement Drawing (Sheet 14 of 15)	1:250 @ A1, 1:500 @ A3
GA0015	General Arrangement Drawing (Sheet 15 of 15)	1:250 @ A1, 1:500 @ A3
GE0001	Geometrics Plan & Profile Drawing (Sheet 1 of 2)	1:500 @ A1, 1:1000 @ A3
GE0002	Geometrics Plan & Profile Drawing (Sheet 2 of 2)	1:500 @ A1, 1:1000 @ A3
DR0000	Drainage Layout Key Plan (Sheet 1 of 1)	NTS @ A1, NTS @ A3
DR0001	Drainage Layout Drawing (Sheet 1 of 15)	1:250 @ A1, 1:500 @ A3

CHURCH FIELDS LINK ROAD & CYCLE NETWORK

Drawing Number	Title	Scale
DR0002	Drainage Layout Drawing (Sheet 2 of 15)	1:250 @ A1, 1:500 @ A3
DR0003	Drainage Layout Drawing (Sheet 3 of 15)	1:250 @ A1, 1:500 @ A3
DR0004	Drainage Layout Drawing (Sheet 4 of 15)	1:250 @ A1, 1:500 @ A3
DR0005	Drainage Layout Drawing (Sheet 5 of 15)	1:250 @ A1, 1:500 @ A3
DR0006	Drainage Layout Drawing (Sheet 6 of 15)	1:250 @ A1, 1:500 @ A3
DR0007	Drainage Layout Drawing (Sheet 7 of 15)	1:250 @ A1, 1:500 @ A3
DR0008	Drainage Layout Drawing (Sheet 8 of 15)	1:250 @ A1, 1:500 @ A3
DR0009	Drainage Layout Drawing (Sheet 9 of 15)	1:250 @ A1, 1:500 @ A3
DR0010	Drainage Layout Drawing (Sheet 10 of 15)	1:250 @ A1, 1:500 @ A3
DR0011	Drainage Layout Drawing (Sheet 11 of 15)	1:250 @ A1, 1:500 @ A3
DR0012	Drainage Layout Drawing (Sheet 12 of 15)	1:250 @ A1, 1:500 @ A3
DR0013	Drainage Layout Drawing (Sheet 13 of 15)	1:250 @ A1, 1:500 @ A3
DR0014	Drainage Layout Drawing (Sheet 14 of 15)	1:250 @ A1, 1:500 @ A3
DR0015	Drainage Layout Drawing (Sheet 15 of 15)	1:250 @ A1, 1:500 @ A3
SCD0501	Drainage Standard Details - Bio-Retention Details (Sheet 1 of 1)	As Shown @ A1, As Shown @ A3
LS0000	Landscaping Layout Key Plan (Sheet 1 of 1)	NTS @ A1, NTS @ A3
LS0001	Landscaping Layout Drawing (Sheet 1 of 15)	1:250 @ A1, 1:500 @ A3
LS0002	Landscaping Layout Drawing (Sheet 2 of 15)	1:250 @ A1, 1:500 @ A3
LS0003	Landscaping Layout Drawing (Sheet 3 of 15)	1:250 @ A1, 1:500 @ A3
LS0004	Landscaping Layout Drawing (Sheet 4 of 15)	1:250 @ A1, 1:500 @ A3
LS0005	Landscaping Layout Drawing (Sheet 5 of 15)	1:250 @ A1, 1:500 @ A3
LS0006	Landscaping Layout Drawing (Sheet 6 of 15)	1:250 @ A1, 1:500 @ A3
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LS0010	Landscaping Layout Drawing (Sheet 10 of 15)	1:250 @ A1, 1:500 @ A3
LS0011	Landscaping Layout Drawing (Sheet 11 of 15)	1:250 @ A1, 1:500 @ A3
LS0012	Landscaping Layout Drawing (Sheet 12 of 15)	1:250 @ A1, 1:500 @ A3
LS0013	Landscaping Layout Drawing (Sheet 13 of 15)	1:250 @ A1, 1:500 @ A3
LS0014	Landscaping Layout Drawing (Sheet 14 of 15)	1:250 @ A1, 1:500 @ A3
LS0015	Landscaping Layout Drawing (Sheet 15 of 15)	1:250 @ A1, 1:500 @ A3
SCD3001	Landscaping Standard Details – Tree Pit Details (Sheet 1 of 1)	As Shown @ A1, As Shown @ A3
UT0000	Existing Utility Layout – Combined Utilities Key Plan (Sheet 1 of 1)	NTS @ A1, NTS @ A3
UT0001	Existing Utility Layout – Combined Utilities Drawing (Sheet 1 of 15)	1:250 @ A1, 1:500 @ A3

Drawing Number	Title	Scale
UT0002	Existing Utility Layout – Combined Utilities Drawing (Sheet 2 of 15)	1:250 @ A1, 1:500 @ A3
UT0003	Existing Utility Layout – Combined Utilities Drawing (Sheet 3 of 15)	1:250 @ A1, 1:500 @ A3
UT0004	Existing Utility Layout – Combined Utilities Drawing (Sheet 4 of 15)	1:250 @ A1, 1:500 @ A3
UT0005	Existing Utility Layout – Combined Utilities Drawing (Sheet 5 of 15)	1:250 @ A1, 1:500 @ A3
UT0006	Existing Utility Layout – Combined Utilities Drawing (Sheet 6 of 15)	1:250 @ A1, 1:500 @ A3
UT0007	Existing Utility Layout – Combined Utilities Drawing (Sheet 7 of 15)	1:250 @ A1, 1:500 @ A3
UT0008	Existing Utility Layout – Combined Utilities Drawing (Sheet 8 of 15)	1:250 @ A1, 1:500 @ A3
UT0009	Existing Utility Layout – Combined Utilities Drawing (Sheet 9 of 15)	1:250 @ A1, 1:500 @ A3
UT0010	Existing Utility Layout – Combined Utilities Drawing (Sheet 10 of 15)	1:250 @ A1, 1:500 @ A3
UT0011	Existing Utility Layout – Combined Utilities Drawing (Sheet 11 of 15)	1:250 @ A1, 1:500 @ A3
UT0012	Existing Utility Layout – Combined Utilities Drawing (Sheet 12 of 15)	1:250 @ A1, 1:500 @ A3
UT0013	Existing Utility Layout – Combined Utilities Drawing (Sheet 13 of 15)	1:250 @ A1, 1:500 @ A3
UT0014	Existing Utility Layout – Combined Utilities Drawing (Sheet 14 of 15)	1:250 @ A1, 1:500 @ A3
UT0015	Existing Utility Layout – Combined Utilities Drawing (Sheet 15 of 15)	1:250 @ A1, 1:500 @ A3

1.6 Background Documents

The following documents are taken into consideration in the preparation of the proposal;

1.6.1 National Cycling Policy Framework 2009 - 2020

The National Cycling Policy Framework sets out many policies and objectives in relation to cycling, with the ultimate aim of increasing cycling’s share of journeys from 2% to 10% by 2020. The key objectives of the policy framework are as follows:

- Move 160,000 people a day to work by bike, an increase of 125,000 people
- Invest in better, safer cycle routes around the country for commuters, leisure cyclists and visitors
- Increase cycling’s share of journeys from 2% to 10% by 2020
- Introduce a new approach to the design of urban roads to better recognise the needs of cyclists and pedestrians and
- Retrofit major road junctions and roadways in key cities and towns to make them cycle-friendly.

The framework aims to create a strong culture of cycling in Ireland, where cycling is seen as an attractive mode of transport, particularly for short trips in urban areas. The development of high-quality cycling infrastructure will play an important part in helping to achieve a new culture.

1.6.2 National Cycle Manual

The National Cycle Manual provides guidance for the development of a cycling scheme, focusing on sustainable safety to meet the five needs of the cyclist; road safety, coherence / logic, directness, attractiveness and comfort. This is provided through a Quality of Service (QoS) ranking, where the QoS is a measurement of the degree in which the needs of the cyclist are met (pavement condition, no. of adjacent cyclists, no. of conflicts, journey time delay and HGV influence).

