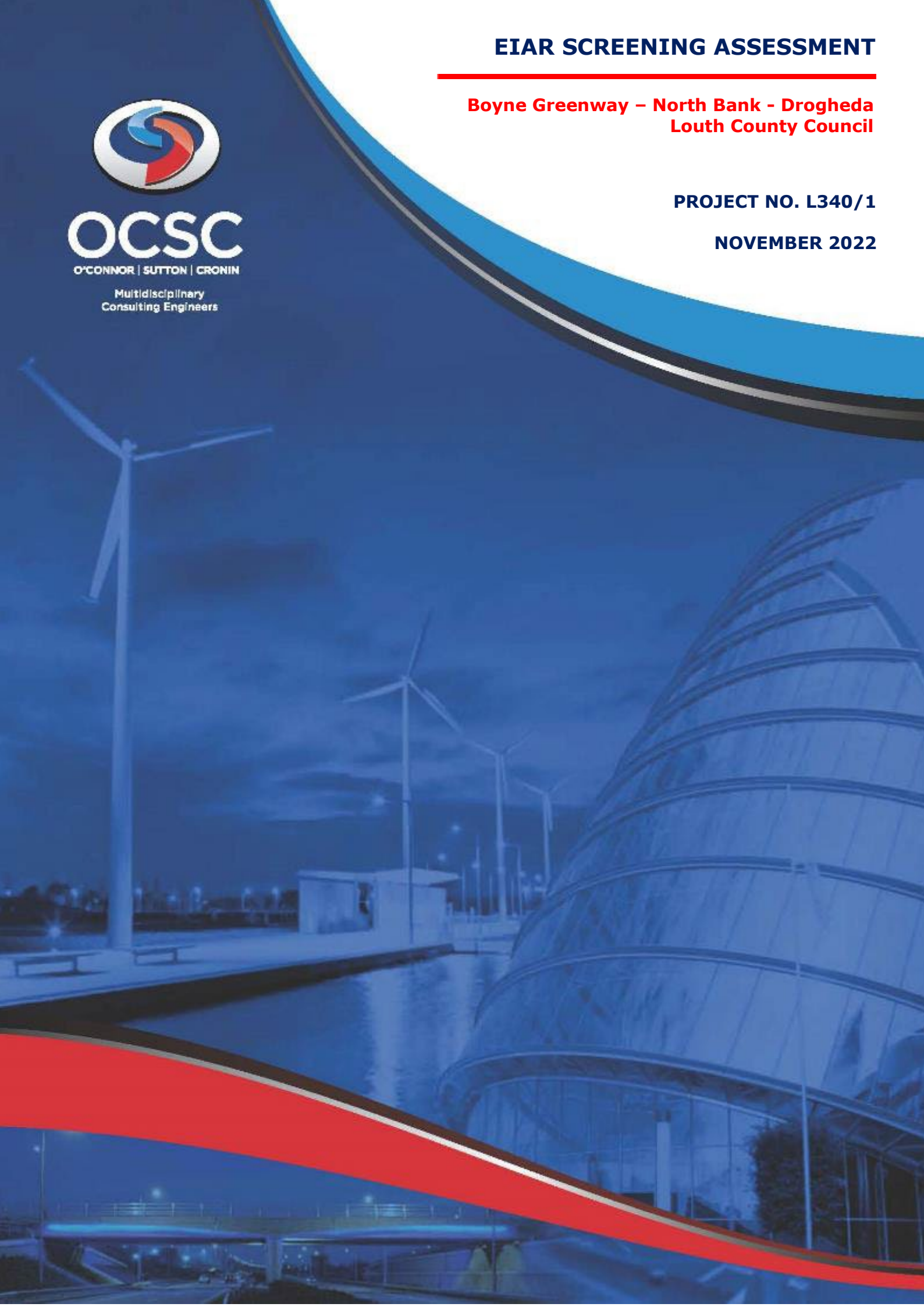
EIAR SCREENING ASSESSMENT

Boyne Greenway – North Bank - Drogheda
Louth County Council

PROJECT NO. L340/1

NOVEMBER 2022

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers



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for

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NOTICE

DOCUMENT CONTROL & HISTORY

OCSC Job No.:	Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
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1 INTRODUCTION

1.1 Project Contractual Basis & Parties Involved

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Louth County Council. The project relates to the extension of the Boyne Greenway – North Bank – Drogheda. The total length of the proposed path is c. 1.6km long. Of this, c. 650 m is a completely new path which will run through mainly scrub habitat. The remainder of the development consists of widening an existing tarmacadam path from 2m to 3m. The regulatory authority for the site is Louth County Council.

The purpose of this report is to determine whether the project requires the preparation of an Environmental Impact Assessment Report (EIAR). This report documents the screening completed to provide a summarised overview of the potential impacts on the receiving environment whilst taking cognisance of the relevant statutory requirements.

A Stage 1 Screening for Appropriate Assessment has also been prepared. A Stage 1 Screening exercise assesses the likely significant effects of the development on Natura 2000 sites within the zone of influence of the proposed project. This project has not been screened out at Stage 1; and, therefore, it was determined that the project required the preparation of a Natura Impact Statement (NIS). OCSC were commissioned to complete a Natura Impact Statement for the proposed works that assessed the impact of the proposed development on the Natura 2000 site network and the mitigation required. An OCSC Ecologist undertook a site visit on 4th October 2022.

This report was completed by Sinéad Doran, BSc, AMIEnvSc, Environmental Consultant; Bruna Guasti, BEng, Environmental Consultant; and Eadaoin Butler BSc, Consultant Ecologist; reviewed by Glenda Barry, BSc, MSc, and Principal Consultant; and approved by Eleanor Burke, BSc, MSc, DAS, MIEnvSc, CSci, Technical Principal, and the OCSC Environmental Division Manager.

1.2 Study Area

The study area is comprised of the the proposed Boyne Greenway – North Bank - in Drogheda, County Louth, an Outdoor Recreation and Infrastructure Scheme (ORIS) Project 2022. The study area extends from Boyne Hall estate in the west to Horse Lane in the east and encompasses an existing footpath with two connections to Lower Mell Street between Fountain Hill and Riverview Streets and another at Horse Lane. See Figure 1.1.

Figure 1.1: Study Area; site location indicated by the red line (Google Earth, 2022)

1.3 Surrounding Land Use

The site is located within the urban environment of Drogheda, County Louth on land that is primarily undeveloped except where is crosses Toberboice Lane in the western portion of the site. The immediate surrounding area is comprised of commercial, residential, public amenity, undeveloped greenspace some of which is used for agricultural purposes, and the River Boyne. North of the study area are areas of undeveloped greenspace, a playing pitch, extensive housing, a public car park, numerous commercial premises including vehicle repair garages, a petrol station, a car dealer, and Lower Mell Street (the R168). South of the site lies undeveloped greenspace, a commercial printing facility, vehicle and auto glass repair shops, agricultural land, and the River Boyne. To the east of the site is Drogheda town centre with numerous residential and commercial premises, a Garda station, and St. Dominic's Bridge. West of the site is undeveloped greenspace including agricultural land and woodland as well as residential developments along Slane Road. See Table 1.1 for adjacent land uses and Figure 1.2 for surrounding land use.

Table 1.1: Adjacent Land Uses

Boundary	Land Use
North	Greenspace, a playing pitch, residential and commercial land use including vehicle repair garages and a petrol station
South	Greenspace, agricultural land, a printing facility, vehicle and auto glass repair shops, and the River Boyne
East	Drogheda town centre and St. Dominic's Bridge
West	Greenspace including agricultural land and woodland and residential developments

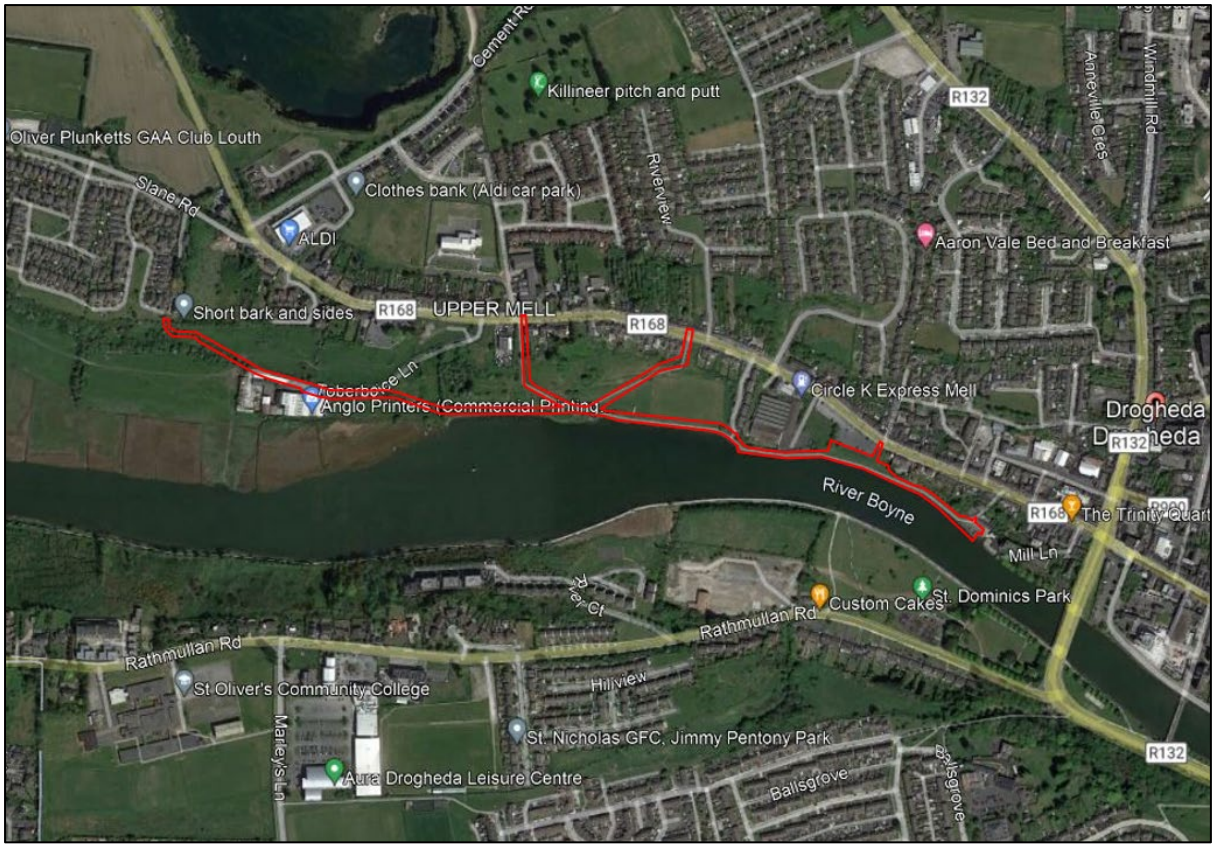

Figure 1.2: Surrounding Land Use; site location indicated by the red line (Google Maps, 2022)

1.4 Project Description

This Environmental Impact Assessment (Screening) Report has been prepared for the proposed construction of the River Boyne Greenway – North Bank. The proposed works are comprised of the construction stages of the Boyne Greenway – North Bank in Drogheda, County Louth, an Outdoor Recreation and Infrastructure Scheme (ORIS) Project 2022. Works to be undertaken include provision of a path with a total length of c. 1.6km long. Of this c. 650m is a completely new path which will run through mainly scrub habitat.

The remainder of the proposed works consists of the enhancement of an existing 950m pathway including widening of the existing tarmacadam path from 2m to 3m with a bitmac surface, resurfacing of poor-quality surfaces, and provision of lighting. The proposed works go from Boyne Hall estate connecting to an existing footpath perpendicular to the Lower Mell street, running through the footpath up to the Horse lane, connecting back to Lower Mell street.

There are sections of the existing footpath which have become deteriorated. These sections are isolated, and they will be milled out and replaced. Benches, bins and bicycle racks will be installed at several locations along the path. In addition, these areas will be resurfaced.

Detail for the existing path upgrade and the new path have been provided in the drawings. They will comprise of 50mm flexible surfacing to CC-SPW-01100 followed by 150mm granular subbase material type B CC-SPW-00800 underlain by acceptable material to Appendix 6/1.

There are weeds and grass encroaching onto the existing path which will be removed / trimmed / scuffed back. There will be access control gates installed. Areas of fencing has also

become damaged and will be replaced or removed. For longevity joins in the surfacing will be overbanded. Road signs and markings will be put in place. There will be public lighting installed along the path also.

The existing path is located immediately within the boundary River Boyne and River Blackwater Special Area of Conservation (SAC) for c. 550m of the overall 950m at a distance of 2m from the River Boyne itself at its closest point. The proposed greenway is 1.2 km from the River Boyne and River Blackwater Special Protection Area (SPA) and 2.75km away from the Boyne Estuary SPA.

Due to the fact that the proposed works are just within an SAC boundary, there is a potential pathway for direct impacts (from construction activities) to affect aquatic features of interest for which the SAC is designated, such as the River Lamprey (*Lampetra fluviatilis*), Salmon (*Salmo salar*), and Otter (*Lutra lutra*). Due to the tidal nature of this section of the River Boyne, there is also a potential pathway for direct impacts (from construction activities) to affect the upstream River Boyne and River Blackwater SPA and the downstream Boyne Estuary SPA. For the first, there is potential for impacts to affect Kingfisher (*Alcedo* atthis) and for the latter, many bird species.

The objectives of this project are:

- To provide a greenway along the River Boyne
- To provide benches
- To provide bins and bicycle racks
- To install access control gates
- To install road signs, markings, and public lighting

1.5 Project Objectives

The overall project objectives include:

- a description of the physical characteristics of the whole project;
- a description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected;
- description of the aspects of the environment likely to be significantly affected by the project; and
- A description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from a) the expected residues and emissions and the production of waste, where relevant and b) the use of natural resources, in particular soil, land, water, and biodiversity.

1.6 Methodology and Approach

The methodology and approach used in the preparation of this report will follow:

- Guidelines on the Information to be contained in Environmental Impact Assessment Reports, Irish Environmental Protection Agency, May 2022.
- European Commission (2015) Environmental Impact Assessment – EIA, Over, Legal Context
- European Union EIA Directive (85/337/EEC) and its amendments in 1997, 2003, and 2009
- Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment
- Planning and Development Act 2000 (as amended)
- Planning and Development Regulations 2001 (as amended)
- Directive 2014/52/EU
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licensing Systems – Key Issues Consultation Paper (2017; DoHPCLG)
- Preparation of guidance documents for the implementation of EIA directive (Directive 2011/92/EU as amended by 2014/52/EU) – Annex I to the Final Report (COWI, Milieu; April 2017)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018)
- Environmental Impact Assessment – Guidance for Consent Authorities regarding Sub-threshold Development (2003; DoEHLG)

Using the above documents, it has been possible to carry out a desktop EIAR Screening using the best available guidance and operating within the applicable legislation. The methodology employed in this screening exercise updates previous guidance in line with the new Directive 2014/52/EU.

1.7 Scope of Works

To meet the project objectives, the following scope of works were completed:

- Present a discussion of the current site status and key environmental influences around the site;
- Undertake and present a historical site and area review, primarily referring to old Ordnance Survey Ireland maps but utilising other sources as appropriate and readily available;
- Present a discussion of the general soil and groundwater conditions within the topographical and area context; and
- Present an overview if any significant negative environmental impacts can arise from the proposed project.

1.8 Limitations

This Environmental Impact Assessment Screening Report has been prepared for the sole use of Louth County Council ("the Client"). No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC.

This assessment is based on a review of available historical information, environmental records, consultations, relevant guidance information, and reports from third parties. All information received has been taken in good faith as being true and representative.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The desktop assessment undertaken by OCSC and described was undertaken in October 2022 and is based on the information available during that period. An OCSC Ecologist undertook a site visit on 4th October 2022. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report which may come or be brought to OCSC's attention after the date of the Report.

The conclusions presented in this report represent OCSC's best professional judgement based on review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the proposed project, with due regard to all relevant statutory requirements and technical guidance. However, it is ultimately the responsibility of the relevant planning authority to make a determination as to whether an EIAR is required for a particular project, based on screening conducted by the planning authority.

2 EIA SCREENING PROCESS

2.1 Introduction

This section of the report discusses the legislative basis for screening used to decide if the proposed project requires the preparation of an Environmental Impact Assessment Report (EIAR). It also sets out the project in terms of planning context.

This project has been screened in accordance with Section 3.2 of the 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022), the Environmental Impact Directive (85/337/EEC) and all subsequent relevant amendments, and Planning and Development regulations (2001-2018), including S.I. No. 296 of 2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, which came into operation on 1st September 2018.

2.2 EIA Applicable Legislation

The Environmental Impact Assessment (EIA) Directive 85/337/EEC has been in force across the European Union since 1985 and applies to a wide range of defined public and private projects which are defined in Annexes I (Mandatory EIA) and II (Screening-Discretion of Member States) of the directives. The EIA Directive of 1985 has been amended three times: 97/11/EC, 2003/35/EC, and 2009/31/EC. These amended directives have been coded and replaced by Directive 2011/92/EU of the European Parliament and Council on the assessment of the effects of certain public and private projects on the environment (and as amended by Directive 2014/52/EU). Directive 2014/52/EU has been transposed in 2018 in Irish law under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI 296 of 2018).

2.3 Mandatory EIAR Review

Annex I of the European Communities (EIA) Directive lists the activities for which an EIA is required. The proposed project is not listed in Annex I; therefore, it is not mandatory for an EIA to be carried out.

Where a project is listed on Annex II or is a development that is not exempted, the national authorities of the member state must decide whether an EIA is needed for a proposed project. This is done by the "screening procedure", which determines the effects of project on the basis of thresholds/criteria or a case-by-case examination. The project is not listed on Annex II. Annex III of the Directive outlines the specific criteria that must be considered when a sub-threshold project is being examined for Environmental Impact Assessment.

The screening procedure investigates whether the project has significant potential negative impact on the environment using different criteria including:

- Characterisation of the proposed development
- Location of proposed development
- Type and Characteristics of the potential impact

The relevant Information [to be provided] for the Purposes of Screening Sub-threshold Development for Environmental Impact Assessment include:

1. A description of the proposed development, including in particular—

(a) A description of the physical characteristics of the whole proposed development and, where relevant, of demolition works and

(b) A description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.

2. A description of the aspects of the environment likely to be significantly affected by the proposed development.

3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from—

(a) The expected residues and emissions and the production of waste, where relevant, and

(b) The use of natural resources, in particular soil, land, water, and biodiversity.

4. The compilation of the information in paragraphs 1 to 3 shall consider, where relevant, the criteria set out in Schedule 7 of the Directive.

3 PLANNING CONTEXT

3.1 National Policy

3.1.1 National Planning Framework

The National Planning Framework (NPF) is the Government's high-level strategic plan for shaping the future growth and development of Ireland to 2040, this was released in tandem with the National Development Plan (NDP), which sets out the budget for national infrastructure investment for the next 10 years.

The NPF is considered a new approach, that aims to improve the different areas of our lives, while bringing the various government departments, agencies, State owned enterprises and local authorities together behind a shared set of strategic objectives for rural, regional and urban development.

Of relevance to the proposed Boyne greenway, the NPF states;

> *"The development of greenways, blueways and peatways offer a unique alternative means for tourists and visitors to access and enjoy rural Ireland. The development of a strategic national network of these trails is a priority and will support the development of rural communities and job creation in the rural economy, as well as the protection and promotion of natural assets and biodiversity."*

Furthermore, the NPF refers to key planning and development and place-making policy priorities for the Eastern and Midland Region and specifically,

> *"Building on the progress made in developing an integrated network of greenways, blueways and peatways, that will support the diversification of rural and regional economies and promote more sustainable forms of travel and activity based recreation utilising canal and former rail and other routes."*

The NPF has identified 10 National Strategic Outcomes. These NSOs represent the overarching priorities which the NPF is designed to achieve. The most applicable of these NSOs, within the context of the Proposed Development, are the following;

National Strategic Outcome 3: Strengthened Rural Economies and Communities

> *"A strong start has also been made in the development of a national long-distance Greenway/ Blueway Network. Such a network, including rural walking, cycling and water-based recreation routes, as well as 'peatways', has demonstrated major potential to bring new life to regional and rural locations through the "win-win" scenario of increased tourism activity and healthier travel. Developing this network further will diversify our rural economy by embracing the potential for a major expansion in the demand for activity based tourism."*

National Strategic Outcome 7: Enhanced Amenities and Heritage

> *"Attractive places include a combination of factors, including vitality and diversity of uses, ease of access to amenities and services supported by integrated transport systems and green modes of movement such as pedestrian and cycling facilities. Appealing places are also defined by their character, heritage and sense of community. This includes attractive buildings and street layouts, civic spaces and parks and regeneration of older areas and making places feel safe through active use and design."*

The following National Policy Objectives which set the context for regional/ local planning policy and are supportive of the proposed Boyne Greenway.

NPO 22 Facilitate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level.

NPO 26 Support the objectives of public health policy including Healthy Ireland and the National Physical Activity Plan, though integrating such policies, where appropriate and at the applicable scale, with planning policy.

NPO 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.

NPO 54 Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.

NPO 62 Identify and strengthen the value of greenbelts and green spaces at a regional and city scale, to enable enhanced connectivity to wider strategic networks, prevent coalescence of settlements and to allow for the long-term strategic expansion of urban areas.

NPO 64 Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green infrastructure planning and innovative design solutions.

The proposal is in compliance with the above National Policy Objectives and will significantly enhance the existing amenities of the area and provide high quality designed facilities to boost physical activity as well as social interaction and associated wellbeing benefits for all users. The proposal will help to provide a segregated off- road experience improving accessibility and connectivity, linking neighbourhoods, recreation areas and the town centre along a beautiful urban riverine landscape. These are the building blocks required to boost a culture of cycling and walking as an alternative transport mode to achieve the target of Drogheda becoming less car dependent while contributing to lower emissions and a reduced carbon footprint.

3.1.2 National Development Plan 2018 – 2027

The National Development Plan 2018-2027 (NDP) came into effect in February 2018, in tandem with the National Planning Framework (NPF). The purpose of the NDP aims to drive Ireland's economic, environmental and social progress over the next decade. The key role of the NDP is to set out the updated configuration for public capital investment over the next 10 years in order to achieve the National Strategic Outcomes as set out within the NPF.

The NDP outlines initiatives that aim to enhance the economic growth for rural areas (NSO 3), of specific relevance;

> *The Outdoor Recreation Infrastructure Scheme will continue to support the further development of the outdoor recreation sector with funding for new infrastructure (walking routes, blueways etc.) and the enhancement of existing facilities.*

This proposal supports the development and enhancement of a greenway along the northern bank of the River Boyne. It will result in an amenity asset that encourages active outdoor recreation for local residents in addition to being a tourism asset that can attract visitors. The proposal amenity will promote a culture of cycling and walking as a sustainable transport mode for everyday life directly connecting the Drogheda neighbourhoods of Mell with the town centre.

3.1.3 Smarter Travel: A New Transport policy for Ireland 2009-2020

This Policy sets out a vision of sustainable travel and transport in Ireland by 2020. It recognises cycling and walking as the transport modes with the least environmental impacts and a realistic alternative to the private car. The policy envisages cycling and walking facilities that form a coherent network. In addition, the policy considers cycling and walking as pivotal to achieving the goals in national health policies that seek to promote physical activity.

The Policy states that "*actions aimed at ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking".*

Furthermore, under Action 17, states.

> *"Many State properties are used for recreation and leisure. We will ensure that, where feasible, areas of State-owned lands such as canal towpaths, former rail lines, Coillte estates, etc. are made available for the development of walking and cycling trails."*

The Smarter Travel: A New Transport policy for Ireland 2009-2020 represents a commitment to promote cycling and walking in Ireland and strengthen its culture. The proposal has the potential to directly assist in achieving these targets supporting the overall vision of the Policy.

3.1.4 National Cycle Policy Framework 2009 – 2020

The National Cycling Policy Framework (NCPF) is Ireland's first cycling framework. With influence taking from international experiences, the NCPF sets out an integrated basis for the long-term development and implementation of cycling policies among various sectors and

levels of government. The NCPF is a direct contribution to a sustainable travel vision for Ireland.

The NCPF sets out 19 objectives developed to enhance a cycling culture. The proposed greenway supports the following objectives.

Objective 1 - Support the planning, development and design of towns and cities in a cycling and pedestrian friendly way.

Objective 2 Ensure that the urban road infrastructure (with the exception of motorways) is designed / retrofitted so as to be cyclist-friendly and that traffic management measures are also cyclist friendly.

Objective 4 - Provide cycling-friendly routes to all schools, adequate cycling parking facilities within schools, and cycling training to all school pupils.

Objective 5 - Ensure that all of the surfaces used by cyclists are maintained to a high standard and are well lit.

Objective 6 - Ensure that all cycling networks - both urban and rural - are signposted to an agreed standard.

3.1.5 The Climate Action Plan (CAP) 2021

The Climate Action Plan (CAP) 2021 sets out proposals for reducing greenhouse gas emissions over all sectors in Ireland. The aim of this plan is to set Ireland on a path to become one of the leading countries tackling climate change. The CAP outlines the importance of sustainable development and planning when tackling climate breakdown.

The CAP specifically highlights the need to provide good public transport, cycling and walking infrastructure, and to become less reliant on their cars, as one approach to tackle congested area. The CAP also addresses that policies need to be aligned better to achieve the ambitious targets for a modal shift.

The CAP in relation to transport states that,

> *"The goal is to successfully reduce emissions from the transport sector while maximising the benefits of the transition, without negatively damaging economic wellbeing, and without adversely impacting different social groups. The pandemic has also shown us that large scale behaviour change is achievable and that new patterns of mobility and working can play a part in the transition to a cleaner, safer and more sustainable transport system for all."*

The CAP lists a number of actions that are supportive of the proposal.

Action Number – Action

231 - Continue the improvement and expansion of the Active Travel and Greenway Network

232 - Development of a coherent and connected National Cycle Network Strategy

233 - Construct an additional 1,000km of cycling and walking infrastructure

234 - Encourage an increased level of modal shift towards Active Travel (walking and cycling) and away from private car use

235 - Accelerate sustainable mobility plans for schools

236 - Legislate to improve the Active Travel environment in urban centres

It should be recognised that the proposed greenway is an essential segment of public infrastructure that will support and assist in reaching the CAP key target of 500,000 extra walking, cycling and public transport journeys per day by 2030.

3.2 Regional Policy

3.2.6 Regional Spatial Economic Strategy 2019 - 2031 (EMRA)

There are three regional assemblies in Ireland, with a main function to identify regional policies and coordinate initiatives that support the delivery of national planning policy. The primary driver for this is the implementation of the Regional Spatial and Economic Strategies (RSES). The RSES provides regional level strategic planning and economic policy in support of the implementation of the National Planning Framework (NPF) and provides a greater level of focus around the National Policy Objectives (NPO) and National Strategic Outcomes (NSO) of the NPF.

The RSES identifies the Eastern and Midland region's challenges as the need to sustain economic growth whilst transitioning to a low carbon society and the requirement to align population growth with the location of homes and jobs whilst creating healthy attractive places and an enhanced quality of life. In response, the RSES is underpinned by three key principles: placemaking, climate action and sustainable economic opportunity and growth.

The strategic vision is

> *"To create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all."*

The RSES aims to enable Drogheda to realise its potential to grow to city scale, with a population of 50,000 by 2031 through the regeneration of the town centre, the compact and planned growth of its hinterland and through enhancement of its role as a self-sustaining strategic employment centre on the Dublin-Belfast Economic Corridor. It is anticipated Drogheda will accommodate significant new investment in housing, transport and employment generating activity.

The River Boyne is considered an important tourism asset and natural amenity which the RSES stating *"The River Boyne is the most important natural amenity of Drogheda and should be central to any future strategy for the town and its regeneration. Enhancing and developing the existing parklands and open space to the west of the town will provide an important new link to Brú na Boinne and beyond and allow the recreational value and leisure uses of this area to be maximised".*

The RSES, has referred to significant opportunities to develop greenways in the region, and has specifically referenced the proposal.

> *"The RSES supports the improvement and protection of walking and cycling routes such as the Boyne Greenway".*

Regional Policy Objective 4.15 seeks specifically to:

Promote Drogheda as an urban tourism destination while protecting its natural and built heritage resources with a particular focus on capitalising on the following assets:

- *The town's role as a gateway to the Boyne Valley heritage sites and World Heritage site at Brú Na Bóinne*
- *Amenity potential of the River Boyne including the Boyne Greenway*

In addition to the above objective, the following Regional Policy Objectives are considered relevant to the proposal. The principle of the proposed Boyne Greenway accords with these objectives.

RPO 7.24 Promote the development of a sustainable Strategic Greenway Network of national and regional routes, with a number of high-capacity flagship routes that can be extended and /or linked with local greenways and other cycling and walking infrastructure, notwithstanding that capacity of a greenway is limited to what is ecologically sustainable.

RPO 7.25 Support local authorities and state agencies in the delivery of sustainable strategic greenways, blueways, and peatways projects in the Region under the Strategy for the Future Development of National and Regional Greenways.

RPO 8.7 To promote the use of mobility management and travel plans to bring about behaviour change and more sustainable transport use.

RPO 9.10 In planning for the creation of healthy and attractive places, there is a need to provide alternatives to the car and to prioritise and promote cycling and walking in the design of streets and public spaces.

RPO 9.17: To support local authorities in the development of regional scale Open Space and

Recreational facilities particularly those close to large or growing population centres in the Region.

3.3 Local Policy

3.3.7 Louth County Development Plan 2021-2027

Louth County Development Plan (CDP) 2021-2027 is the operative statutory plan for the area and has superseded the Drogheda Borough Council Development Plan 2011-2017.

Table 2.4 of the County Development Plan sets out the settlement hierarchy for County Louth. Drogheda is designated as Regional Growth Centres. The Plan set out the following guidance for these centres:

"Regional Growth Centres are large towns with a high level of self-sustaining employment and services that act as regional economic drivers and play a significant role for a wide catchment area".

The following core strategy policies are of relevance,

CS 3 To support and manage the self-sufficient sustainable development of all settlements in a planned manner, with population growth occurring in tandem with the provision of economic, physical and social infrastructure.

CS 5 - To support the progression and delivery of projects that would facilitate the creation of vibrant, sustainable communities and the rejuvenation of towns and villages, including any project to be funded by the Urban or Rural Regeneration and Development Fund.

CS 11 - Support the Regional Growth Centres of Drogheda and Dundalk as regional economic drivers targeted to grow to city scale with a population of 50,000 by 2031 and capitalise on their strategic location on the Dublin-Belfast Economic Corridor.

SS 1 - To support the role of Drogheda as a Regional Growth Centre and a driver of growth along the Dublin-Belfast Economic Corridor and to facilitate the continued expansion and growth of the town based on the principles of balanced, sustainable development that enables the creation of employment, supports economic investment, and creates an attractive living and working environment.

SS 13 - To support investment in public and sustainable transport infrastructure and services in Drogheda including the progression of the DART Expansion Programme which includes the electrification of the rail line and the extension of DART services to Drogheda.

SS 17 - To work with the NTA, local landowners, and developers to implement an integrated pedestrian and cycle path network throughout Drogheda, recognising the highest priority to be given to cycling and walking over other modes of transport.

SS 18 - To develop a network of green areas throughout the town including the delivery of a greenway along the north and southern banks of the River Boyne stretching from Townley Hall to Baltray and Oldbridge to Mornington in County Meath while maintaining the integrity of the Boyne Natura 2000 sites.

The importance of the River Boyne is acknowledged in the CDP as being central to any future strategy for the town and its regeneration. In conjunction with the adjoining parks and open spaces it provides a link to the Brú na Bóinne and beyond, as a recreational use.

The proposal is shown in the CDP as traversing lands that are zoned predominately within land zoning category *"H1 Open Space"*. The policy objective is *"to preserve, provide and improve recreational amenity and open space".*

The land zoning guidance states that *"Development that will improve the facilities or quality of the open space, amenity or recreational facilities, or contributes to the enjoyment of the space will be considered".* Cycleway/Walkway trails are considered a permitted land use.

A small section (ca. 0.13km) of the proposed greenway is located within lands zoned as "A2 – New Residential – Phase 1". This section of greenway will establish a link to the residential neighbourhoods of Oldbridge, Boyne Lodge and Boyne Hall in addition to helping improve the general connectivity of the other residential areas along the Slane Road to the town centre and the amenity of the River Boyne. The proposal will bring positive permeability and accessibility benefits to the general locality and local community. The proposal will support the creation of any future new residential developments on these zoned lands by providing a sustainable transport link to the town centre and surrounding area. The proposal is considered to accord with the proper planning and sustainable development of the area.

3.3.8 Movement

The CDP has the following policy objectives in relation to more sustainable forms of transport including,

MOV 7 - To support a modal shift away from the private car to more sustainable forms of transport, such as public transport, cycling and walking and the attainment of any national targets relating to modal change published during the life of this Plan.

MOV 9 - To support investment in sustainable transport infrastructure that will make walking, cycling or public transport more attractive and appealing, and facilitates accessibility for all, regardless of age, physical mobility, or social disadvantage.

The CDP supports and will facilitate the provision of cycling/walking infrastructure and greenways that will provide a more comfortable and attractive environment for pedestrians and cyclists. The CDP acknowledges the individual and community benefits of active travel which encourages an active lifestyle, improve fitness levels and facilitate greater social interaction between people.

The principle of the proposed Boyne Greenway fully aligns with the following Cycling and Walking policy objectives.

MOV 25 - To support the retrospective provision of walking and cycling infrastructure in existing settlements, where feasible, to achieve growth in sustainable mobility and strengthen and improve the walking and cycling network.

MOV 28 - To promote walking and cycling as a safe, convenient, healthy, efficient, and environmentally friendly mode of transport for all age groups.

MOV 30 - To provide, where possible traffic free pedestrian and cyclist routes particularly where such routes would provide a more direct, safer, and more attractive alternative to the car.

MOV 33 - To continue the development of a network of Greenways in the County in accordance with the Strategy for the Future Development of National and Regional Greenways.

3.3.9 Tourism

The CDP highlights the need for the future development of the tourism sector in County Louth to capitalise on County's unique location in relation to the Boyne Valley and the Mourne/Cooley/Gullion Regions. It seeks to promote Drogheda as an urban tourism destination capitalising on its role as gateway to the Boyne Valley, Brú na Bóinne, Boyne River and Irelands Ancient East designation.

Greenways are deemed as entry points to a more active lifestyle and are also greatly enhancing the tourism attractiveness of these areas. Last year, 46% of all oversea holidaymakers to Ireland engaged in walking and cycling as part of their holiday experience. Harnessing the potential of this tourism sector can have significant economic benefits. The proposal is supported by the following policy objectives.

TOU 8 To promote and facilitate the development of walkways and cycleways at appropriate locations throughout the County utilising disused transport links where feasible.

TOU 9 To protect the integrity and scenic quality of existing and future walking and cycling routes and their setting.

TOU 11 To continue the development of a network of greenways in County Louth in accordance with the 'Strategy for Future Development of National and Regional Greenways'.

TOU 17 To facilitate the sustainable development of the tourism sector and provide for the delivery of a unique combination of tourism opportunities drawing on the network of attractions in County Louth and potential future attractions.

3.4 Built Heritage

The built heritage of Louth refers to all man-made features, buildings or structures in the environment. This includes a rich and varied archaeological and architectural heritage to be found throughout the countryside and within the historic towns and villages of the county. The CDP seeks to protect the County's built and archaeological heritage from the direct and indirect impacts from climate change.

Below lists the relevant Built Heritage policies and objectives from the CDP. There are a number of Recorded Monuments within proximity of the proposal.

BHC 1 To protect and enhance archaeological sites and monuments, underwater archaeology, and archaeological objects listed in the Record of Monuments and Places (RMP), and/or the Register of Historic Monuments and seek their preservation (i.e. presumption in favour of preservation in situ or in exceptional cases, at a minimum, preservation by record) through the planning process and having regard to the advice and recommendations of the National Monuments

Service of the Department of Housing, Local Government and Heritage and the principles as set out in the 'Framework and Principles for the Protection of the Archaeological Heritage' (Department of Arts, Heritage, Gaeltacht and the Islands 1999).

BHC 2 To protect the built heritage assets of the county and ensure they are managed and preserved in a manner that does not adversely impact on the intrinsic value of these assets whilst supporting economic renewal and sustainable development.

BHC 3 To protect known and unknown archaeological areas, sites, monuments, structures and objects, having regard to the advice of the National Monuments Services of the Department of Housing, Local Government and Heritage.

BHC 5 To protect all sites and features of archaeological interest discovered subsequent to the publication of the Record of Monuments and Places (i.e. preservation in situ or in exceptional circumstances, at a minimum preservation by record) having regard to the advice and recommendations of the National Monuments Section of the Department of Housing, Local Government and Heritage.

BHC 7 To require applicants seeking permission for development within Zones of Archaeological Potential and other sites as listed in the Record of Monuments and Places to include an assessment of the likely archaeological potential as part of the planning application and the Council may require that an on-site archaeological assessment is carried out by trial work, prior to a decision on a planning application being taken.

BHC 10 To require, as part of the development management process, archaeological impact assessments, geophysical surveys, test excavations and monitoring, as appropriate, where development proposals involve ground clearance of more than half a hectare or for linear developments over one kilometre in length or for developments in proximity to areas with a density of known archaeological monuments and history of discovery, as identified by a licensed archaeologist.