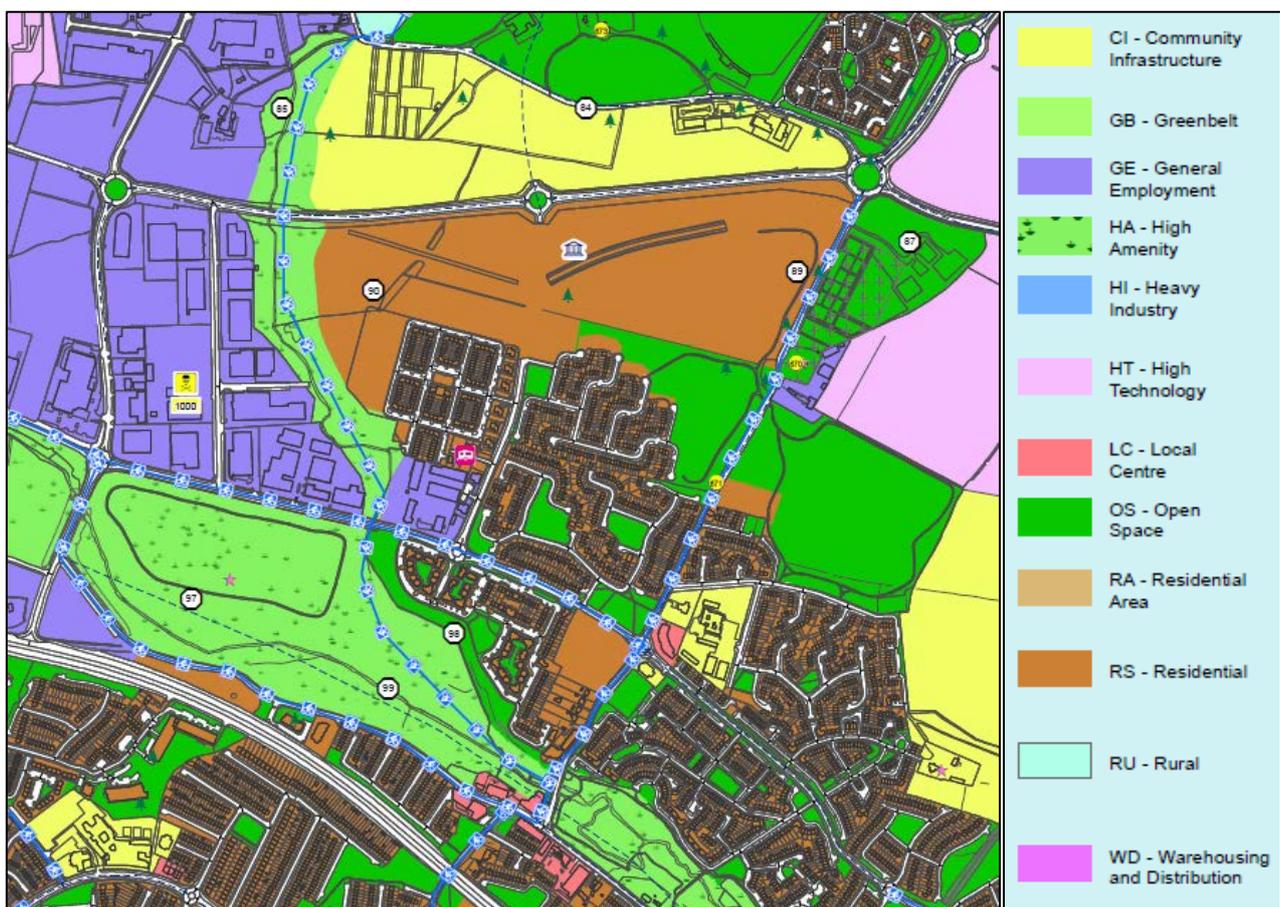
1.6.3 Design Manual for Urban Roads and Streets (DMURS)

DMURS outlines practical measures to support and encourage more sustainable travel patterns in urban areas. The conventional approach has been to focus on traffic demand and forecasting and minimising travel time. The approach outlined in DMURS is balancing the needs of all road users, giving priority to pedestrians, cyclists, public transport and lastly traffic.

1.6.4 Fingal Development Plan 2017 – 2023

The Fingal Development Plan 2017 – 2023 was prepared by Fingal County Council in March 2017. It sets out the Council’s proposed policies and objectives for the development of the County over the Plan period. The Development Plan seeks to develop and improve, in a sustainable manner, the social, economic, environmental and cultural assets of the County. It states that whilst Fingal is committed to the promotion of sustainable means of travel, and the encouragement of modal change from the private car, it is recognised that the roads infrastructure maintains a central position in the overall transportation network, catering for the movement of buses, goods vehicles, pedestrians, cyclists, as well as the private car. A number of key road improvements are required to facilitate the movement of goods and people throughout the County and to ensure ease of access, especially for major areas of new development.

Figure 1-2 – FCC Development Plan – Blanchardstown North



1.6.5 DRAFT Church Fields Land Management Plan

The DRAFT Church Fields Land Management Plan was prepared on behalf of Fingal County Council with the aim of developing a vibrant and heterogeneous community with links to the surrounding areas and to provide new housing, but also to improve the environment and security of existing householders by creating better open spaces and removing or improving existing poorly functioning open spaces. The Land Management plan states that the existing road through Avondale should be upgraded and enhanced, and should extend to the existing roundabout on Damastown Avenue. It states that the infrastructure design must

comply with “Smarter travel – A sustainable Transport Future: A New Transport Policy for Ireland 2009 – 2020” by implementing five key goals;

- i. To reduce overall travel demand,
- ii. To maximise the efficiency of the transport network,
- iii. To reduce reliance on fossil fuels,
- iv. To reduce transport emissions,
- v. To improve accessibility to transport and improve quality of life.

The DRAFT Church Fields Land Management Plan proposes to make Wellview Avenue a boulevard with;

- Reduced carriageways (3.25m per lane) to reduce speeds of traffic and over-use,
- Traffic limited to 50kph maximum and slower through the neighbourhood centre,
- Wide (2.5-3m) usable pavements and planted areas that incorporate seating and play structures,
- More, wide (2-4m), high quality pedestrian crossing points located approximately 100m apart depending on local connecting routes and junctions,
- Crossings constructed with robust, long-lasting materials that look good such as smooth concrete block paving or stone setts,
- A separate cycle path,
- More tree planting using bigger trees planted in an underground environment that is as generous as possible and concurrent with best practice guidance,
- More robust planting that looks interesting and is more sustainable to maintain.

The Land Management plan also provides guidance of indicative phasing in the Church Fields area, in order to ensure that infrastructure, services, facilities, and amenities are provided in tandem with, or ahead of development. The delivery concept is based on ensuring that there is sufficient flexibility within the phasing strategy to deliver sections of the Plan on an incremental basis. Initial phases of development will focus on the extension of Wellview Avenue and the construction of the Church Fields Link Road.

1.7 Studies Undertaken

While there have been no previous studies directly relating to the Church Fields Link Road, previous studies have been carried out on the area as part of the preparation of the DRAFT Church Fields Land Management Plan (CLMP), which will impact on the overall Link Road area, as set out below along with the current studies undertaken as part of this development.

1.7.1 Archaeological Desktop Study (CFLMP)

A draft Archaeological Desktop Study of the Church Fields area was carried out by Fingal County Council in August 2018 in order to assess the archaeological and cultural heritage environment of proposed developments. The study concluded that the development site has already been extensively disturbed by the insertion of roads, temporary haul roads, an ESB corridor, clearance and dumping, and the construction of playing pitches. The extensive and impactful nature of the latter means there is little potential for the recovery of archaeological remains.

1.7.2 Archaeological Desktop Analysis

A review and analysis of the Church Fields Archaeological Desktop Study was carried out by RPS in 2019 to inform the link Church Fields Link Road Design. The findings concluded that there were no impacts on the archaeological sites in the area, nor did they impact on the zones of notification for these sites.

1.7.3 Churchfields, Mulhuddart Surface Water Management Plan Part 1: Strategic Flood Risk Assessment [DRAFT] (CFLMP)

Carried out in March 2019, the Churchfields, Mulhuddart Surface Water Management Plan Part 1: Strategic Flood Risk Assessment [DRAFT] was prepared by Roughan and O'Donovan in 2019 to supplement the DRAFT Church Fields Land Management Plan (The assessment concluded that the majority of the Land Management Plan area is within Flood Zone C where the probability of flooding from rivers and the sea is low (<1 in 1000 year) and is therefore appropriate for highly vulnerable developments. The incorporation of Sustainable Drainage Systems complying with the GSDS in all new developments is recommended.

1.7.4 Flood Risk Review Report

A review of the Draft Strategic Flood Risk Assessment Report (Roughan and O'Donovan Consulting Engineers, 2019) for the Church Fields Land Management Plan (LMP) was carried out by RPS in 2019 to inform the design and final layout for Church Fields Link Design. The results of the hydraulic modelling did not indicate the proposed link road to be susceptible to fluvial flooding from the East Pinkeen Stream for both the 1% and the 0.1% AEP events. However, the proposed link road is indicated to be susceptible to flooding from overland flow. The report proposes SUDs to address flooding from pluvial sources. Therefore, it was recommend the draft FRA to be adopted to inform the design and final layout for Church Fields Road Link Design.

1.7.5 Options Selection Reports

1.7.5.1 Church Fields Link Road Options Selection Report

An Options Selection Report for the Church Fields Link Road was prepared during the Concept, Feasibility and Option Selection stage. This report presented the background to the scheme and the existing situation is detailed in terms of road and cycling conditions, accident and traffic data, and public transport services. The report presented twelve options. Following an early stage options assessment, the three most suitable cross section options were carried forward for further consideration. Following the completion of a multi-criteria assessment and stakeholder engagement, a preferred option was recommended. On appraisal of the three options, the option with the grassed median and cycle tracks segregated from the carriageway by grassed verges was selected as the preferred solution.

1.7.5.2 Damastown Avenue Cycle Route Options Selection Report

An Options Selection Report for the combined cycle track and footway along Damastown Avenue was prepared during the Concept, Feasibility and Option Selection stage. This report presented three options for the provision of the cycle link along this section. Following the completion of a multi-criteria assessment, a preferred option was recommended. On appraisal of the three options, the option which provides the two-way cycle track on the inside of the footpath and retains the existing kerb line and grass verge was selected as the preferred solution which best meets the objectives of the project.

1.7.5.3 Powerstown Road School Cycle Link Options Selection Report

An Options Selection Report for the combined cycle track and footway along Powerstown Road was prepared during the Concept, Feasibility and Option Selection stage. This report presented four options for linking the Damastown Avenue / Church Road Roundabout to the Powerstown National School. Following the completion of a multi-criteria assessment, a preferred option was recommended which involved providing the footpath and two-way cycle track inside the existing trees which are to be retained, resulting in the need for a small parcel of land acquisition.

1.7.6 Stakeholder Engagement

Stakeholder engagement was carried out in July 2019. The following stakeholders were consulted;

- Fingal County Council Planning and Strategic Infrastructure Department
- Fingal County Council Parks Department
- Fingal County Council Architects Department
- Fingal County Council Development Control Department
- Fingal County Council Conservation Department
- Fingal County Council Ecology Department
- Fingal County Council Water Service Planning Department
- National Transport Authority (NTA)
- Office of Public Works (OPW)
- National Parks and Wildlife Services (NPWS)
- Dublin Bus
- Parlickstown House
- Wellview Parlickstown Residents Committee

Feedback where provided from these consultations was considered in the preparation of the design proposal.

1.7.7 Traffic Impact Assessment

A Traffic Impact Assessment was carried out to assess transport and traffic impacts associated with the combined proposed developments in the Church Fields area and the impacts on the surrounding environment and road network.

1.7.8 Environmental Assessments

The following environmental assessments were carried out to assess the existing conditions and identify features and potential impacts of the proposed development.

1.7.8.1 Constraints Study

This report provides an overview of the constraints for the proposed development of the Church Fields Link Road in accordance with the guidelines set out in Transport Infrastructure Ireland's (TII) 2010 Project Management Guidelines (NRA 2010 PMG). The purpose is to identify the constraints within the study area, within which the proposed works will be developed. The key constraints which were identified in relation to the environment are outlined in **Section 1.4.2**.

1.7.8.2 Ecological Appraisal

An Ecological Appraisal of the proposed development was carried out. This included an assessment of the potential ecological impact of the proposed development, a desk study, habitat survey, bird survey, and a protected species assessment.

1.7.8.3 Screening for Appropriate Assessment Report

This report comprises information in support of screening for Appropriate Assessment to be undertaken by the competent authority in line with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora; the Planning and Development Act 2000-2015, and the European Communities (Birds and Natural Habitats) Regulations 2011 as amended. The report concludes that in respect of the proposed development, the project either

individually or in combination with other projects and plans, is not likely to have a significant effect on any Natura 2000 site.

1.7.8.4 EIA Screening Report

This report establishes the likely significant effects of the proposed development on the environment and advise if an Environmental Impact Assessment is required or not. The overall determination of this EIA Screening Report is that the proposed development individually and cumulatively with associated existing and approved development will not result in the potential for significant impacts to arise on the environmental receptors as a result of the proposed development. As such it is concluded that an EIAR is not required for this development.

2 THE EXISTING ROUTE

2.1 Wellview Avenue

Wellview Avenue forms the central access route for the existing Wellview Estate to the East and the existing Avondale Estate to the West. At present, the route has speed control ramps, grass verges, public lighting and footpaths. There are no designated cycle facilities. The residential developments of Avondale Court, Parlickstown Gardens, Avondale Park and the Avondale Estate all have direct access to the existing road. A new development, Avondale Place, is currently nearing completion and is due to open in early 2020. This development will also have direct access to the existing Wellview Avenue.

Image 2-1: Wellview Avenue



There is only one designated pedestrian crossing point for the entirety of Wellview Avenue. This is an uncontrolled crossing at the Damastown Road / Ladyswell Road Roundabout at the extreme south of the scheme as shown in **Image 2-2**.

Image 2-2: Uncontrolled Crossing, Wellview Avenue



To the north of Parlickstown Gardens, there is a drop kerb, encouraging pedestrians to cross the carriageway, on the eastern side of Wellview Avenue. However, there are no facilities provided to access the footway on the opposite side of the carriageway. This poses a significant hazard to vulnerable road users.

Image 2-3: Hazardous Crossing, Wellview Avenue



2.2 Damastown Avenue

The section of Damastown Avenue between the Damastown Avenue middle roundabout and the Church Road / Damastown Avenue / R121 roundabout forms the northern boundary of the Church Fields development lands. The road is of modern construction and has existing on-road cycle lanes in both directions, footpaths, grass verges, crash barriers, public lighting and is lined with trees on either side. There are uncontrolled pedestrian crossings on each approach arm of the roundabouts, while there is a signal-controlled pelican crossing on the eastbound approach to the Church Road / Damastown Avenue / R121 roundabout.

Image 2-4: Damastown Avenue



2.3 Church Road Parkland

The parkland area adjacent to Church Road is proposed in the Draft Church Fields Land Management Plan to be retained and upgraded. The parkland will run north-south, forming the eastern boundary of the Church Fields development lands. This is currently a footway running along the boundary of the parkland, but no cycling facilities are present.