The proposal does not conflict with the CDP policies as listed above. An Archaeological Impact Assessment (AIA) has been prepared to support this application. The archaeological impact assessment of the site at the proposed Drogheda Greenway, North Bank, Drogheda, Co. Louth was carried out by the Archaeological Consultancy Services Unit (2022). There are four monuments located within or in the immediate vicinity of the proposed greenway along Toberboice Lane – Souterrains LH024-012001-012002, Enclosure LH024-12004 and Burial Ground LH024-012003 (Figure 3). There are no Protected Structures listed in the Louth County Development Plan 2021-2027 or structures listed within the National Inventory of Architectural Heritage for County Louth or Meath directly present within the proposed greenway. As the area presently occupied by the existing footpath along the riverbank was previously monitored by Donald Murphy under works associated with the Drogheda Main Drainage project in the late 1990s, it is not expected that any archaeological features or deposits would be present within the proposed greenway along this route. However, the potential does exist that previously unknown archaeological feature or deposits may be exposed or identified, especially in the area adjacent to the known archaeological monuments (LH024-012001-012005) at Toberboice lane, where the potential is particularly high, within the greenfield adjacent to the proposed greenway. Therefore, it is recommended that archaeological monitoring of all ground works within the greenfield areas should be conducted and conditioned within any grant of permission for the site. This should be carried out by a licence eligible archaeologist working under licence from the Department of Housing, Local Government and Heritage in consultation with the National Museum of Ireland. It is also recommended that the ruinous stone structure, which will be partially impacted upon, should be subject to a detailed measured and photographic architectural survey.

3.5 Natural Heritage

County Louth boasts a rich natural heritage, which contributes substantially to the County's character, identity and sense of place, in addition to the well-being and the quality of life of those living in and visiting the County. Natural heritage comprises the biological and geological underpinnings of our existence, our biodiversity and geodiversity, expressed through various mediums including farming, wildlife and landscapes.

Below lists the relevant Natural Heritage policies and objectives from the CDP. There are a number of Protected Areas within proximity of the proposal.

NBG 3 To protect and conserve Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated under the EU Habitats and Birds Directives.

NBG 4 To ensure that all proposed developments comply with the requirements set out in the DECLG 'Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities 2010'.

NBG 5 To ensure that no plan, programme, or project giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan, either individually or in combination with other plans, programmes or projects2.

NBG 6 To ensure a screening for Appropriate Assessment (AA) on all plans and/or projects and/or Stage 2 Appropriate Assessment (Natura Impact Report/ Natura Impact Assessment) where appropriate, is undertaken to make a determination. European Sites located outside of the County but within 15km of the proposed development site shall be included in such screenings as should those to which there are pathways, for example, hydrological links for potential effects.

Policy CH 3 of the Drogheda Development Plan states the following in relation to the protection of Natura 2000 sites:

"Protect the designated Boyne Estuary SAC and SPA and the River Boyne and Blackwater SAC from any adverse impacts of development and to require appropriate assessment of any development likely to have an impact on such sites."

In total 6 sites designated as SAC or SPA were recorded within 15km of the proposal. Given the type of project, the sites being given further consideration are the River Boyne and River Blackwater SAC, the River Boyne and River Blackwater SPA, and the Boyne Estuary SPA. A section of the proposed greenway is located within the River Boyne and River Blackwater SAC. Consequently, a full AA is required. A Natura Impact Statement (NIS) has been prepared by O'Connor Sutton Cronin & Associates (2022) to support this application.

The NIS assesses the likely significant effects on the Natura Sites arising from the proposed works. The walkway is expected to be widened, repaired, and extended. In addition, ancillary structures such as benches, lighting, gates, bins, and bicycle racks are to be installed. Due to the nature of the works, there is a risk of water quality impacts as a result of debris, sediment, dust, and contaminated run-off entering the watercourse.

The mitigation measures proposed are considered to be sufficient to ensure that potential impacts, mainly relating to water quality, are minimised. The conclusion is that, with mitigation in place, no significant negative impacts on the conservation status of the Natura 2000 network and its associated habitats and species are anticipated as a result of this development.

4 CHARACTERISTICS OF PROPOSED DEVELOPMENT

Schedule 7 of SI 296 of 2018 requires that the characteristics of proposed development are identified. In particular, it references the following sections:

4.1 Size and Design

The study area (~19,000m^2) comprises largely of an existing path, unoccupied grassland and scrub habitat along the north bank of the River Boyne in Drogheda, County Louth. The works have been designed to provide the River Boyne Greenway (North Bank) which will consist of a path with a total length of 1.6km, around 650m of which will be a completely new path and 950m of which is an existing path that will be enhanced with resurfacing. The final pathway will have a width of 3m, which will be widened in the existing sections from 2m. The proposed works extend from Boyne Hall estate in the west to Horse Lane in the east and encompasses an existing footpath with two connections to Lower Mell Street between Fountain Hill and Riverview Streets and another at Horse Lane.

There are sections of the existing footpath which have become deteriorated. These sections are isolated, and they will be milled out and replaced. Benches will be installed at several locations along the path. At these locations there will also be litters bins and bicycle racks. In addition, these areas will be resurfaced.

There are weeds and grass encroaching onto the existing path which will be removed / trimmed / scuffed back. There will be access control gates installed. Areas of fencing has also become damaged and will be replaced or removed. For longevity joins in the surfacing will be overbanded. Road signs and markings will be put in place. There will be public lighting installed along the path also.

Detail for the existing path upgrade and the new path have been provided in the drawings. They will comprise of 50mm flexible surfacing to CC-SPW-01100 followed by 150mm granular subbase material type B CC-SPW-00800 underlain by acceptable material to Appendix 6/1.

4.2 Cumulation with other Existing Developments/Development the Subject of a Consent

A review was undertaken of County Louth planning records for the area. The review covered the closest projects which are in receipt of a grant of planning within the last ten years. Permitted planning applications in the site area are as follows:

Planning Application Reference: 13510084

In accordance with the provisions of Part 9, Planning & Development Regulations 2001 (S.I. 600 of 2001), (as amended), The Commissioners of Public Works Ireland propose to carry out the following works to construct a new Courthouse. The development will consist of the construction of a new courthouse of approximately 1385m² on a site of 1910m², to include 2 no. Courtrooms & ancillary accommodation. The subterranean historical town wall, a Protected Structure, is located on the Southern boundary of the site & will be represented as part of the hard landscaping. The development does not materially affect the character of the Protected Structure. The proposal includes a new vehicular access gate, & the reminder of the perimeter will be secured with a railing & pedestrian gates. A new separate foul & surface

water drain will connect to the existing public separate foul & surface drain avoiding all sub surface archaeological material.

Planning Application Reference: 20763

Permission to vary development permitted under P.A. Ref. 18/1056 on a site known as No. 1 & 2 Mill Lane, Trinity Street and R132 Bridge of Peace, overlooking the River Boyne and includes a pedestrian link beneath the Bridge of Peace to Fr. Connolly Way. A Natura Impact Statement (NIS) accompanies this application. The proposed development consists of an increase in the height and variations to the external and internal design and layout of the permitted apartment building resulting in an increase in the number of storeys from 10 as permitted to 11 storeys, comprising ten storeys of apartments and a lower ground floor level comprising an under croft car park and communal facilities, an increase in the number of apartments from 41 no. to 49 no. in a mix of 27 no. 1 bed and 22 no. 2 bed apartment types. The area previously allocated to a laundry is now proposed as a management office. The proposed development also provides for a single storey standalone ESB substation, in addition to all associated site development works, boundary treatments, landscaping and public lighting. The number of car parking spaces and upgrade proposals for Mill Lane itself and the pedestrian link under the Bridge of Peace permitted under P.A Ref. 18/1056 are unaltered. **Significant Further Information received 18/01/2021 provides for, inter alia, the provision of a laundry room at lower ground floor level, the reduction in size of the ESB substation, changes to the design of the eastern elevation to reflect internal design changes and clarification of the floor areas of the apartments**

Planning Application Reference: 18847
EXTENSION OF DURATION PARENT Ref: 13510007.

Permission for construction of a single storey commercial building for use as a restaurant and drive thru take away to include associated onsite parking and alteration works to the existing site entrance. Works will also include erecting new 5m high signage at the site entrance.

The proposed development is short term by its very nature and aims to provide a full walkway along the River Boyne along with smart benches, solar bins, and bicycle racks. It is considered unlikely that any of the committed developments in the immediate vicinity will result in a significant potential for cumulative environmental impacts (including potential cumulative traffic impacts, surface water quality, etc.) with the proposed development during either the construction or operational phases.

Pre-Application Stage - Planning Reference: 22567

This section was added given the proximity of the proposed development to the works. Permission for development to the back of lands at 29-32 Trinity Street. A Natura Impact Statement accompanies this application. The development consists of a detached 3 bedroom dwelling and a three storey building comprising of 2 no. 1 bed apartments. 29-32 Trinity Street, Drogheda, Co Louth. The proposal seeks to connect with the proposed greenway via a new pedestrian path.

4.3 The Nature of Any Associated Demolition Works

It is not anticipated that any buildings will require demolition as there are no buildings in the study area.

4.4 The Use of Natural Resources, in Particular Land, Soil, Water and Biodiversity

There will be no long-term use of any natural resources.

4.5 Production of Waste

Any waste generated during the construction will be reused on-site where possible, e.g., topsoil generated will be reused to provide landscaping and excavated material will be reused for backfill where this material meets acceptable construction criteria. However, if offsite disposal is required for any material, it will be managed in accordance with all relevant waste management legislation. There will be no generation of the waste following the completion of the works other than that produced by end users. Bins will be installed and maintained during the operational phase of the proposed greenway to control these wastes.

4.6 Pollution and Nuisances

There will be a temporary increase in noise during the proposed works. However, levels will not exceed noise levels typical of construction works and are short-term in nature. There will be a slight increase in traffic disturbance during the construction activities, i.e., bringing supplies to the site and removal of material if required. However, this disturbance will be short-term in duration. Some dust will likely be generated during the works; however, this nuisance will be managed in line with best practice. There will be no pollution or nuisance after following the completion of works.

Potential surface water pollution via runoff, including pollution by silt or hydrocarbons, will be managed in accordance with best practices. The risk of surface water pollution during the construction stage is considered to be not significant due to the small-scale nature of the project. However, the appointed contractor will be required to prepare a site-specific Construction Environmental Management Plan (CEMP) which will clearly detail all necessary environmental control measures.

4.7 The Risk of Major Accidents or Disasters including those caused by Climate Change

There is minimal risk of major accidents or disasters including those caused by climate change given the small-scale and temporary nature of the construction works. Any risks that are present are associated with typical construction activities including working with machinery. However, the appointed contractor will be required to prepare a site-specific CEMP clearly detailing all necessary environmental control measures.

There will be no risks following construction above that which would be expected for pedestrian and cycle traffic.

4.8 Risks to Human Health – e.g., Water Contamination/Air Pollution

Risks to surface water during the construction phase will be minimised via construction in line with best practice and mitigation measures identified in the NIS.

There are three reported groundwater source protection zones (SPZs) within a 2km radius of the proposed site: Ballymakenny GWS located approximately 70m to the north, Drybridge PWS located approximately 80m to the northwest, and Kiltrough PWS, located approximately 1.08km to the south. SPZ delineation provides an assessment of the land area that contributes groundwater to a borehole or spring. The purpose of SPZs is to provide additional protection to safeguard drinking water quality through constraining the proximity of an activity that may impact upon a drinking water abstraction. There is no risk to any of the SPZs due to the proposed greenway development.

Based on the GSI database (refer to section 5.15), there are six boreholes located within a 1km radius of the site.

Given the relatively short-term nature of the works and the works being conducted in accordance with best practice guidance, it is not anticipated that the works will pose a risk to groundwater quality during either the construction or the operational phase. In addition, air pollution will be limited to typical construction nuisance such as dust. The same best practice guidelines will be applied to noise nuisance. Overall, the risk to human health is low.

4.9 Impacts of the Proposed Development

Table 4.1: Impacts on the Environment Summary

EIA Topic	Comment on Potential Impacts
Population and Human Health	The potential impacts of the construction phase on the population are not considered to be significant. The greenway will have a positive effect on the population. See section 3.7 for more detail on the project's risks to human health.
Biodiversity / Species and Habitats	The main risk is to water quality in the River Boyne and River Blackwater SAC, the River Boyne and River Blackwater SPA, and the Boyne Estuary SPA. Although a portion of the proposed project footprint is located just within the Natura 2000 network, the potential long-term impacts resulting from the project are unlikely based on the limited work area required to undertake the construction of the proposed walkway and ancillary works and the short duration of the project. A Natura Impact Statement (NIS) has been prepared by OCSC which concluded that, with mitigation in place, no significant negative impacts on the conservation status of the Natura 2000 network and its associated habitats and species are anticipated as a result of this development.
Land and Soils	No significant impact on existing land or soils; the development will be managed in accordance with best practices.
Water	Surface water pollution via runoff, including pollution by silt or hydrocarbons, will be managed in accordance with best practices. No significant residual impacts on water are anticipated as the mitigation proposed will reduce the risk of water pollution to a non-significant level. See sections 3.6 and 3.7 for more detail.
Air & Climate	During construction, there is the potential for short-term minor negative impacts related todust likely to occur, however, this will be short-term in duration and limited to the works area. Best practice construction site management will minimise emissions. See section 3.5 for more detail.

Noise & Vibration	Potential short-term noise impact may arise during construction activities however this will be managed through best practice measures, and noise and vibration levels will be restricted to normal construction operation hours. No significant impact is therefore anticipated. See section 3.5 for more detail.
Material Assets: Built Environment	The proposed development will be a useful amenity for both tourists and residents, and offer an attractive alternative transport choice for school children and commuters, bringing significant environmental, economic and health benefits to the wider community. No significant residual impacts are anticipated with the proposed development.
Material Assets: Transportation	There will be no significant long-term impact on local traffic movements due to the scale of the proposed development, the scheme will have a positive impact on pedestrians. During the construction phase, appropriate traffic management and signage will be in place to ensure safe access and egress from the site, and the safety of other road users.
Waste Management	No significant effects are anticipated. See section 3.4 for more detail.
Cultural Heritage	An archaeological impact assessment of the site at the proposed Drogheda Greenway, North Bank, Drogheda, Co. Louth was carried out by the Archaeological Consultancy Services Unit. There are four monuments located within or in the immediate vicinity of the proposed greenway along Toberboice Lane – Souterrains LH024-012001-012002, Enclosure LH024-12004 and Burial Ground LH024-012003 (Figure 3). There are no Protected Structures listed in the Louth County Development Plan 2021-2027 or structures listed within the National Inventory of Architectural Heritage for County Louth or Meath directly present within the proposed greenway. As the area presently occupied by the existing footpath along the riverbank was previously monitored by Donald Murphy under works associated with the Drogheda Main Drainage project in the late 1990s, it is not expected that any archaeological features or deposits would be present within the proposed greenway along this route. However, the potential does exist that previously unknown archaeological feature or deposits may be exposed or identified, especially in the area adjacent to the known archaeological monuments (LH024-012001-012005) at Toberboice lane, where the potential is particularly high, within the greenfield adjacent to the proposed greenway. Therefore, it is recommended that archaeological monitoring of all ground works within the greenfield areas should be conducted and conditioned within any grant of permission for the site. This should be carried out by a licence eligible archaeologist working under licence from the Department of Housing, Local Government and Heritage in consultation with the National Museum of Ireland. It is also recommended that the ruinous stone structure, which will be partially impacted upon, should be subject to a detailed measured and photographic architectural survey. See Section 4.19 for a full list of protected structures in the vicinity of the site.
Landscape	No significant effects are anticipated. The development will not give rise to any significant landscape or visual impacts. There will be no significant change in terms of site visibility.

5 LOCATION OF THE PROPOSED DEVELOPMENT

5.1 Information Sources

An understanding of the site setting and history was gained by undertaking a review of the following primary sources including:

- A review of available extracts of historical Ordnance Survey of Ireland (OSI) maps;
- National Monuments Service (NMS) viewer;
- A review of information held by the Environmental Protection Agency (EPA) EnVision online Mapping;
- Aerial images available of the site (OSI and Google);
- The Geological Survey of Ireland (GSI) and GeoHive online mapping tools; and
- The National Parks and Wildlife Service online map tool.

5.2 Abundance, Availability, Quality, and Regenerative Capacity of Natural Resources

Limited natural resources will be required to complete the work. It is proposed that material generated during the works is reused on site. The relevant natural resources have been looked at in more detail in the following sections.

5.3 The Absorption Capacity of the Natural Environment

In the description of the site, the absorption capacity of the natural environment has been screened in accordance with Regulations paying particular attention to:

(i) wetlands, riparian areas, river mouths;
(ii) coastal zones and the marine environment;
(iii) mountain and forest areas;
(iv) nature reserves and parks;
(v) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive;
(vi) areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;
(vii) densely populated areas; and
(viii) landscapes and sites of historical, cultural, or archaeological significance.

5.4 Surrounding Land Use

The terrestrial environment is characterized not only by its physical land cover, but also from a human/social perspective by its land use which is distinguished by its designated or identifiable purpose (EPA, 2008).

The immediately surrounding area is comprised of commercial, residential, public amenity, undeveloped greenspace some of which is used for agricultural purposes, and the River Boyne. Refer to Section 1.3 Surrounding Land Use' for a full list of adjacent land uses.

5.5 Site Development

A review of the OSI historical maps dataset has found that the study area has been largely undeveloped since the 1830s except for the area to the east of the Peace Bridge where buildings may have been present from that time until the construction of the bridge and adjoining car park by 1995. The following section outlines the historically mapped features in the immediate environs of the study area.

The 6" inch map (1837-1842) shows the site area as largely or entirely undeveloped although structures are located very close to the site boundaries at the easternmost portions of site and in the areas where the site joins Trinity Street and Lower Mell Street and where it crosses Toberboice Lane. The site is located adjacent to or slightly within gravel pits and a sand pit to the east and west, respectively, of Toberboice Lane. Land to the north of the site was occupied by presumed residential structures, a national school, Lower Mell Street, and undeveloped land and, closer to the town centre, residences and rope and linen factories. To the south of the site were undeveloped land, several residences, Toberboice Well, and the River Boyne. Land to the south of the river was largely undeveloped with scattered residences and estates. To the east of the site was the town centre with salt works, markets, an abbey, and a distillery noted on the north side of the river and a barracks on the south side. To the west of the site was undeveloped land a quarry.

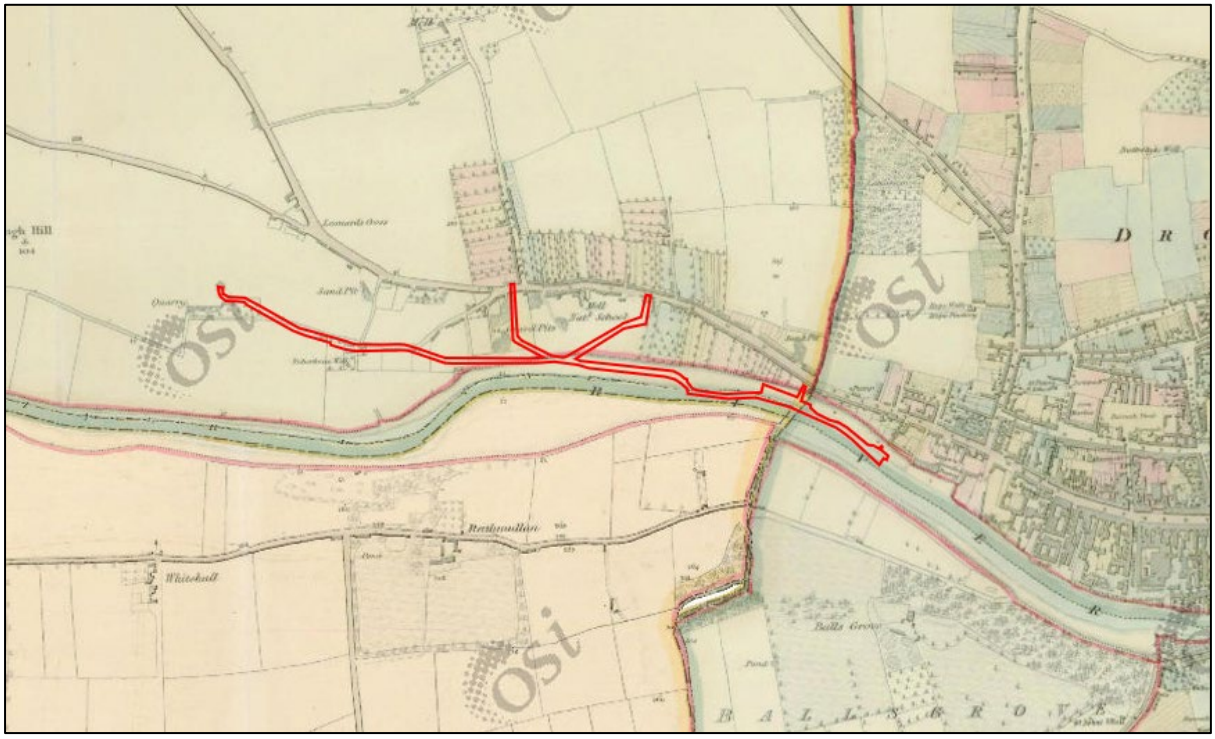

Figure 5.1: 1837-1842 6-inch OS Map; site location shown by red lines (Source: GeoHive, 2022)

The 25-Inch map(1888-1913) shows the easternmost section of the site as developed with several structures along the Town Mall. The access off Lower Mell Street at the east end of the main area of the site was designated as Horse Lane which led to mud and shingle along the River Boyne. The site extended through disused gravel pits to the east of Toberboice Lane and at the western end of the site. Development had occurred to the north along Mell Lane and along and off Lower Mell Street. A weaving mill was noted along the river between the

two sections of the site. Infill construction was noted to the east in the town centre. No significant changes were noted to adjoining lands to the west or south of the site.

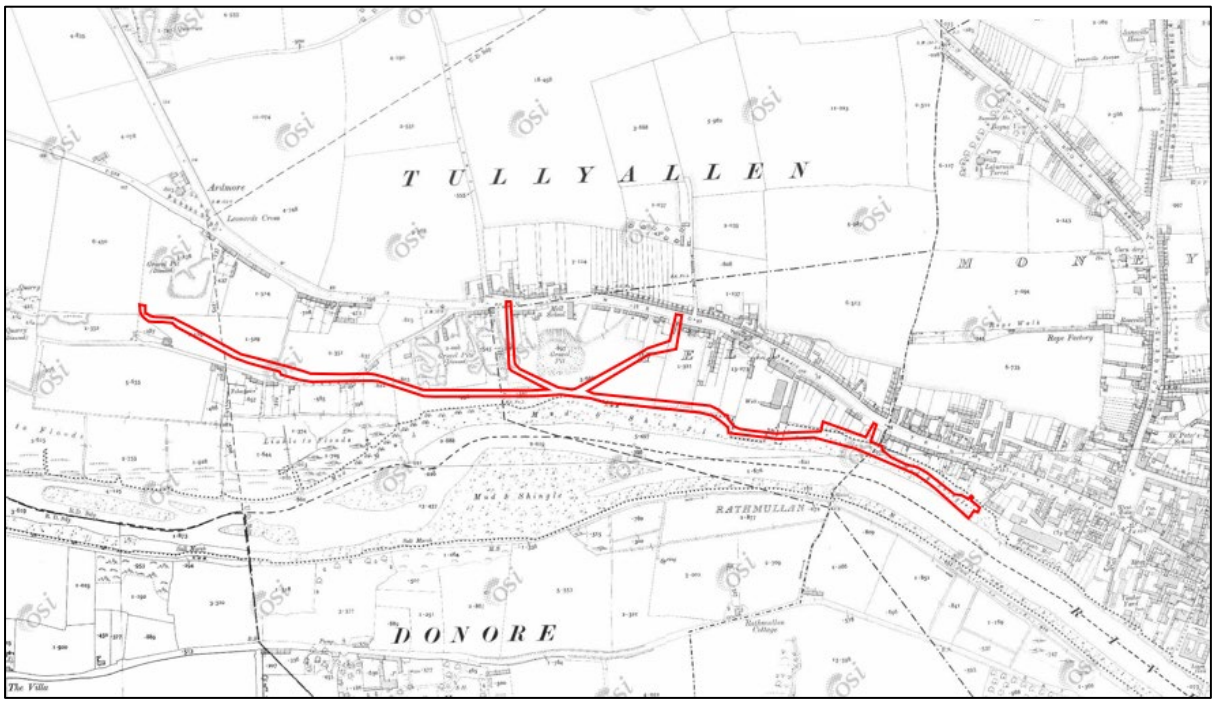

Figure 5.2: 1888-1913 25 inch OSI Map; site location shown by red lines (Source: GeoHive, 2022)

The 6-inch Cassini map (1830s to 1930s) shows further building construction on the easternmost section of the site along the Town Mall. There were no significant changes to the remainder of the site or to adjoining lands to the west or south of the site. The map showed significant residential development on the north side of Lower Mell Street to the north of the site and to the southeast of the site on the opposite side of the River Boyne. The weaving mill near the eastern end of the main site had changed to a shoe works. A clothing works had been constructed on the northern property site boundary in the central portion of the site. No other significant changes were noted to adjoining lands to the west, east, or south of the site.

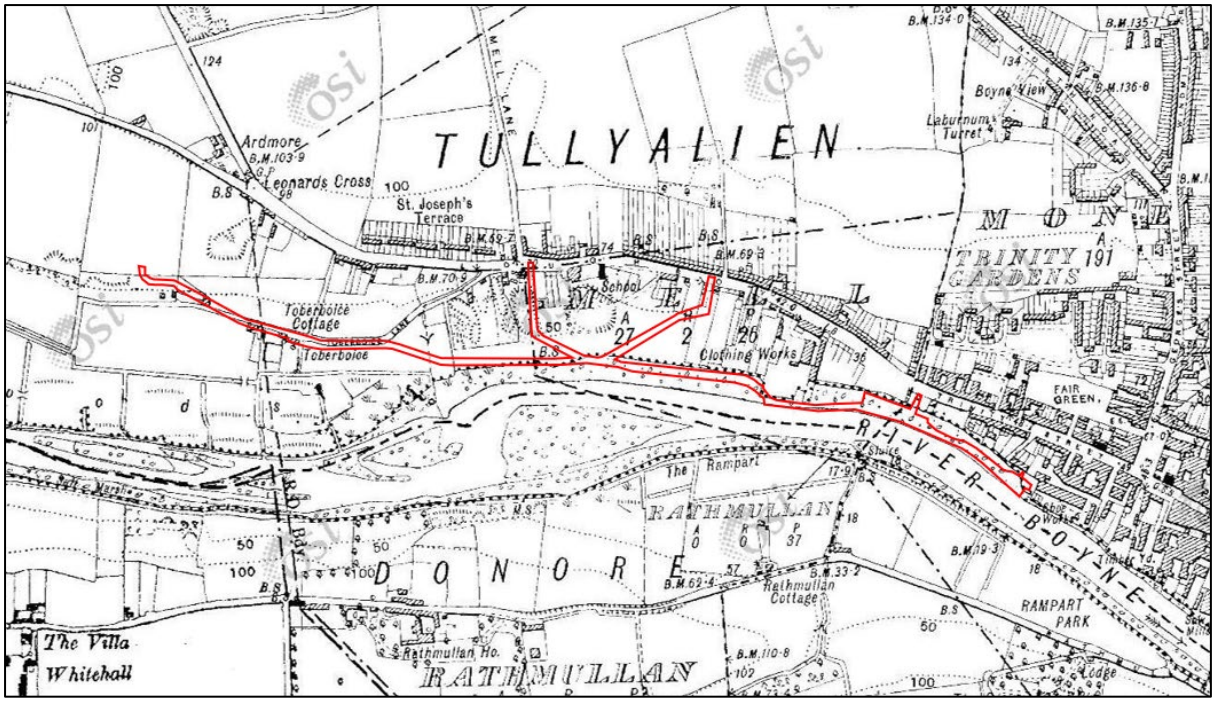

Figure 5.3: 6 Inch Cassini Map; site location shown by the red lines (Source: GeoHive, 2022)

The aerial photograph from 1995 shows the buildings on and adjacent to the eastern end of the site as having been removed and the Peace Bridge constructed across the River Boyne. The site of the former clothing works had been extended to the south, abutting the site area. Extensive residential development had occurred and was underway to the north of the site and to the south on the opposite side of the River Boyne since the Cassini mapping. An apparent industrial building had also been constructed to the south on the opposite side of the river. Extensive quarrying was located to the northwest of the site. Demolition of buildings and infill construction had occurred to the east within Drogheda town centre.

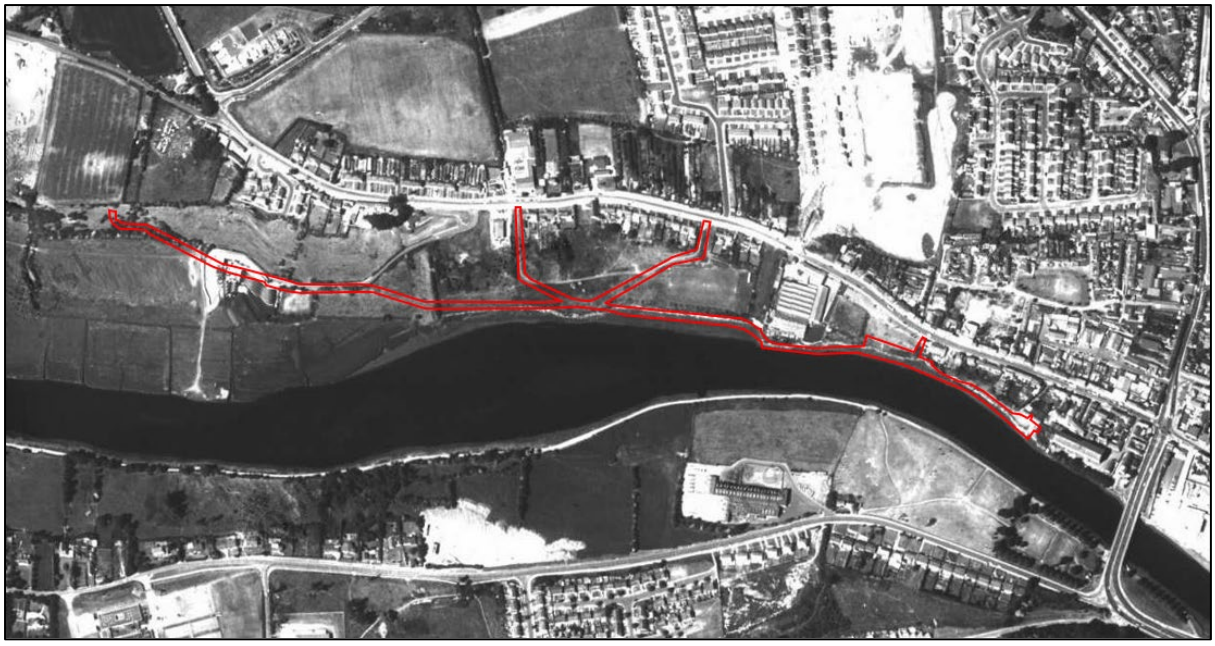

Figure 5.4: Aerial photograph for 1995; site location shown by red lines (Source: GeoHive, 2022)

The 2000 aerial photo shows no significant changes to the site. However, extensive residential construction had occurred to the west and north of the site since the 1995 photo. Commercial/ light industrial units had been constructed to the south of the site on Toberboice Lane. No other significant changes were apparent on the site or immediate vicinity.

Figure 5.5: Aerial photograph for 2000; site location shown by red lines (Source: GeoHive, 2022).

The 2005 aerial photo shows no significant changes to the site or adjacent lands since the 2000 aerial photo was taken. Quarrying to the northwest appeared to have largely ceased by this time.

Figure 5.6: Aerial photograph for 2005; site location shown by red lines (Source: GeoHive, 2022).

The 2010 aerial photo shows no significant changes to the site or adjacent lands since the 2005 aerial photo was taken other than the construction of a commercial unit to the north of the western end of the site.

Figure 5.7: Aerial photograph 2010; site location shown by red lines (Source: GeoHive, 2022)

The 2011-2013 aerial photo shows no significant changes to the site or adjacent lands since the 2010 aerial photo other than limited residential and commercial construction to the north of the western end of the site.

Figure 5.8: The aerial photograph from 2011-2013; site location shown by red lines (Source: GeoHive, 2022)

The aerial photograph from 2013-2018 aerial photo shows no significant changes to the site or adjoining lands since the 2011-2013 aerial photo was taken other than the completion of earlier construction to the north and the construction of an office building to the east of the site.

Figure 5.9: Aerial photograph 2013-2018; site location shown by red lines (Source: GeoHive, 2022)

5.6 Site Physical Setting

Information regarding the site topography, hydrology, geology, hydrogeology, and ecology of the area has been obtained from records held by the GSI, EPA Envision online mapping tool, OSI, GeoHive, Water Framework Directive Maps, and NPWS databases.

5.7 Biodiversity

The Boyne Estuary (IE_EA_010_0100) transitional waterbody is located directly south of the proposed greenway. The River Boyne flows west to east discharging into the Boyne Estuary and the Irish Sea and is a part of the River Boyne and River Blackwater SAC and Boyne Coast and Estuary SAC.

Louth County Council have a legal obligation to carry out an Appropriate Assessment for the proposed scheme. As mitigation measures are required for the proposed walkway works in order to prevent adverse impacts on the Natura 2000 network, an Article 6 Appropriate Assessment is required under the Habitats Directive (92/43/EEC). OCSC were commissioned to complete a Natura Impact Statement (NIS) for the proposed works in September 2022.

A Natura Impact Statement was prepared by OCSC (2022). The NIS assesses the likely significant effects on the Natura Sites (River Boyne and River Blackwater SAC, River Boyne and River Blackwater SPA, and the Boyne Estuary SPA) arising from the proposed works. The existing walkway is expected to be widened, repaired, and extended along with the development of a new pathway. In addition, ancillary structures such as benches, lighting, gates, bins, and bicycle racks are to be installed. Due to the nature of the works, there is a

risk of water quality impacts as a result of debris, sediment, dust, and contaminated run-off entering the watercourse.

The NIS (OCSC, 2022) is available as a standalone document. The mitigation measures proposed within the NIS are considered to be sufficient to ensure that potential impacts, mainly relating to water quality, are minimised. The conclusion of the NIS is that, with mitigation in place, no significant negative impacts on the conservation status of the Natura 2000 network and its associated habitats and species are anticipated as a result of this development.

There are three SPAs within 15km of the proposed scheme as shown on Figure 5.10: the River Boyne and River Blackwater SPA (c. 1.2 km west, at its nearest point), the Boyne Estuary SPA (c. 2.75 km east, at its nearest point), and the River Nanny Estuary and Shore SPA (c. 7.7 km southeast, at its nearest point). There is no direct connectivity between the area of the proposed works and River Nanny Estuary and Shore SPA. However, given the tidal nature of the River Boyne in the area of the site which results in flow both up and downriver, there is a direct hydrological connection between the area of the proposed works and both the River Boyne and River Blackwater and the Boyne Estuary SPAs.

There are three SACs within the 15km of the proposed scheme as shown on Figure 5.10: the existing walkway is located within the River Boyne and River Blackwater Special Area of Conservation (SAC) for around 550m but 2m from the River Boyne itself in its closest point. The Boyne Coast and Estuary SAC (c. 3.7 km east, at its nearest point), and the Clogher Head SAC (c. 12 km northeast) are also within the 15km. The Clogher Head SAC has no direct connectivity to the area of the proposed works. However, the River Boyne and River Blackwater and the Boyne Coast and Estuary SACs both are directly and indirectly connected to the studied area.

There are no Natural Heritage Areas (NHAs) and 18 proposed Natural Heritage Areas (pNHAs) within 15km of the site as shown in Figure 5.10. The nearest is Boyne River Islands pNHA (Site Code 001862), located circa 0.6km west of the study area, at its nearest point. However, there is no hydrological or physical connectivity, in the form of hedgerows, treelines, or woodlands, from the area of the proposed works to this pNHA. Given the tidal nature of the River Boyne in the area of the site which results in flow both up and downriver, there is a indirect hydrological connection between the area of the proposed works and both the Boyne River Islands and the Boyne Estuary pNHA which is located approximately 3.5km east of the site, at its nearest point.

There is a potential for erosion of bare ground and/or sediment movement resulting from surface run-off during the construction phase. However, given the relatively small-scale and short-term nature of the works, temporary but not significant effects are possible within the River Boyne and River Blackwater SAC in areas proximal to site works. The impact to other European Sites or designated sites as a result of erosion and/or sedimentation is predicted to be temporary and imperceptible. The appointed contractor will be required to prepare a site-specific CEMP clearly detailing all necessary environmental control measures to prevent erosion and sediment movement.

Given the nature of the development, its scale, and its location, it is concluded that the project is foreseen to give rise to low adverse effects on the biodiversity local to the site and that no

significant negative impacts on the conservation status of the Natura 2000 network and its associated habitats and species are anticipated as a result of this development.