2.4 Powerstown Road

The section of Powerstown Road between the Church Road / R121 roundabout and Powerstown Educate Together National School is a narrow rural road, without road markings or road lighting, except for in the immediate vicinity of the roundabout. The south-western side of the carriageway is kerbed with a footpath,

CHURCH FIELDS LINK ROAD & CYCLE NETWORK

separated from the road by a grass verge with two singular large trees. The north-eastern side of the carriageway is not kerbed and is bounded by a tree-lined grass verge. There are no designated cycle facilities on this section.

Image 2-5: Powerstown Road

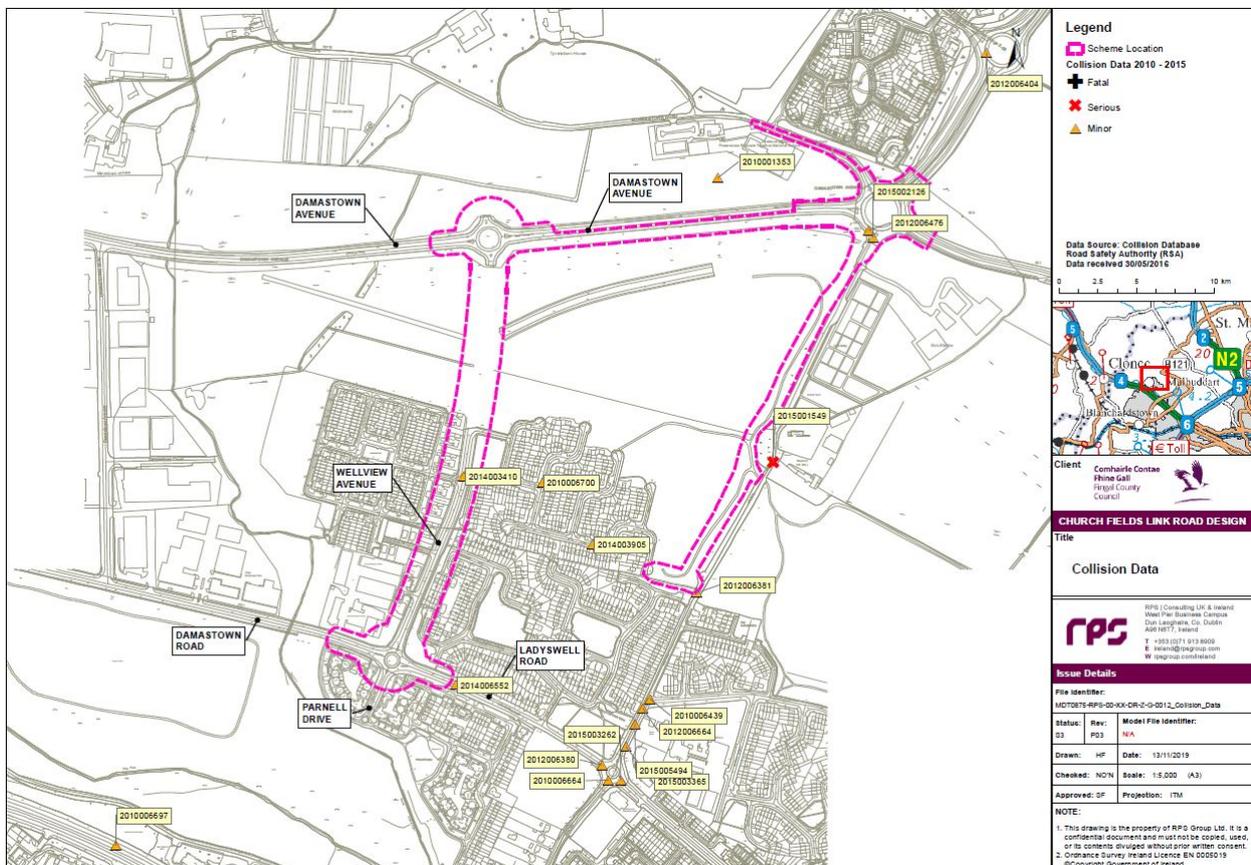


2.5 Existing Data

2.5.1 Collision Data

Following an assessment of the available Collision Data, it was identified that there was one recorded collision in 2014 on Wellview Avenue, occurring at the junction with Avondale Park between the hours of 7am and 10am on a Monday. The severity was minor, involving a car and resulting in 1no. minor casualty.

Figure 2-1: Collision Map 2010 to 2015



2.5.2 Traffic Data

Traffic Surveys were carried out on the existing junctions relevant to this link road scheme, but also on the wider area and junctions surrounding the link road in order to prepare a Traffic Impact Assessment that will feed into the EIAR for the Church Fields Land Management Plan. The junctions and the type of surveys carried out at each junction are shown below.

Figure 2-2: Traffic Survey Location & Types



To summarise, the findings of these traffic surveys indicated the following key details with respect to the junctions directly related to this scheme:

- Damastown Rd. / Ladyswell Rd. / Wellview Avenue Roundabout:
 - Traffic volumes going straight through this roundabout eastbound and westbound are 1162 vehicles and 1284 vehicles respectively over a 12-hour period (07:00 – 19:00). Of these volumes, HGVs were found to make up 7.49% and 7.94% respectively.
 - Traffic coming onto Wellview Avenue from this roundabout are 953 vehicles, with 78.91% coming from Ladyswell Road. and 18.68% coming from Damastown Road.
 - The cyclist volumes coming through this roundabout were found to be 90 over a 12-hour period (07:00 – 19:00), with 15 using Wellview Avenue.
- Wellview Avenue / Avondale Court Entrance:
 - Traffic volumes using this entrance are 48 vehicles over a 12-hour period (07:00 – 19:00).
- Wellview Avenue / Parlickstown Gardens Priority Junction:
 - Traffic volumes using this junction are 8 vehicles over a 12-hour period (07:00 – 19:00).
- Wellview Avenue / Avondale Park Priority Junction:
 - Traffic volumes using this junction are 881 over a 12-hour period (07:00 – 19:00).
- Wellview Avenue / Wellview Estate Access Road:

- Traffic volumes using this access are 1038 over a 12-hour period (07:00 – 19:00).
- Damastown Avenue Middle Roundabout:
 - Traffic volumes going through this roundabout eastbound and westbound are 4496 vehicles and 3873 respectively over a 12-hour period (07:00 – 19:00). Of these volumes, HGVs were found to make up 9.17% and 9.48% respectively.
 - The cyclist volumes coming through this roundabout were found to be 47 in the eastbound direction and 45 in the westbound direction over a 12-hour period (07:00 – 19:00).
- Church Road / Damastown Avenue Roundabout:
 - 4517 vehicles enter this roundabout from Damastown Way over a 12-hour period (07:00 – 19:00), with 3911 vehicles exiting the roundabout onto Damastown Way over the same period.
 - 512 vehicles enter this roundabout from Powerstown Road over a 12-hour period (07:00 – 19:00), with 624 vehicles exiting the roundabout onto Powerstown Road over the same period.
 - 5961 vehicles enter this roundabout from the R121 (N) over a 12-hour period (07:00 – 19:00), with 5440 vehicles exiting the roundabout onto the R121 (N) over the same period.
 - 4723 vehicles enter this roundabout from the R121 (E) over a 12-hour period (07:00 – 19:00), with 5091 vehicles exiting the roundabout onto the R121 (E) over the same period.
 - 3059 vehicles enter this roundabout from Church Road over a 12-hour period (07:00 – 19:00), with 3642 vehicles exiting the roundabout onto Church Road over the same period.
 - The above results in 37,480 vehicles using the Church Road / Damastown Avenue Roundabout over a 12-hour period (07:00 – 19:00).

2.6 Existing Cycle Facilities

As outlined in **Sections 2.1, 2.3 and 2.4**, there are currently no designated cycling facilities present on Wellview Avenue, Church Road or Powerstown Road. The lack of cycle facilities forces cyclists to use the carriageway, bringing them into close contact with vehicles on narrow carriageways, or use the footpaths, bringing pedestrians and cyclists into close contact on narrow footpaths.

As outlined in **Section 2.2**, Damastown Avenue has existing on-road cycle lanes in both directions.