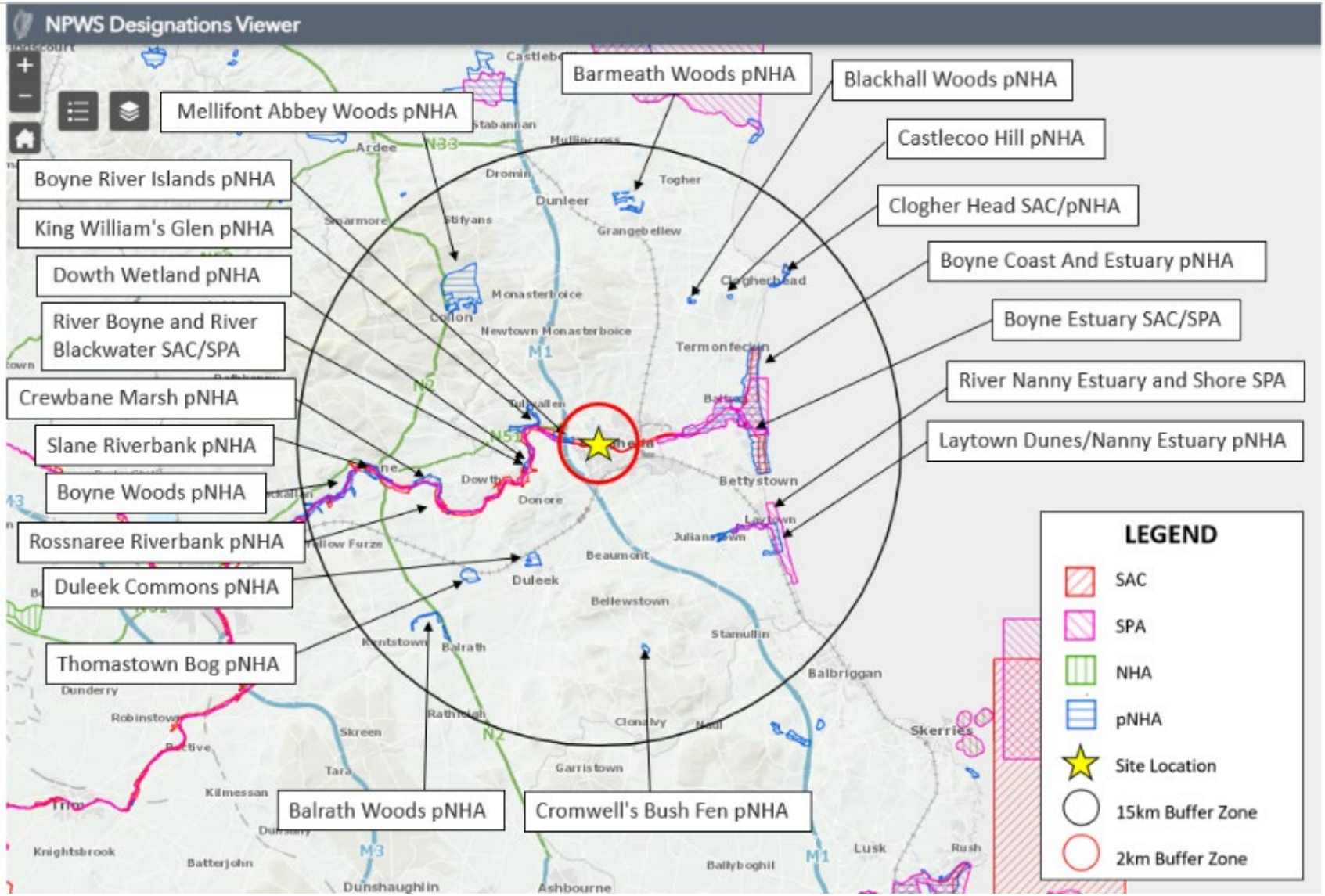

Figure 5.10: Designated Sites within a 15km radius. The site location is shown as a yellow star (Source: NPWS Maps, 2022)

5.8 Topography

The topography of the site is gently sloping downwards from north to south towards the River Boyne. There is an elevated area at the western portion of the site.

5.9 Unconsolidated Geology

The site is comprised of five different soil types: Made ground (as seen by a bright blue colour), AminPD - poorly drained, mainly acidic mineral soil (as seen by a coral colour), BminSW - shallow, well drained mainly basic mineral soil (as seen by a purple colour, AminSW - shallow, well drained mainly acidic mineral soil (as seen by a pale pink colour), and AlluvMIN - alluvial mineral soil (as seen by an orange colour).

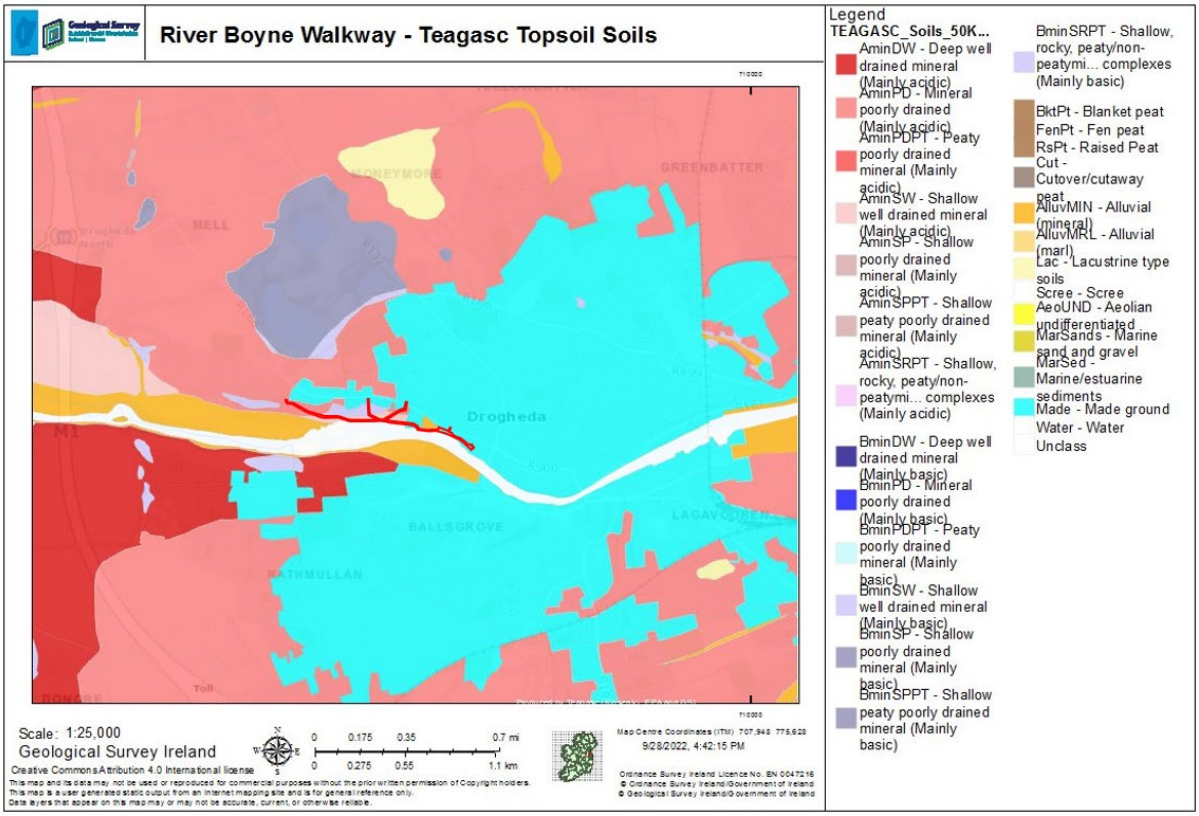

Figure 5.11: Teagasc Topsoil Soil Classification; approximate site location indicated by the red lines (Source: GSI, 2022).

5.10 Geology

The site is underlain by Tullyallen Formation as shown in blue. The formation consists of pale grey, thickly-bedded, highly micritised grainstones, packstones, and wackestones with a thickness of 500m or more (GSI, 2022).

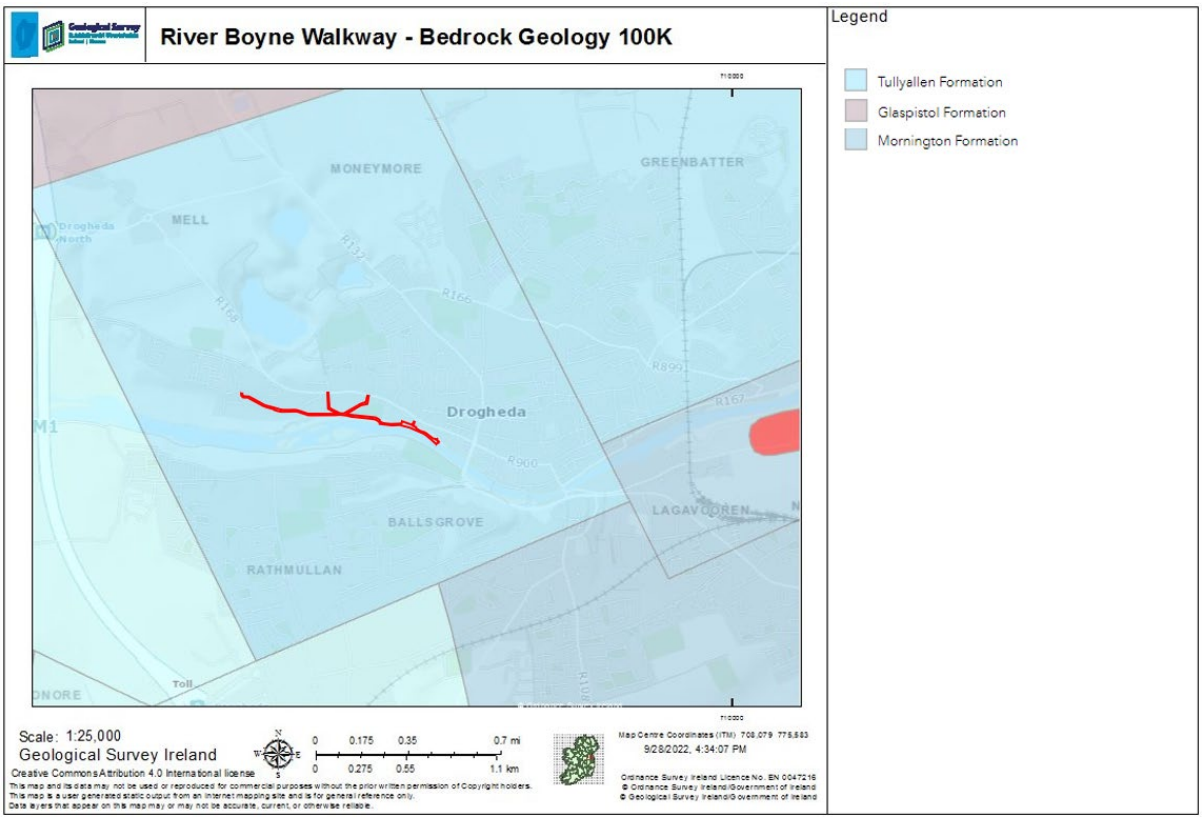

Figure 5.12: Bedrock Geology 100K; approximate site location indicated by the red lines (Source: GSI, 2022).

5.11 Areas of Geological Interest

The GSI online mapping service was consulted regarding areas of geological interest in the vicinity of the site. The nearest area of geological interest is Mell Quarry (LH023) which is located 0.28 km north of the site, at its nearest point, and is a designated County Geological Site (CGS). This is a complex of disused quarries adjacent to and northwest of the town of Drogheda and has the best exposure of limestone of the Tullyallen Formation in the district. The next nearest area of geological interest is the Boyne Valley (MH011) which is located 0.85km west of the site, at its nearest point, is a designated as a CGS, and may be recommended as a Geological NHA. This river is a glacial U-shaped valley with characteristic depositional and erosional features associated with ice flow and glacial meltwater. See Figure 5.13 for local geological heritage sites.

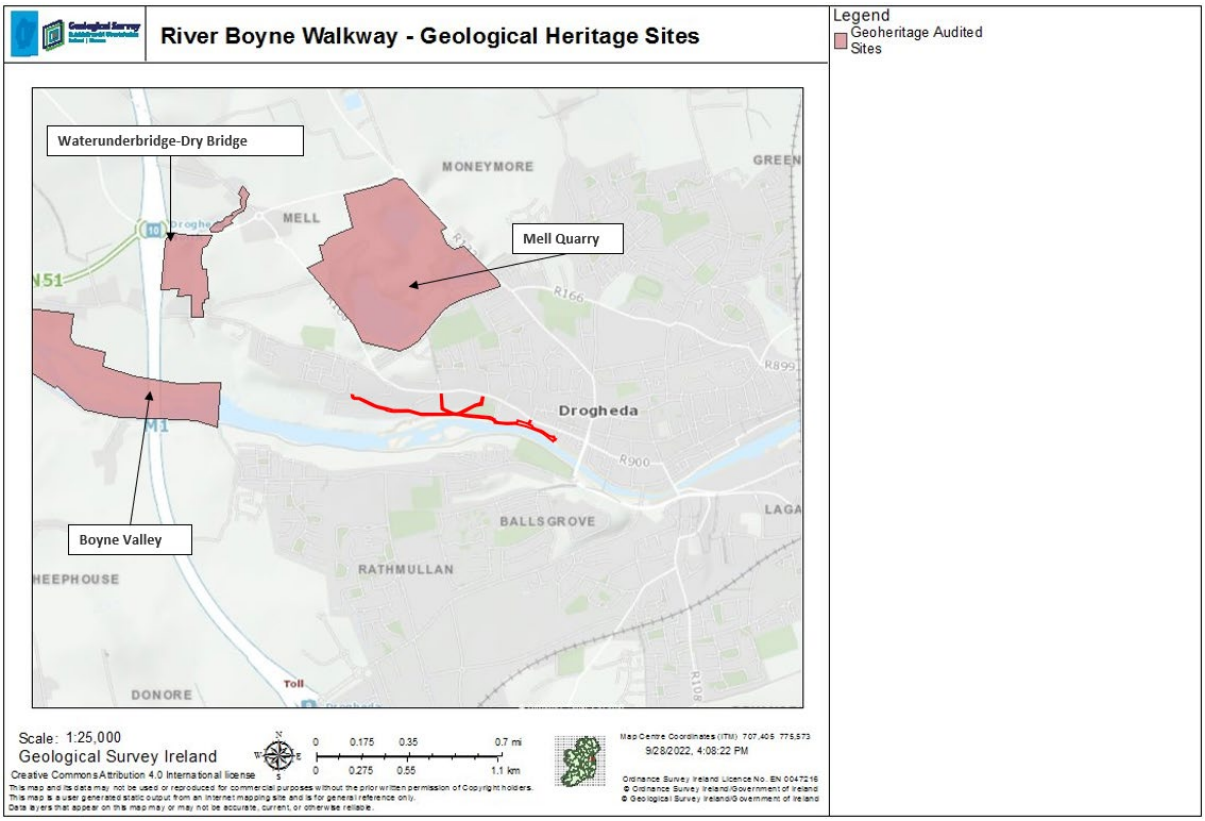

Figure 5.13: Geological Heritage Sites; approximate site location indicated by the red lines (Source: GSI, 2022).

5.12 Aquifers

The GSI provides a methodology for aquifer classification based on resource value (Regionally Important, Locally Important, and Poor) and vulnerability (Extreme, High, Moderate, or Low). Resource value refers to the scale and production potential of the aquifer whilst vulnerability refers to the ease with which groundwater may be contaminated by human activities (vulnerability classification primarily based on the permeability and thickness of subsoils). The site is underlain by a Rkd - Regionally Important Aquifer - Karstified (diffuse).

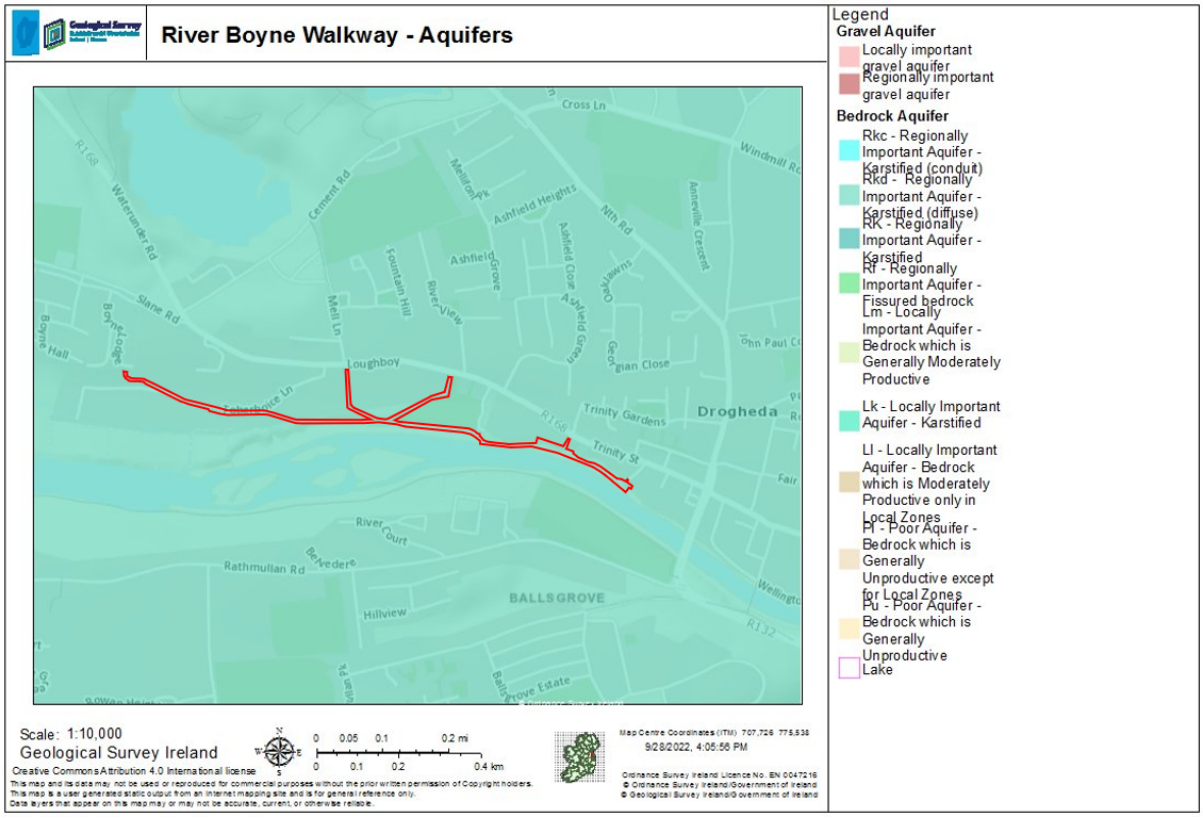

Figure: 5.14 Aquifers: approximate site location indicated by the red lines (Source: GSI, 2022).

5.13 Groundwater Vulnerability

The GSI resources describes the site as having four different groundwater vulnerabilities: Extreme, High, Rock at or near Surface or Karst, and Moderate as seen by the pink, orange, red and yellow colours, respectively in Figure 5.15. Vulnerability ratings are related to a function of overburden thickness and permeability which might offer a degree of protection and/or attenuation to the underlying aquifer from surface activities and pollution.

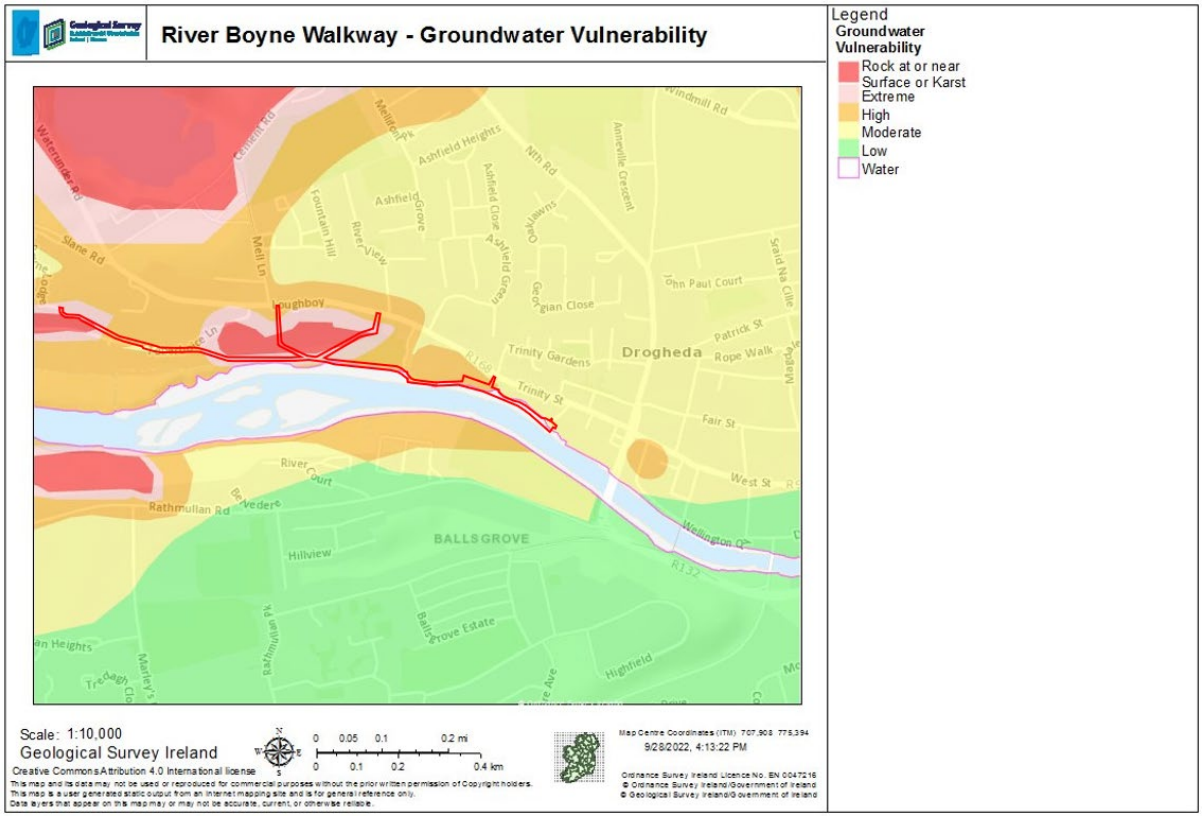

Figure 4.15: Groundwater Vulnerability; approximate site location indicated by the red lines (Source: GSI, 2022).

5.14 Groundwater Recharge

Diffuse recharge generally occurs via rainfall percolating through the subsoil with its rate being higher in areas where the subsoil is thinner and/or more permeable. The proportion of effective rainfall that recharges the aquifer is largely determined by the thickness and permeability of the soil and subsoil and by the slope. The groundwater recharge zones associated with the site are shown in Figure 5.16. GSI groundwater recharge model parameters for these zones are summarised in Table 5.1.

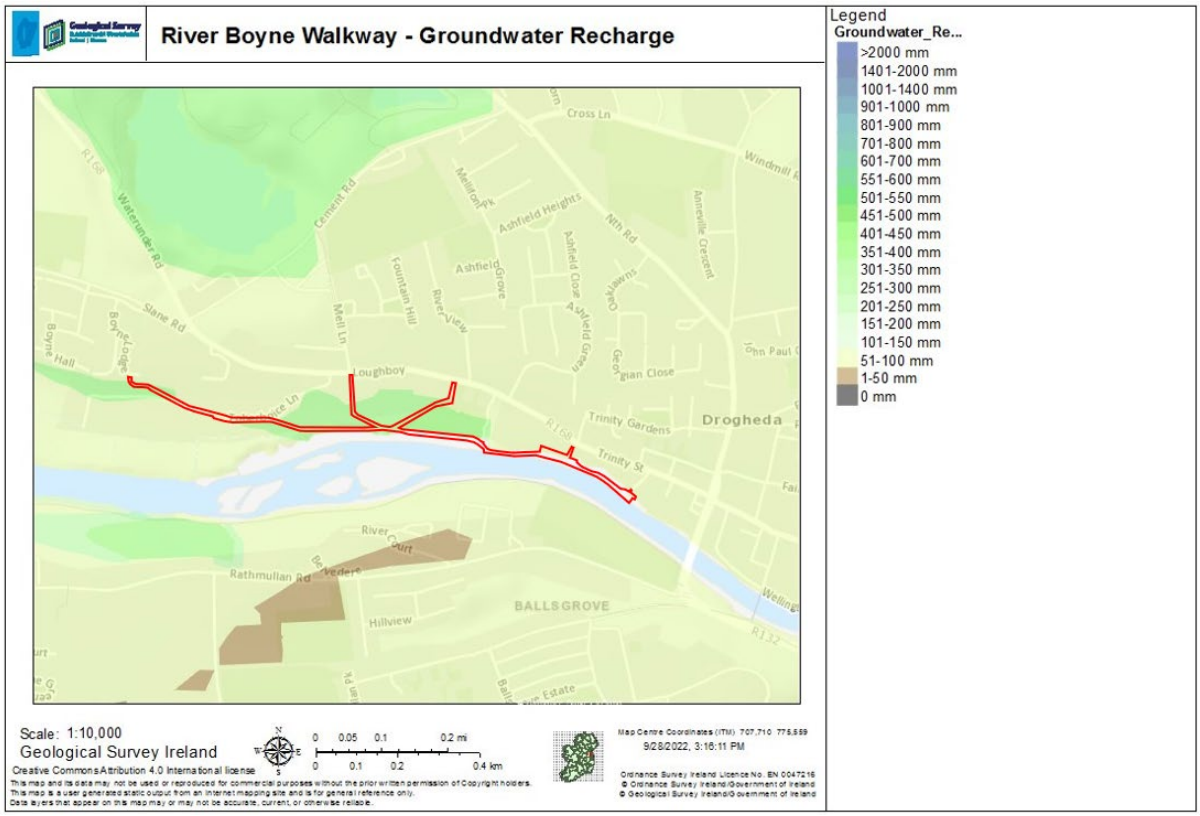

Figure 5.16: Groundwater Recharge; approximate site location indicated by red lines (Source: GSI, 2022).

Table 5.1: GSI Groundwater Recharge Parameters

Groundwater Recharge Parameters										
Site Location:	Adjacent to Boyle Lodge	South of Loughboy	South of Lynch Motors	East of 11 R168	The northern portion of Mell Football Pitch	The southern portion of Mell Football Pitch and Willow Grove	East of Willow Grove	South of Trinity St Car Park	Horse Lane	Father Connolly Way Car Park
Average Recharge (mm/yr.):	80	89	325	76	312	312	73	76	73	73
Hydrogeological Setting:	1.v	2.vii	1.ii	1.v	1.i	2.ii	2.m	2.vi	3.m	2.m
Hydrogeological Setting Description:	E Vul: Till overlain by poorly drained (gley) soil	H Vul: Low permeability subsoil	E Vul: Sand & gravel overlain by well-drained soil	E Vul: Till overlain by poorly drained (gley) soil	E Vul: Areas where rock is at ground surface or karst feature	H Vul: High permeability subsoil (sand & gravel) overlain by well-drained soil	H Vul: Made ground	H Vul: Moderate permeability subsoil overlain by poorly drained (gley) soil	M Vul: Made ground	M Vul: Made ground
Recharge Coefficient (%):	22.50	25.00	85.00	22.50	85.00	85.00	20.00	22.50	20.00	20.00
Effective Rainfall (mm/yr):	354.800	354.800	381.900	338.900	366.500	366.500	367.300	338.900	367.300	367.300
Recharge (mm/'yr):	80	89	325	76	312	312	74	76	74	74
Subsoil Permeability Description:	N/A	Low	N/A	N/A	N/A	High	Moderate	Moderate	Low	Low
GW Vulnerability:	Extreme	High	Extreme	Extreme	Rock at or near Surface of Karst	High	High	High	Moderate	High
Aquifer Category:	Rkd	Rkd	Rkd	Rkd	Rkd	Rkd	Rkd	Rkd	Rkd	Rkd
Aquifer Category Description:	Regionally Important Aquifer -	Regionally Important Aquifer -	Regionally Important Aquifer -	Regionally Important Aquifer -	Regionally Important Aquifer -	Regionally Important Aquifer -	Regionally Important Aquifer -	Regionally Important Aquifer -	Regionally Important Aquifer -	Regionally Important Aquifer -

	Karstified (diffuse)	Karstified (diffuse)	Karstified (diffuse)	Karstified (diffuse)	Karstified (diffuse)	Karstified (diffuse)	Karstified (diffuse)	Karstified (diffuse)	Karstified (diffuse)	Karstified (diffuse)
Rock Unit Group	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones	Dinantian Pure Bedded Limestones

5.15 Wells & Springs

A search of the GSI groundwater well database was conducted to identify registered wells within the site footprint and/or the surrounding area.

There are no wells or springs located within the site boundary. There are, however, eighteen within a 1.5km radius of the site. The nearest spring (2927SEW08) is located 100m south of the site, this was dug to an unknown depth on December 29th, 1899, for an unknown use. The second nearest borehole (2927SEW066) is located 410m west of the site and was drilled to a depth of 61m on November 12th, 1996, for an industrial use.

The GSI database also provides a framework for the protection of groundwater source zones (e.g., areas of contribution to water supply bores). The Ballymakenny Group Water Scheme (GWS), Drybridge PWS, and Kiltrough PWS are located 0.7km north, 0.78km northeast, and 1.08km south of the proposed development, respectively.

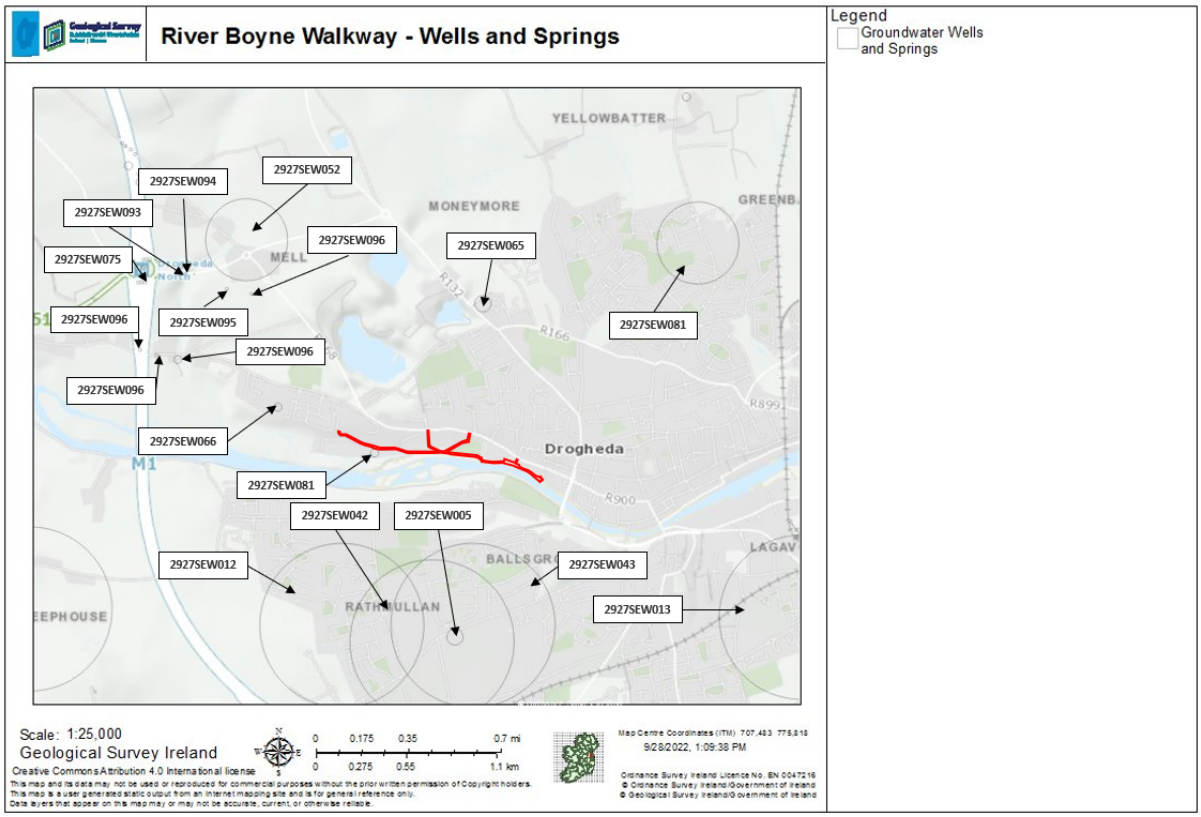

Figure 5.17: Wells and Springs; approximate site location indicated by the red lines (Source: GSI, 2022)

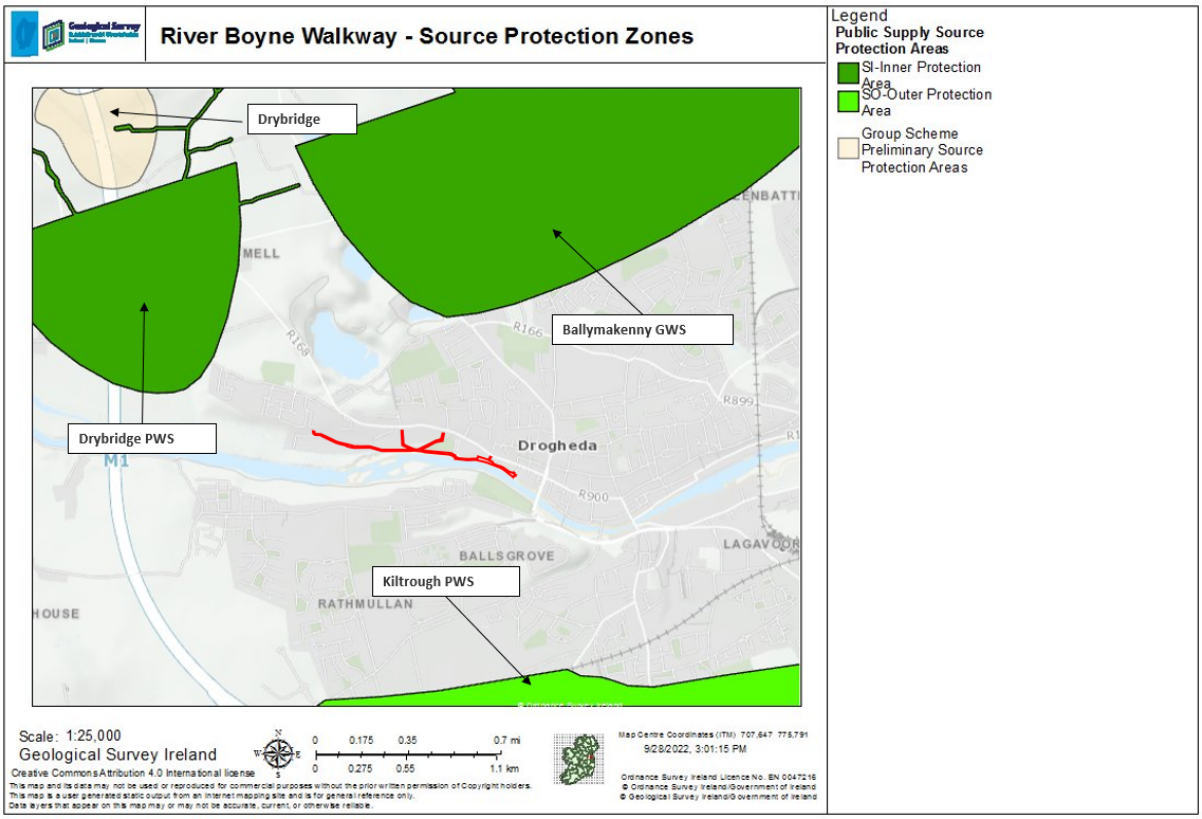

Figure 5.18: Source Protection Zones; approximate site location indicated by the red lines (Source: GSI, 2022).

5.16 Hydrology

There are no surface water features within the site boundary. The nearest surface water feature is a transitional waterbody, the Boyne Estuary (IE_EA_010_0100), located approximately 2 metres south of the study area at the closest point. The Boyne Estuary generally flows west to east, eventually entering the Irish Sea but is tidal within the area of the site thereby having both upriver and downriver components of flow.

The EPA designated the Boyne Estuary as having an overall Water Framework Directive (WFD) Status of 'Moderate' based on the most recent water quality information from 2013-2018.

The EPA spatial dataset shows that the WFD Risk associated with the Boyne Estuary is 'At Risk' of not meeting its 2027 WFD objectives (EPA 2022). WFD summary information for this river is summarised in Table 5.2.