2.7 Design Considerations

Keeping in mind the over-riding purpose of the scheme, the aims and objectives and the known constraints, the following design considerations and options were identified:

- **Church Fields Link Road;** Following an early stage options assessment, three options were appraised in the Options Selection Process. The appraisal was based on twenty-one criteria under the following four categories; Scheme Specific Objectives, Engineering, Environmental and Economy. The process concluded that the emerging preferred option proposes a boulevard style street with narrow carriageway, grassed medians and verges and off road cycle tracks and footpaths, as further explained in **Section 2.7.1**. The ideal cross section was examined against the achievable cross section for the route. This examination identified the potential impacts and items to be considered, such as lane widths (cycle lanes, bus lanes, traffic lanes), traffic calming, green spaces, utilities, vulnerable road users and pinch points or constraints along the route. For cycle facility widths, the desirable was considered to be 2.0m.
- **Damastown Avenue Cycle Track;** Three options were appraised in the Options Selection Process. The appraisal was based on seventeen criteria under the following four categories; Scheme Specific Objectives, Engineering, Environmental and Economy. The process concluded that the emerging option

proposes a new two-way cycle track inside the footpath adjacent to existing grassed verge running along the carriageway kerb line, as further described in **Section 2.7.2**. The existing kerb line is to be retained, along with the existing adjacent on-road cycle lane.

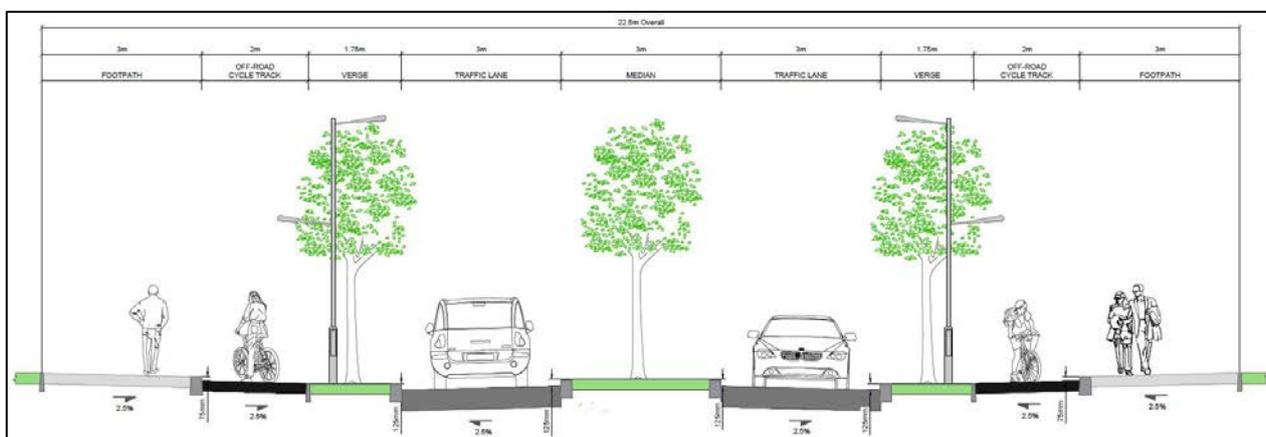
- Church Fields Parkland Cycle Track & Footpath;** The proposed footpath and two-way cycle track through the future Church Fields parkland parallel to Church Road proposes an alignment which maximises the space available for green spaces and the future Church Fields developments, but also ensures the existing trees along Church Road are retained and not impacted on by the new track. It, for the most part, closely follows the existing footpath through the parkland areas adjacent to Church Road – refer to **Section 2.7.3** for more details.
- Powerstown Road Cycle Link;** Four options were appraised in the Options Selection Process. The appraisal was based on seventeen criteria under the following four categories; Scheme Specific Objectives, Engineering, Environmental and Economy. The process concluded that the emerging preferred option proposes a two-way cycle track and footpath along the entire length of the section, as described further in **Section 2.7.4**. The alignment ensures that the existing kerb line is not affected, and existing trees are retained, but does result in the need for a parcel of land acquisition from the Department of Education, which has been agreed in principle.

2.7.1 Church Fields Link Road

The preferred option for the Church Fields Link Road proposes 3m traffic lanes segregated in the middle by a planted grassed median, with 2m off-road cycle tracks and 3m footpaths segregated from the carriageway by 1.75m grass verges. The proposed 3m grass median would allow for the inclusion of right-turn pockets at junctions and accesses along the link road without the need to increase the overall road cross section which is 22.5m.

It is proposed to apply this cross section to the new link road, connecting Damastown Avenue to Wellview Avenue (approx. 300m), and to the upgrade of the existing Wellview Avenue (approx. 400m).

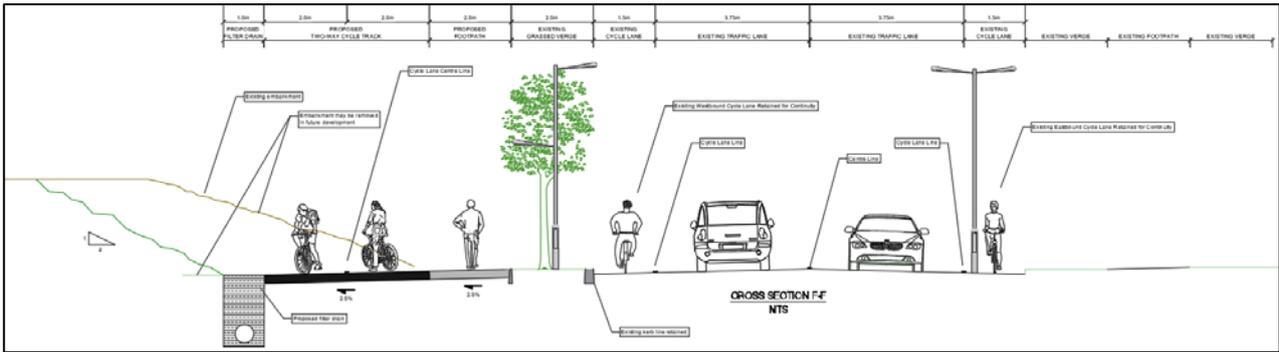
Figure 2-3: Church Fields Link Road Preferred Option



2.7.2 Damastown Avenue Cycle-Track

The preferred option for the Damastown Avenue Cycleway (approx. 600m in length) proposes to retain the existing kerb line and existing verge. A new 2m footpath is proposed along the alignment of the existing footpath, and a 4m two-way cycle track is proposed on the inside of this footpath. The existing embankment is proposed to be removed completely, as it is noted that the building lines from the CFLMP appear to extend into the area of this existing embankment, and it is presumed that the embankment would have to be removed anyway to facilitate these buildings. The footpath & cycle track in this case are at the same level and segregated by different surface finishes and road marking delineation along this 600m section length. It is proposed to retain the existing adjacent westbound on-road cycle lane for continuity with the other sections of Damastown Avenue, likewise for the existing eastbound on-road cycle lane.