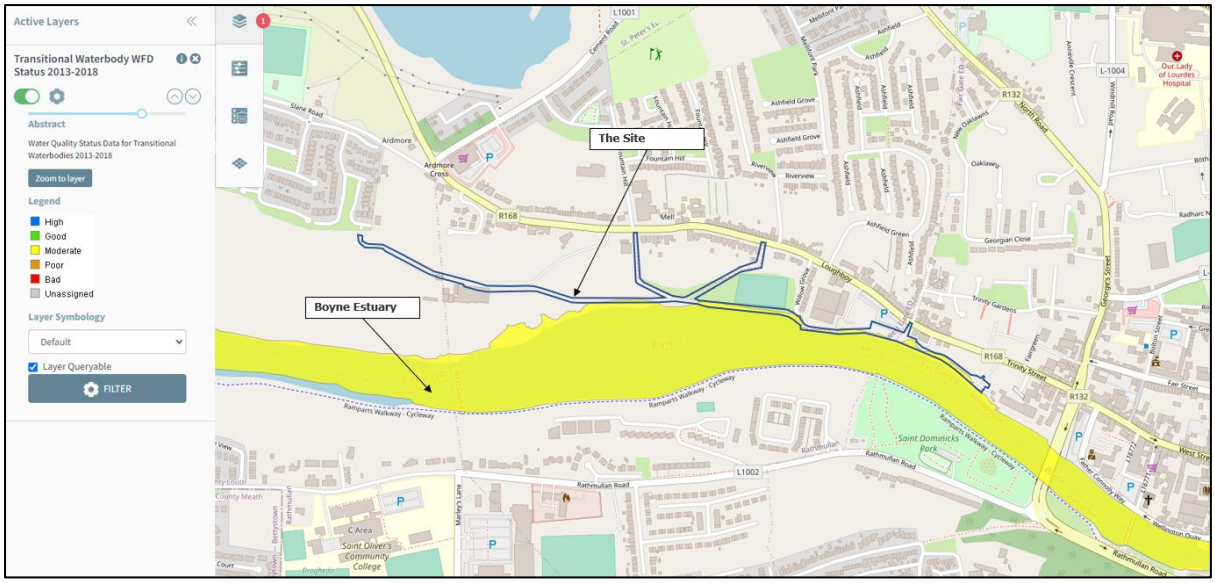

Figure 5.19: Tranistional Waterbody WFD Status (approximate site location indicated by the red lines) (Source: EPA Maps, 2022).

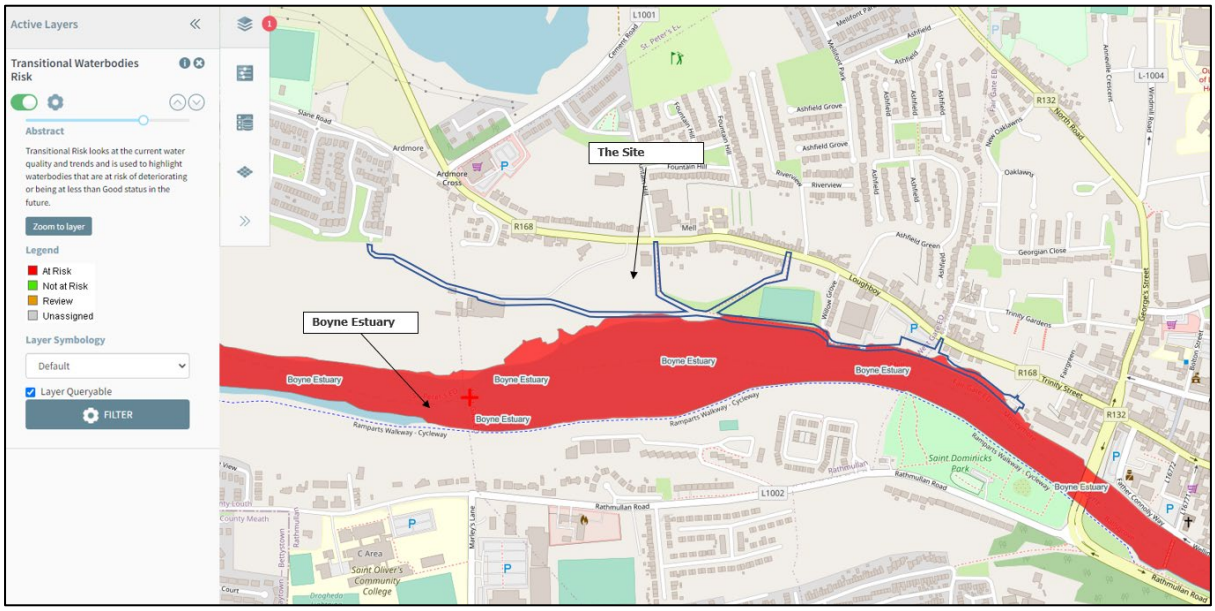

Figure 5.20: Transitional Waterbodies Risk (approximate site location indicated by the blue lines) (Source: EPA Maps, 2022).

Table 5.2:WFD Summary Information - The Boyne Estuary

Waterbody Code	IE_SE_16S022600
Waterbody Name	Boyne Estuary
Waterbody Type	Transitional
Iteration	SW 2013-2018
Status	Moderate
Risk	At-Risk

5.17 Radon

According to the EPA the site has been classified as having to varying levels of radon risk. The central portion and parts of the western portion of the site have been classified as an area where about 1 in 5 homes are likely to have high radon levels while the eastern portion and part of the central portion of the site has been classified as an area where about 1 in 10 homes are likely to have high radon levels.

Figure 5.9: Radon Risk; approximate site location indicated by the blue lines (Source: EPA Maps, 2022).

5.18 Protected Structures

The National Monuments Service (NMS) maps show that there are thirty-seven protected structures within a close proximity to the site; twenty-eight National Inventory of Architectural Heritage locations within a 100m the site, and nine Sites and Monuments Records within a 100m radius to the proposed works (OSI, 2022)

A standalone Archaeological Impact Assessment has been completed by Archaeology Consultancy Services Unit for the project and is available under separate cover.

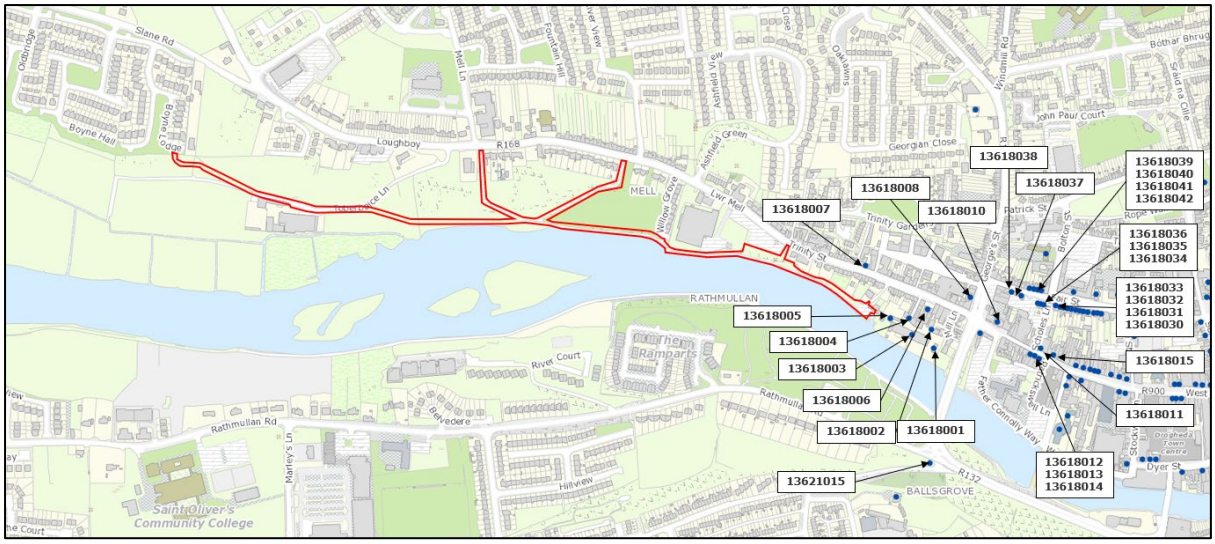

Figure 5.22: National Inventory of Architectural Heritage structures in the vicinity of the proposed site; approximate site boundary indicated by the red lines (Source: NMS, 2022).

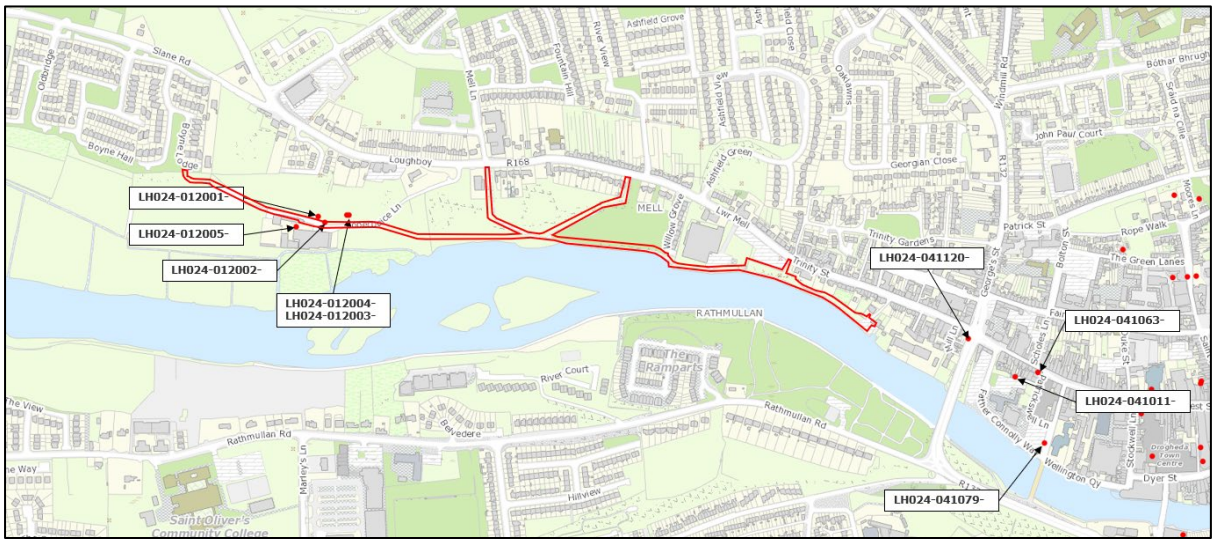

Figure 5.10: Sites and Monuments Records in the vicinity of the proposed site; approximate site boundary indicated by the blue lines (Source: NMS, 2022).

Table 5.3 National Inventory Of Architectural Heritage Summary Of Sites Within The Boundary Summary

NIAH Ref.	Name	Location	Description	Distance from site
13621015	Gates/railings/walls	Balls Grove , Rathmullan Road, Moneymore, Drogheda, Louth	"Triumphal Arch" gateway, dated 1801, on a symmetrical plan with pair of square-headed gateways centred on round-headed carriageway. Relandscaped, 2002.	0.1km S
13618001	Store/warehouse (Factory)	Westgate Mill, Mill Lane, Moneymore, Drogheda, Louth	Detached four-bay two-storey rendered former store building, built c. 1870, now in commercial use.	0.1km E
13618002	Chimney	Westgate Mill, Mill Lane, Moneymore, Drogheda, Louth	Attached octagonal brick chimneystack built c. 1820, no longer in use.	0.1km W
13618006	Store/warehouse	Peppercorn Mill, Trinity Street, Moneymore, Drogheda, Louth	Detached five-bay three-storey stone former grain store, built c. 1820, no longer in use	0.1km W
13618003	Water Mill (Factory)	Westgate Mill, Mill Lane, Moneymore, Drogheda, Louth	Detached multiple-bay four-storey former mill, built c. 1820, later used as factory and now used as offices and gymnasium.	0.1km W
13618004	Store/warehouse	Westgate Mill, Mill Lane, Moneymore, Drogheda, Louth	Attached five-bay single-storey store house, built c. 1820, no longer in use.	0.1km W
13618005	Store/warehouse	Westgate Mill, Mill Lane, Moneymore, Drogheda, Louth	Attached five-bay single-storey store house, built c. 1820, no longer in use.	<0.1km E
13618007	House	Mccloskey's, Trinity Street, MONEYMORE, Drogheda, LOUTH	Attached three-bay three-storey house, built c. 1850, now also in use as shop	<0.1km N
13618008	House	Drogheda Infirmary, George's Square, Moneymore, Drogheda, Louth	Attached four-bay three-storey former house, built c. 1840, now in commercial use.	0.1km N
13618010	House (Garda station/constabulary barracks)	Barlow House, West Street, Moneymore, Drogheda, Louth	Detached five-bay three-storey double-pile over basement townhouse, built 1734, on a rectangular plan; five-bay three-storey rear (north) elevation. Adapted to alternative use, 1861.	0.1km N
13618038	Store/warehouse	Fair Street, Moneymore, Drogheda, Louth	Attached seven-bay four-storey warehouse, built c. 1840.	0.1km NE
13618037	House	Fair Street, Moneymore, Drogheda, Louth	Attached L-plan four-bay three-storey house with integral carriage arch, built c. 1770.	0.1km NE
13618039	House	Fair Street, Moneymore, Drogheda, Louth	End-of-terrace two-bay three-storey over basement former house, built c. 1760, as a group of four with the adjoining houses to the east	0.1km NE
13618040	House	Fair Street, Moneymore, Drogheda, Louth	Terraced two-bay three-storey over basement house, built c. 1760, as a group of four with the adjoining houses to the east and west.	0.1km NE
13618041	House	Fair Street, Moneymore, Drogheda, Louth	Terraced two-bay three-storey over basement former house, built c. 1760, as a group of four with the adjoining houses to the east and west.	0.1km NE
13618042	House	Fair Street, Moneymore, Drogheda, Louth	End-of-terrace two-bay three-storey house over basement, built c. 1760, as a group of four with the adjoining houses to the west.	0.1km NE
13618036	House	Fair Street, Moneymore, Drogheda, Louth	End-of-terrace two-bay three-storey over basement former house, built c. 1820, as a group of three with the adjoining houses to the east.	0.1km NE

13618035	House	Fair Street, Moneymore, Drogheda, Louth	Terrace two-bay three-storey over basement former house, built c. 1820, as a group of three with the adjoining houses to the east and west.	0.1km NE
13618034	House	Fair Street, Scholes Lane, Moneymore, Drogheda, Louth	End-of-terrace two-bay three-storey over basement former house, built c. 1820, as a group of three with the adjoining houses to the west.	0.1km NE
13618033	House	Fair Street, Moneymore, Drogheda, Louth	Attached two-bay three-storey over basement former house, built c. 1780, as a pair with the adjoining house to the east.	0.1km NE
13618032	House	Fair Street, Moneymore, Drogheda, Louth	Attached two-bay three-storey over basement former house, built c. 1780, as a pair with the adjoining house to the west.	0.1km NE
13618031	House	Fair Street, Moneymore, Drogheda, Louth	Terraced two-bay three-storey over basement house, built c. 1800, as a terrace of four with the adjoining buildings to the east.	0.1km NE
13618030	House	Fair Street, Moneymore, Drogheda, Louth	Terraced two-bay three-storey over basement former house, built c. 1800, as a terrace of four with the adjoining buildings to the east and west.	0.1km NE
13618015	House	West Street, Moneymore, Drogheda, Louth	Attached four-bay three-storey house, built c. 1860, now in use as public house and restaurant.	0.1km E
13618011	House	West Street, Scholes Lane, Moneymore, Drogheda, Louth	Corner-sited attached double-pile five-bay three-storey former town house, built c. 1760, refronted c.1880 and pair of shopfronts inserted to ground floor, now in commercial use.	0.1km E
13618012	House	West Street, Moneymore, Drogheda, Louth	Attached three-bay two-storey house, built c. 1780, as a pair with the adjoining house to east.	0.1km E
13618013	House	West Street, Moneymore, Drogheda, Louth	Attached three-bay two-storey house, built c. 1780, as a pair with the adjoining house to west.	0.1km E
13618014	House	West Street, Patrickswell Lane, Moneymore, Drogheda, Louth	Corner-sited attached five-bay three-storey house, built c. 1675, renovated c. 1830, now in commercial and residential use.	0.1km E

Table 5.4 Sites and Monuments Records Summary

NIAH Ref.	Name	Location – Townland	Description	Distance from site
LH024-012001-	Souterrain	Mell	The site consisted of two sections of souterrain and a cemetery site (LH024-012003-) within an enclosure (LH024-012004-) discovered during pipe-laying. The two sections of souterrain were situated 8-10m apart. The E section of the souterrain consisted of a drystone-built passage (L 2m). The W section consisted of part of a delintelled circular chamber.	0.1km S
LH024-012005-	Ritual site - holy well	Mell	Marked on the 1835 'OS 6-inch' map as 'Toberboice Well'. There is a tradition that St. Boice drank from this spring before he was beheaded (IFC Schools' Mss 679, 179). It was covered in concrete when inspected by ASI in 1967.	0.1km S
LH024-012002-	Souterrain	Mell	See LH024-012001-.	0.1km S
LH024-012004-	Enclosure	Mell	Located on side of slope on N side of River Boyne. Trial trenching in 1985 in advance of building revealed an enclosure (max. diam. c. 60m E-W) defined by a ditch (Wth 2.5m, D 1.4m). This enclosure is associated with the souterrain(s) (LH024-012001- and LH024-012002-) and cemetery (LH024-012003-) discovered in 1983.	0.1km S
LH024-012003-	Burial ground	Mell	Associated with the remains of souterrain (s) (LH024-012001- and LH024-012002-), discovered in 1983 during the course of cutting a trench for sewerage. The site was recorded by Mr C. Manning (OPW) who supervised the digging of trial trenches in 1985 and discovered a small enclosure (LH024-012004-). It was c. 50m in diameter and was defined by a ditch (Wth 2.5m, D 1.8m). The burials were very scattered but were seen to be orientated E-W and were not slab-lined. The souterrain and the burials were enclosed by the ditch.	0.1km S
LH024-041120-	Religious house - Fratres Cruciferi	Moneymore	The Abbey and Hospital of St Mary d'Urso, founded by Ursus de Swemele c. 1206-14 for Crutched friars to aid the sick of the town, is outside the medieval West gate of Drogheda (CLAJ 1959, 154-9). In 1377 three of the friars and a chaplain were tried for assault and acquitted (Gwynn and Hadcock 1970, 211). At the Supression in 1540 it was described as a dovecote with two orchards amounting to one and a half acres, but it owned a considerable amount of property within Drogheda and land at Glasspistol (60 acres) and Carlingford (30 acres) and other places throughout the county (White 1943, 242-4). In 1557 the priory was granted to Drogheda Corporation. The site of the hospital was thought to be the ruins (LH024-041011-) off Patrickswell Lane but recent research (McHugh 2019) demonstrates conclusively that the ruins are those of the church of the Augustinian friars. St Mary d'Urso is always described as being outside the walls, and the ruins are depicted on the Newcomen map of 1657 just outside the West Gate.	<0.1km W