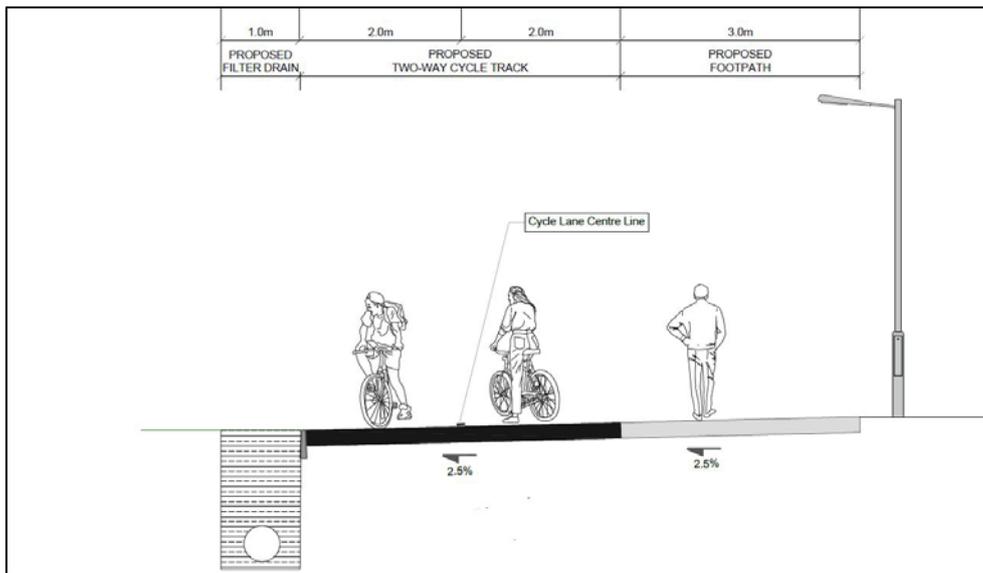
Figure 2-4: Damastown Avenue Cycle-Track Preferred Option



2.7.3 Church Fields Parkland Cycle-Track & Footpath

A new combined 4m two-way cycle-track and adjacent 2m footpath is the preferred option for the cycleway through the future parkland area in the CFLMP. The proposed route is approximately 700m in length and for the most part follows the existing footpath through the existing parkland area adjacent to Church Road. The footpath & cycle-track are at the same level and segregated by different surface finishes and road marking delineation. The alignment ensures the existing trees are retained and not impacted on by the new track.

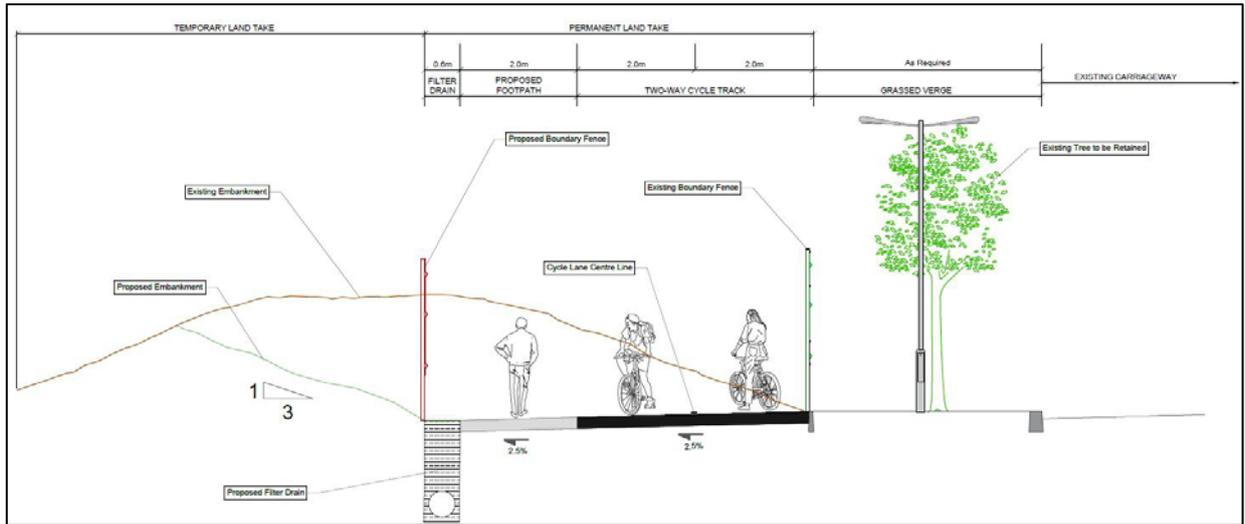
Figure 2-5 – Church Fields Parkland Cycle-Track & Footpath Preferred Option



2.7.4 Powerstown Road Cycle Link

The preferred option for the Powerstown Road Cycle Link proposes to provide a two-way cycle-track along with a segregated footpath all in the southern verge. This option proposes that a strip of land behind the fence-line at Powerstown National School is acquired to provide sufficient space to maintain the full facility widths along the full link without the need to remove the two large existing mature trees in this grass verge. The two-way cycle-track and footpath links would be widths of 4m and 2m respectively along the entire length of the section, before then tying into a shared area just in advance of the existing signalised pedestrian crossing at the school. The section west, between the pedestrian crossing and the vehicular entrance is proposed to be widened out to the full width available to provide a shared area link to this vehicular entrance also.

Figure 2-6: Powerstown Road Cycle Link Preferred Option



3 THE PROPOSAL

3.1 Description of the Scheme

The proposed development comprises a new link road from an existing roundabout on Damastown Avenue on the northern end of the study area connecting to the established Wellview Avenue to service the development lands in the north adjacent to Damastown Avenue which is intended to be developed (later) in accordance with the Church Field Land Management Plan (CFLMP). It is also proposed to upgrade the existing Wellview Avenue as far as, and including, Ladyswell Road Roundabout in accordance with the CFLMP.

A new combined cycle-track and footway along Damastown Avenue and through the future parkland area parallel to but separate from Church Road is also proposed. This also includes the upgrade and provision of vulnerable road user (VRU) facilities at various locations to tie in with other existing facilities in the area. A series of Preliminary Design Drawings are included in **Appendix A**.

The main infrastructural elements to be included in the proposed development comprise the following:

- New link road section – two lanes, approximately 300m in length, from an existing roundabout on Damastown Avenue connecting to Wellview Avenue, including 2m cycle-tracks/lanes, 3m footpaths with appropriately located zebra crossings, planted grass medians and verges, and a new roundabout junction to access the future Church Fields development lands;
- Upgrade the existing two lane Wellview Avenue road section from the above new section to as far as and including Ladyswell Road Roundabout approximately 400m in length, and to include all of the same facilities as above;
- A new combined 4m two-way cycle-track and adjacent 2m / 3m footpath approximately 600m in length along the southern side of Damastown Avenue adjacent to existing grassed verge running along the carriageway kerb line, and through the future parkland area adjacent to Church Road, approximately 700m in length, and following the alignment of existing footpath through the existing parkland areas;
- It is proposed to retain the existing adjacent westbound on-road cycle lane for continuity with other sections, likewise for the existing eastbound on-road cycle lane;
- The proposed off-road footpath & cycle-track in this case are at the same level and segregated by different surface finishes and road marking delineation;
- The section provided through the future parkland parallel to Church Road, approximately 700m in length, will follow an alignment to ensure the existing trees are retained and not impacted on by the new track;
- This also includes the upgrade and provision of vulnerable road user (VRU) facilities through and around the Church Road /Damastown Avenue Roundabout to tie in with other existing facilities in the area;
- The upgrade of existing / poorly constructed cycleways on the roundabout to tie in to existing cycleways on the R121 and R121 Cruiserath Road. On the south-western and northern sections around the roundabout will be a 4m two-way cycle-track. However, owing to space limitations on the southern and south-eastern sections, these small sections of cycle lanes will be 2m one-way cycle lanes, therefore cyclists will be required to make use of dedicated crossing points to venture around the roundabout;
- An upgrade to the southern side of the Powerstown Road footpath to include a 4m two-way cycle-track to provide a link from the above roundabout to as far as Powerstown Educate Together National School. This is the only section of the entire scheme that will require land-take, albeit narrow, which will be by agreement with the Department of Education;

- The existing Pelican crossing on the eastern approach of Damastown Avenue to the Church Road /Damastown Avenue Roundabout is to be upgraded to a Toucan crossing, and new Toucan crossings are proposed on each of the other arms of this roundabout also;
- New Toucan crossings are proposed on the eastern and western side of the Damastown / Church Field Link Road roundabout at the top of the new link road section;
- New replacement street lighting is proposed on the new and upgraded link road sections, while along the new Damastown Avenue cycle-track, the existing street lighting is to be relocated closer to the road, with additional lighting provided on the back to light the new cycle-track and footpath. There is minimal existing lighting in the parkland areas along the existing footpath, which is proposed to be replaced with more frequent pathway lighting.
- The existing road markings and signage would be refreshed, and new signage and road markings installed as required.

3.1.1 Road Type

3.1.1.1 Church Fields Link Road

The proposed road has been designed in accordance with TII Publications (Standards), DMURS and the National Cycle Manual.

The proposed Church Fields Link Road (300m) and upgrade of Wellview Avenue (400m) consists of a 6m carriageway (3m lanes in each direction), and a 3m grassed median. Outside of the carriageway on both sides will be a 1.75m grass verge, a 2m cycle-track and a 3m footpath. The proposed 3m grass median would allow for the inclusion of right-turn pockets at junctions and accesses.

The construction of the main carriageway will include associated accommodation works, landscaping works, drainage works and ancillary works. The layout of the proposed development is shown in more detail on the Part 8 Drawings as described in **Table 1.1**.

3.1.2 Drainage

With respect to the surface water drainage at this stage of the project, the design has focussed on reinforcing the existing road drainage. All new drainage incorporated as part of the detailed solution shall follow the SuDS train. This will include bio-retention features under the tree pits in the grassed verges, additional percolation pipes in the verge also, as well as attenuated discharge via petrol interceptor into local watercourses.

The proposed development will incorporate a surface water management system which has been designed in accordance with the Greater Dublin Strategic Drainage Study (GDSDS, 2005) approach using Sustainable Drainage Systems (SUDS) techniques. This system, which is illustrated in the Outline Drainage Drawings provided in **Appendix A**, recognises seven discrete drainage network areas covering the entirety of the proposed development.

With the existing road sections, the design will reinforce the management of the surface waters to ensure no impact on receiving waters. The key elements of the design, which are applicable across seven of the proposed drainage networks identified, rely on a number of overlapping drainage solutions.

On the new and upgraded link road sections, where new central carrier drains are proposed, the following is proposed:

- Tree Pit drainage – For each tree, side-inlet gullies will be the first capture of carriageway surface water through stone lined pits that will focus water into the topsoil tree pit to discharge downwards through the soil into a filter drain lying beneath. The filter drain will direct captured water to the central carrier drains;
- Additional verge storage / percolation – Downstream of the tree pit gullies, additional side-inlet gullies will be the second capture of carriageway surface water, which are linked into closed perforated pipes

extending approximately 10m in the grassed verges, where additional surface water will be stored and can percolated down through the filter drain material into the filter drain lying beneath, which captures the water to the central carrier drains as above;

- By-pass gullies – Further downstream of the two previous systems, a standard by-pass gully will take any remaining carriageway surface water that has not been taken into the two previous systems and pipe this into the verge filter drain below, and similarly into the central carrier drains;
- Footpath & cycle-track drainage – the surface water from the footpaths and off-road cycle-tracks will flow into the dished grassed verges where it can percolate through the filter material into the filter drain beneath, which captures the water to the central carrier drains as above.

Percolation alone will not adequately deal with surface water, particularly given the fact that much of the surrounding lands is built upon or destined to be built upon as part of the Church Fields Land Development Plan. The design includes for the enhancement of the existing drainage network and include standard features such as bypass separators, retention pipes and attenuation ponds to deal with surface water.

Each of the seven networks identified, as shown in the Outline Drainage Drawings have differing conditions and the discharge of the attenuated surface waters are detailed below.

Area 1 – All flows will follow through the above drainage steps, and ultimately flow through a proposed petrol interceptor at the Damastown Road / Ladyswell Road roundabout. This will tie-in to the existing road drainage and likely discharges into the Powerstown_09 further west along Damastown Road.

Area 2 – Similar to Area 1 drainage solution, the next section will rely on the same drainage steps, but will be directed to Gaywood river, which is largely modified through a housing estate before entering the Powerstown_09 to the west of Tyrellstown.

Area 3 – This is the longest stretch of drainage network identified and will ultimately discharge into the Macetown South, a tributary of the Powerstown_09 river, which itself flows into the Tolka River. The new link road section will follow the same principles as Area 1 and 2, while the drainage of the new cycle-track along Damastown Avenue will be through a filter drain adjacent to the track for the most part, with the drainage of a section of the parklands cycle-track to the north connected to this filter drain via a filter drain also. Prior to any discharge, surface water will be directed by the proposed road drainage to flow into a proposed new section of pipeline that will run alongside the existing historical road (which follows the line of the future main development western street footpath) before flowing into a proposed series of three attenuation ponds, that are to be located to the west of the wooded section of the Macetown_South. The proposed attenuation ponds will include a bypass separator treatment at its inlet, and a hydro-break or similar at its outfall. These attenuation ponds will form part of the Church Fields Land Management Plan, and will complement the vegetated swale that is proposed for the urban linear park.

Due to the presence of a surface water drainage pipe and manhole which drains a recently built housing development at Avondale Place conflicting with the southernmost pond no. 3, there will be a requirement to redirect this drainage line and manhole through a proposed new section of pipeline and manholes to divert it around pond no. 3 and tie back in to a new combined headwall with the pond discharge outlet at the location of the existing headwall.

Area 4 – The drainage solution for the proposed widened cycle-track and footpath in the park, will comprise a filter drain adjacent to the cycle-track where it with flows directed in a southerly direction. A temporary construction tie-in will be provided to tie-in to an existing ditch until such time that the future Linear Park swale is constructed. The surface water from this section will attenuate and infiltrate in this vegetated ditch. The plan is that this Area 4 drainage will be incorporated into the future Linear Park swale when it is constructed.

Area 5 – This area in the parklands will comprise a filter drain where drainage from the proposed cycle-track will be directed into it. The filter drain on for this section will tie-in to the existing road carrier drainage on Church Road just south of the park entrance. The discharge location of this existing road drainage is unknown at present but owing to ground conditions likely flows in a southerly direction to the Powerstown_09 or Tolka River.

Area 6 – The last area in the parkland will comprise discrete works around the Damastown Avenue / Church Road / Powerstown roundabout. On the southwest corner of this roundabout, the proposed cycle-track drainage forms part of Area 3. On the north-western and northern sections, the drainage of these small sections of additional two-way cycle-track proposed is to crossfall out to the existing roadside gullies and into the existing drainage network on the roundabout. On the south-eastern and southern sections, surface water from the small one-way additional cycle track is allowed to percolate into the retained grassy verges but also to flow to existing road gullies on the carriageway if necessary. Records seem to indicate that this existing roundabout road drainage is piped along Damastown Avenue to the west where it seems to discharge unattenuated or untreated to the Powerstown_09. Owing to the limited nature of the discrete works being carried out around the outside of the roundabout, the drainage solutions are considered to have a negligible impact on the existing drainage and outfall.

Area 7 – The final drainage area for the cycle-track link along Powerstown Road from the roundabout to the national school will comprise a filter drain at the back of the cycle-track that will be connected via a carrier pipe across the Powerstown Road to the existing drainage network on Curragh Hall Crescent in the housing estate on the opposite side of this road. This existing network, which captures all the surface water drainage for Tyrrellstown, flows to the west, where the outfall is unknown, but likely to be the Powerstown_09 watercourse.

A detailed Construction Environmental Management Plan (CEMP) will be developed in Stage II of the project. The construction methodologies will adhere to the CEMP whereby the environment and operating procedure will commit to protecting watercourses. The methodologies will include:

- Never discharging material into the storm water drainage network without prior approval
- Undertaking a risk assessment for all activities – never undertaking potentially polluting activities adjacent to open water courses; and
- Not cause or permit any polluting matter to enter the water system at the site.

3.1.3 Land Acquisition

3.1.3.1 Permanent Land Acquisition

In order to construct the cycleway connection from the Church Road / Damastown Avenue Roundabout to the entrance of Powerstown National School while retaining the existing trees along the route, a land take of approx. 485m² will be required. This land is inside the boundary fence of the lands of Powerstown National School. It is proposed to acquire this land by agreement from the Department of Education, and Fingal County Council have an agreement in principle with the Department of Education for this land acquisition. This sliver of land is approx. 6.6m in width at its widest point.

3.1.3.2 Temporary Land Acquisition

A temporary land acquisition of approx. 526m² will also be required in order to construct the proposed cycleway and footpath to Powerstown National School. This land is also within the lands of Powerstown N.S. and is approx. 10.3m in width at its widest point. This temporary land take will allow for the regrading of an existing embankment to tie-in with the back of the proposed cycle-track.

3.1.4 Earthworks

3.1.4.1 Church Fields Link Road Earthworks

The earthworks for the new section of the Church Fields Link Road mainly consists of cuttings with slopes of approx. 1 in 2. The height of cuttings varies throughout the greenfield site due to the profile of the road, and have a maximum height of approx. 1.7m.

Earthworks are not envisaged on the western side of the upgraded Wellview Avenue, as it is proposed that the scheme will tie-in at-grade to existing boundaries. There is a 130m long cut proposed along the eastern side of Wellview Avenue, at the southern end of the scheme. This is to allow the back of the proposed footpath to tie-in to the existing grassed area between Parlickstown Court and Wellview Avenue, **Image 3-1**.

The height of the cutting varies along its length, and has a maximum height of approx. 1.6m. Material will be reused as far as possible. Excavated material is to be incorporated into the embankments and final landscaping of the works area. This will depend however on the suitability of the excavated material. If low levels of contamination are encountered during the construction works, soil testing and a risk assessment of material shall be undertaken to assess its potential for use.

Image 3-1: Grassed area between Wellview Avenue & Parlickstown Court



3.1.4.2 Damastown Avenue Cycle-track Earthworks

The existing embankment along the southern side of Damastown Avenue (**Image 3-2**) is proposed to be removed completely to create space for the cycle-track. It is noted that the building lines from the Draft Church Fields Land Management Plan appear to extend into the area of this existing embankment, so it is presumed that the embankment would have to be removed anyway to facilitate the buildings. Material will be reused as far as possible. Excavated material is to be incorporated into the embankments and final landscaping of the works area. This will depend however on the suitability of the excavated material. If low levels of contamination are encountered during the construction works, soil testing and a risk assessment of material shall be undertaken to assess its potential for use.

Image 3-2: Embankment along Damastown Avenue



3.1.4.3 Powerstown Road Cycleway Earthworks

The proposal of the Powerstown Road Cycleway will require the regrading of an existing embankment within the site boundary of Powerstown N.S. As detailed in **Section 3.1.3**, this land is to be acquired from the Department of Education by agreement. Material will be reused as far as possible. Excavated material is to

be incorporated into the embankments and final landscaping of the works area. This will depend however on the suitability of the excavated material. If low levels of contamination are encountered during the construction works, soil testing and a risk assessment of material shall be undertaken to assess its potential for use.

3.1.5 Landscaping

Landscaping will be managed so that the scheme can be efficiently integrated into the receiving environment and the future Church Fields Land Management Plan. All works will be complete to minimise the impact on the surrounding environment.

Preliminary Landscaping Drawings are provided in **Appendix A**, while detailed landscaping designs and drawings will be prepared as part of the Detailed Design for the scheme and will be submitted for approval in advance of works. Boundary treatments will be developed in consultation with stakeholders throughout the extents of the scheme.

3.1.6 Public & Private Utilities

Existing public utilities affected by the scheme will have to be diverted to a suitable location to accommodate the works or protected. The diversion of the public utilities will ensure that future access to the utilities is convenient. The new location of the services should ensure that both future performance of the service and the scheme is not affected and will enable safe construction of the development.

As part of a constraints gathering exercise, all the major services available in the area were reviewed in order to establish the utility constraints within the scheme extents. The major services identified to date are;

- ESB Electricity Network
- Water Mains
- Foul & Storm Water
- Telecommunications including;
 - Zayo T50 fibre optic cable
 - Eir
 - Virgin Media
 - British Telecom
 - Enet
- Gas Networks Ireland

All service utility providers should be contacted to determine the exact location of affected utilities. Utility diversion works may be undertaken as advanced works or as part of the main contract.

3.1.7 Signing and Lighting

Traffic signs for the proposed scheme will be provided as per the Department of Transport Traffic Signs Manual.

Public lighting for the proposed scheme will be provided as per TII Design Standard DN-LHT-03038 and Section 7.6 of the Fingal Development Plan 2017-2023.

3.1.8 Traffic Management

3.1.8.1 Church Fields Link Road TM

As the proposed upgrade of Wellview Avenue is online, traffic management will be required for the entirety of the works across this section. It is likely road closures will be required for certain sections of the works. Fingal County Council will endeavour to keep Wellview Avenue open where it is safe to do so. Local access will be maintained to ensure local residents are not disrupted during the construction period.

The proposed Church Fields Link Road on the northern end is routed through a greenfield site, and as such, should not require major traffic management during construction. However, traffic management will be required during the construction of the tie-in to the existing Damastown Avenue middle roundabout. Fingal County Council will endeavour to keep the Damastown Avenue middle roundabout open where it is safe to do so.

3.1.8.2 Damastown Avenue Cycle-Track TM

As the proposed Damastown Avenue cycle-track and associated footpath is not proposed on a live carriageway, major traffic management is not envisaged during construction. However, traffic management will be required during the construction of the proposed replacement footpath to cater for pedestrians. Fingal County Council will endeavour to keep the Damastown Avenue footpaths open where it is safe to do so.

3.1.8.3 Powerstown Road Cycle Link TM

As the existing kerb line is to be retained as part of the Powerstown Road Cycle Link, major traffic management is not envisaged during construction. However, traffic management will be required during the construction of the proposed replacement footpath to cater for pedestrians. Fingal County Council will endeavour to keep the Powerstown Road footpath open where it is safe to do so.

4 CONCLUSION AND RECOMMENDATION

This report supports a Part 8 Planning Application for a new link road from the existing middle roundabout on Damastown Avenue connecting to Wellview Avenue, the upgrade of the existing Wellview Avenue, a new combined cycle-track and footway along Damastown Avenue and through the future parkland area adjacent to Church Road, and a new cycle route link from the Damastown Avenue / Church Road Roundabout to Powerstown National School, along Powerstown Road.

The proposed scheme will result in substantial improvements to the existing public realm and will enhance pedestrian, cycle and vehicular access to the Church Fields development lands and the existing residential settlements. Access to Powerstown Educate Together National School and the proposed parkland adjacent to Church Road will also be greatly enhanced by the scheme.

The proposed development is considered to be in accordance with the proper planning and development of the area and is in accordance with of the various national, regional and local planning policies and objectives.

The potential impacts, including environmental, arising from the new link road, upgrade of existing road and provision of new cycle and pedestrian facilities along the route have been reviewed and assessed. It is concluded that the construction of the proposed scheme and associated works will have no significant impact on the receiving environment, provided the recommendations and mitigation measures are followed.

It is recommended to Fingal County Council to proceed with the proposal as shown on the drawings contained in **Appendix A**.

Appendix A Proposed Development – Preliminary Design Drawings

(Refer to MDT0875 – Part 8 Preliminary Design Book of Drawings)

Appendix B

EIA Screening Report

(Refer to Report MDT0875-RPS-00-XX-RP-Z-RP0018 - EIA Screening)

Appendix C

Ecological Appraisal Report

(Refer to Report MDT0875-RPS-00-XX-RP-Z-RP0016 - Ecological Appraisal)

Appendix D Screening for Appropriate Assessment Report

(Refer to Report MDT0875-RPS-00-XX-RP-Z-RP0017 - Screening for Appropriate Assessment)

Appendix E

Flood Risk Review Report

(Refer to Report MDT0875-RPS-00-XX-RP-Z-RP0012 - Flood Risk Review)

Appendix F Archaeology & Architectural Desktop Analysis Report

(Refer to Report MDT0875-RPS-00-XX-RP-Z-RP0003 - Archaeology & Architectural Desktop Analysis)