LH024-041063-	House - medieval	Moneymore	Situated on the S side of Narrow West Street, at the crest of the S-facing slope down to the River Boyne. The house at 43/44 West Street, has a projecting chimney breast on the E gable, but a commemorative plaque of Nicholas Elcock with the date 1583 on the E wall was thought to have been moved from another house (Tempest 1943). Internal works during 2017 removed internal walls at the ground floor level, and revealed the internal stairs to be a 19th century feature. The roof is also of this date, probably resulting from a refurbishment of c. 1830. The masonry of the basement and ground floor appear to be late medieval in date. The E wall at the first floor and much of the second is also original, and the Elcock plaque might be in its original position. The N wall at the basement level has a base-batter, suggesting it was probably the original ground floor of a three storey building, the roof-line of which is evident inside the E gable. About 1650 new structural timbers were introduced, and a decorative fireplace added to the E gable at the first floor. Later in the seventeenth century, c. 1675, the front (N) and S walls above the basement were rebuilt.	0.1km E
LH024-041011-	Religious house - Augustinian friars	Moneymore	A house of Augustinian friars was established at Drogheda in the reign of Edward I (1272-1307) according to Ware (1705, 90), and it was sometimes known as Pontanense because of its associated with the bridge (Archdall 1722, 314). An Irish chapter of the order was held there in 1359, and it was decided to introduce the Observant rule in 1517 (Gwynn and Hadcock 1970, 298). At the suppression in 1540 it was described as the church and certain superfluous buildings, an orchard and a garden amounting to one and a half acres (White 1943, 246-7). The ruins survive, although they have been mistakenly called the hospital of Mary d'Urso beginning with D'Alton (1844, vol. 1, 111-16), but this is now firmly identified as the house of the Augustinian friars (McHugh 2019). The standing remains consist of part of the nave, chancel, the W gable of the N aisle, and the central bell-tower. It is built of roughly coursed limestone blocks, greywacke and rubble. There is virtually nothing left of the nave except for portions of the S wall which have been disturbed and in places rebuilt with brick. To the N of where the W end of the nave should be there are the remains of a gable wall containing a window, now filled in, which is presumably the W end of a destroyed N aisle. It is a two-centred arch of moulded sandstone and its W façade has the remains of carved heads at the base of the arch, that at the N side being almost completely eroded. The N jamb is missing while that at the S side is of moulded sandstone. The E façade has a simple two-centred moulded arch of sandstone. Part of a later wall abuts the S side of the nave at right	<0.1km E

			angles. It contains a now blocked opening with segmental arch of hammer-dressed blocks of limestone which must be of late medieval date. The vaulting of the cross-tower is stepped upwards in three stages and there are two floor levels above the arch. The upper one has a twin-light transomed window at each side, while the lower stage has a small plain rectangular opening immediately below the apex of the original roof lines of the nave and chancel, but this is hardly big enough to give access to the lofts of these structures. The windows of the upper level have cusped ogee-headed arches of limestone. There is a plain rectangular-shaped doorway in the SE angle of the tower just below the line of the roof of the chancel which must have given access to a gallery. The arches of the tower are two-centred and are constructed with chamfered grey sandstone. There is a doorway in the S face of the tower at first-floor level. It has a segmental arch constructed with rough blocks of greywacke and limestone. It presumably gave access from the first-floor level of the domestic range to the tower, which in turn led to the chancel gallery - a similar arrangement to that at Carlingford Priory (LH005-042013-). The E window of the chancel has a large two-centred arch, but since all the tracery has been robbed it is not possible to say what type of dressed stone was used or what number of lights there were. The S wall of the chancel has one half of a small arch, now blocked, about 6m E of the central tower. It has a central keystone and limestone blocks. Just to the E and at a slightly higher level there is a moulded sandstone window jamb. In the S façade of the S wall of the chancel just to the E of the tower are the remains of a doorway at ground level, now blocked. All the arch and jamb stones, which are limestone blocks, are still in position. It has a two-centred pointed arch with keystone and is quite plain. It gave access in late medieval times to the chancel from the cloister. About 26m S of the nave there is a short E-W stretch of medieval walling (L c. 7m) which has the remains of a splay at its W extremity. On the same E-W line as this wall and c. 13m to the E there is a further small fragment which contains punch-dressed quoin stones and may be a jamb from a late medieval doorway. (Bradley 1978, 116-17; CLAJ 1941, 25-32; CLAJ 1945, 24-5; CLAJ 1959, 154-9)	
LH024-041079-	Quay	Moneymore	Excavations at the S end of Dominic Street (Excavation Licence 96E0160) revealed an E-W aligned section of quay wall. It was over 1m thick and was constructed of mortared stone (pers. Comm. Eoin Corcoran (Archaeological Consultancy Services Limited), 2002).	0.1km E

All information taken from the Ordnance Survey Ireland website.

The archaeological impact assessment of the site at the proposed Boyne Greenway, North Bank, Drogheda, Co. Louth identified four monuments located within or in the immediate vicinity of the proposed greenway along Toberboice Lane – Souterrains LH024-012001-012002, Enclosure LH024-12004 and Burial Ground LH024-012003.

There are no Protected Structures listed in the Louth County Development Plan 2021-2027 or structures listed within the National Inventory of Architectural Heritage for County Louth or Meath directly present within the proposed greenway. As the area presently occupied by the existing footpath along the riverbank was previously monitored by Donald Murphy under works associated with the Drogheda Main Drainage project in the late 1990s, it is not expected that any archaeological features or deposits would be present within the proposed greenway along this route. However, the potential does exist that previously unknown archaeological feature or deposits may be exposed or identified, especially in the area adjacent to the known archaeological monuments (LH024-012001-012005) at Toberboice lane, where the potential is particularly high, within the greenfield adjacent to the proposed greenway. Therefore, it is recommended that archaeological monitoring of all ground works within the greenfield areas should be conducted and conditioned within any grant of permission for the site. This should be carried out by a licenced eligible archaeologist working under licence from the Department of Housing, Local Government and Heritage in consultation with the National Museum of Ireland. It is also recommended that the ruinous stone structure, which will be partially impacted upon, should be subject to a detailed measured and photographic architectural survey.

5.19 Nearby Site Investigations

The Geological Survey of Ireland (GSI) have compiled a database of site investigations carried out in Ireland. There are six investigations located within a 1km radius of the site. The nearest investigation is the Drogheda Brass Band Report (Report ID 6,889) which is located 0.02km north of the site. This report details a geotechnical investigation conducted in November 2006 prior to construction of a new building. The next nearest investigation relates to a Proposed Housing Development (Report ID 2,611) located 0.06km north of the site. This investigation was conducted by in July 1995 and involved borehole investigations, trial pits, in-situ standard penetration tests, triaxial compression tests, classification tests, particle size distribution and CBRs.

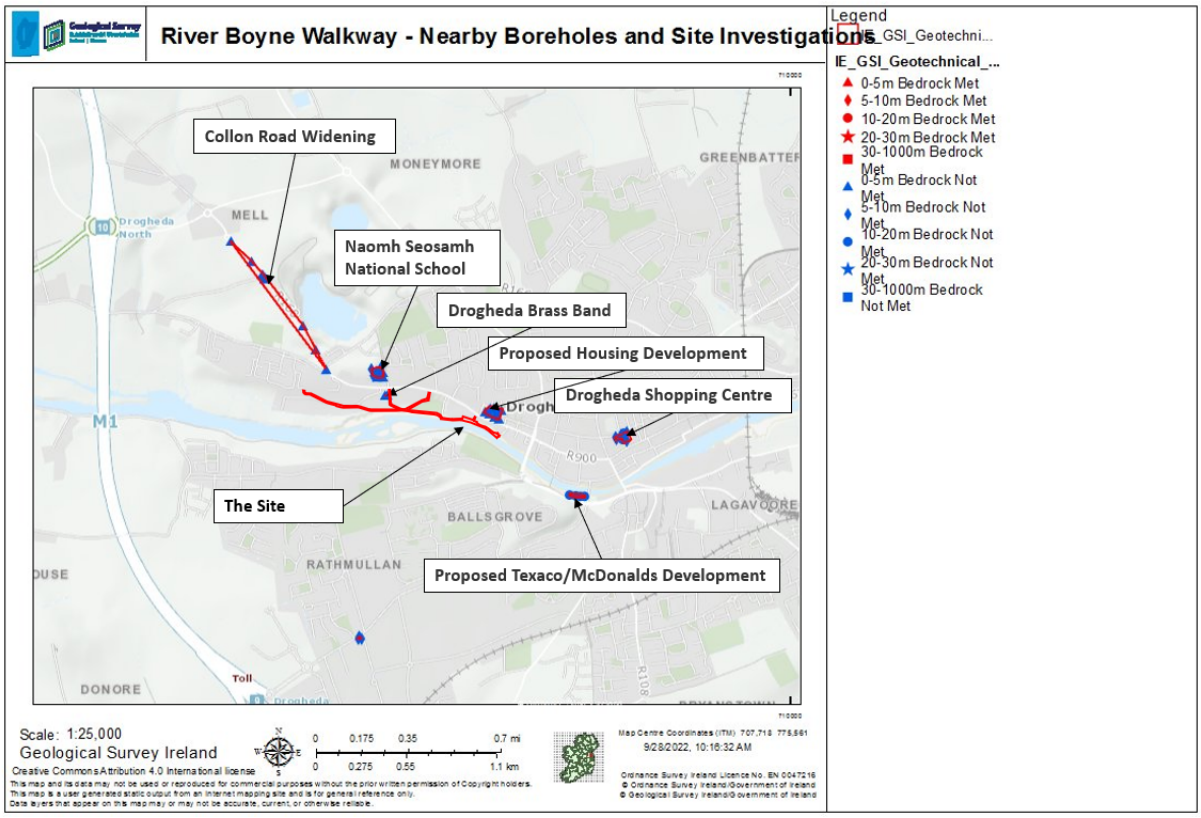

Figure 5.24: Nearby Boreholes and Site Investigations; approximate site location indicated by the yellow lines (Source: GSI, 2022).

5.20 Summary of the Physical Site Setting

Summary of the site physical setting are outlined in Table 5.3.

Table 5.5: Summary Site Setting

Feature	Details & Comments
Topography	The topography of the site is gently sloping downwards from north to south towards the River Boyne.
Geology	**Topsoil:** The site is comprised of five different soil types: Made ground; AminPD - poorly drained, mainly acidic mineral soil; BminSW – shallow, well drained, mainly basic mineral soil; AminSW - shallow, well drained, mainly basic mineral soil; and AlluvMIN - alluvial mineral soil
	Solid Geology: The site is underlain by Tullyallen Formation
Hydrogeology	**Aquifer Classification:** The site is underlain by a Rkd - Regionally Important Aquifer - Karstified (diffuse)
	Vulnerability & Recharge: The GSI resources describes the site as having four different groundwater vulnerabilities: Extreme, High, Rock at or near Surface or Karst, and Moderate

	GSI groundwater recharge model parameters for these zones are summarised in Table 4.1.
	Groundwater Flow: The regional groundwater flow direction can be expected to be to the eastward towards the Irish Sea.
	Well Search: There are no wells or springs located within the site boundary; however, there are eighteen within a 1.5km radius of the site. The Ballymakenny GWS, Drybridge PWS, and Kiltrough PWS are located 0.7km north, 0.78km northeast and 1.08km from the proposed development, respectively.
Hydrology	**Surface Water Courses:** The closest surface water feature is the Boyne Estuary (IE_EA_010_0100) which is located approximately 10 metres south of the study area.

6 TYPES AND CHARACTERISTICS OF POTENTIAL IMPACTS

The likely significant effects on the environment of the proposed development in relation to specified criteria are outlined below.

6.1 Magnitude and Spatial Extent of Impact

This project relates to the development of the Boyne Greenway including the upgrading of 950m of existing pathway and the construction of 650m of new path. Proposed works also include the installation of benches, bins, and bicycle racks along the greenway. A portion of the existing path (550m) is located just within the Natura 2000 network. Having considered all the habitats and species for which the nearby Natura 2000 sites are designated, it was concluded that the main risk was to water quality in the River Boyne as well as to the River Boyne and River Blackwater SAC, the Boyne Coast and Estuary SAC, and the Boyne Estuary SPA.

Mitigation was proposed to reduce this risk to water pollution to a non-significant level. This includes careful project management in respect of water protection and proper management of fuels and building materials.

The mitigation will be the responsibility of the grantee of planning and may be implemented through a contractor. The conclusion is that, with mitigation in place, no significant negative impacts on the conservation status of the Natura 2000 network and its associated habitats and species are anticipated as a result of this development.

6.2 The Nature of the Impact

This project relates to the construction of the Boyne Greenway (North Bank) located along the River Boyne in Drogheda, County Louth. This project is small in magnitude and extent. Potential impacts related primarily to sedimentation resulting from earthworks and are likely to be temporary and not significant.

6.3 The Transboundary Nature of the Impact

Due to the scale and nature of the works, transboundary impacts are unlikely.

6.4 The Intensity and Complexity of the Impact

The project involves a small work area which has been limited to that required to create a useful amenity for both tourists and residents. Potential impacts are likely to be temporary and not significant.

6.5 The Probability of the Impact

The probability of impact is low subject to the implementation of mitigation measures detailed in the project-specific CEMP which will be prepared by the appointed contractor.

6.6 Expected Onset, Duration, Frequency and Reversibility of the Impact

Having considered all the habitats and species for which the nearby Natura 2000 sites are designated, it was concluded that the main risk was to water quality in the River Boyne as well as to the River Boyne and River Blackwater SAC, the River Boyne and River Blackwater SPA, and the Boyne Estuary SPA. Although a portion of the proposed project footprint is located just within the Natura 2000 network, potential long-term impacts resulting from the project are unlikely based on the limited work area required to undertake the construction of the proposed walkway and ancillary works and the short duration of the project.

6.7 The Cumulation of the Impact with the Impacts of other Existing and/or Future Developments

There are no likely cumulative impacts of the proposed works in conjunction with committed developments based on a review of planning grants.

6.8 The Possibility of Effectively Reducing the Impact

The area required for the works has been limited in order to restore and enhance the existing path and create the River Boyne walkway. An outline CEMP has been prepared as part of this application and a more detailed CEMP will be prepared by the appointed contractor taking into account all site works and detailing all required mitigation measures outlined in the NIS and other documents.

The potential exists, particularly at the construction stage, for a small amount of nuisance associated with localised traffic disruption, construction noise and dust, and siltation associated with soil disturbance. However, for the most part, construction impacts related to this project are likely to be minimal and temporary.

6.9 Screening Conclusion

Based on the nature, scale, and location of the proposed project, by itself and in combination with other plans and projects, it is considered that the overall impact on the receiving environment will be low subject to implementation of all mitigation measures detailed in the CEMP.

The proposed project is not listed in Annex I or II; therefore, it is not mandatory for an EIA to be carried out. Annex III of the Directive outlines the specific criteria that must be considered when a sub-threshold project is being examined for Environmental Impact Assessment and this has been used for the purpose of this assessment.

A Natura Impact Statement (NIS) has been prepared by OCSC which concluded that, with mitigation in place, no significant negative impacts on the conservation status of the Natura 2000 network and its associated habitats and species are anticipated as a result of this development.

Please refer to the completed Screening Checklist identified in European Commission publication Environmental Impact Assessment of Projects, Guidance on Screening (2017).

Table 6.1:Environmental Impact Assessment of Projects Screening Checklist

Checklist	Response
Will there be a large change in environmental conditions?	No
Will new features be out-of-scale with the existing environment?	No.
Will the impact be unusual in the area or particularly complex?	No
Will the impact extend over a large area?	No
Will there be any potential for transboundary impact?	No
Will many people be affected?	Minor temporary impacts associated with construction. Overall positive impact in creating a new amenity and will offer an attractive alternative transport choice for school children and commuters, bringing significant environmental, economic and health benefits to the wider community.
Will many receptors of other types (fauna and flora, businesses, facilities) be affected?	No, subject to implementation of mitigation measures.
Will valuable or scarce features or resources be affected?	No
Is there a risk that environmental standards will be breached?	No
Is there a risk that protected sites, areas, and features will be affected?	No, subject to implementation of mitigation measures.
Is there a high probability of the effect occurring?	No
Will the impact continue for a long time?	Temporary, short term.
Will the effect be permanent rather than temporary?	No
Will the impact be continuous rather than intermittent?	Temporary and short-term following construction.
If it is intermittent, will it be frequent rather than rare?	-
Will the impact be irreversible?	No
Will it be difficult to avoid, or reduce or repair or compensate for the effect?	No

OCSC
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Multidisciplinary
Consulting Engineers

APPENDIX A. Archaeological Impact Assessment

ACS

Archaeological Impact Assessment Boyne Greenway, North Bank, Drogheda, Co. Louth.

ARCHAEOLOGICAL
CONSULTANCY
SERVICES UNIT

Client

Louth County Council.

ITM: 708297, 775285 to 707096, 775464

RMP/SMR Nos: LH024-012001-0122005

Ian Russell.

20th October 2022

ACSU Ref.: 22111

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PROJECT DETAILS

Project	Boyne Greenway, North Bank, Drogheda, Co. Louth.
Report Type	Archaeological Impact Assessment
Archaeologist	Ian Russell.
Client	Louth County Council.
Site	Boyne Greenway, North Bank, Drogheda, Co. Louth.
Townlands	Mell & Moneymore.
ITM Refs	708297, 775285 to 707096, 775464
RMP/SMR Nos	LH024-012001-012005
Protected Structure No.	N/A
Report Date	20th October 2022
ACSU Ref.	22111

Revision	Date	Description	Status	Author	Reviewed	Approved
0	20.10.2022	Assessment Report	Final	I.R.	L.C	D.M

NON-TECHNICAL SUMMARY

This report presents the findings of an archaeological impact assessment for a site at the proposed Drogheda Greenway, North Bank, Drogheda, Co. Louth (ITM 708297, 775285 to 707096, 775464, Figure 1). This assessment is based on the findings of a site survey and a study of available sources. It aims to identify and describe known and potential archaeological and cultural heritage constraints within the study area and offer recommendations for the mitigation of such potential impacts.

The site extends from Horse Lane, west of Donagheys Mill, linking into the R168 Loughboy, Mell and the residential housing estate at Boyne Lodge. Part of the site is currently under a footpath, from Horse Lane to the rear of the commercial premises occupied by 'Micks Mattress'. The remainder of the route westwards lies in greenfields. It was inspected on the 13th October 2022 by Donald Murphy and Ian Russell of Archaeological Consultancy Services Unit Ltd. The western portion of the route is partially occupied by greenfields covered in undergrowth adjacent to the flood plain or the River Boyne along its northern banks. A rough-hewn footpath has been created through parts of the fields leading from the existing footpath to the commercial premises at the end of Toberboice lane and beyond towards the Boyne Cable Bridge.

There are four monuments located within or in the immediate vicinity of the proposed greenway along Toberboice Lane – Souterrains LH024-012001-012002, Enclosure LH024-12004 and Burial Ground LH024-012003. There are no Protected Structures listed in the Louth County Development Plan 2021-2027 or structures listed within the National Inventory of Architectural Heritage for County Louth or Meath directly present within the proposed greenway. As the area presently occupied by the existing footpath along the riverbank was previously monitored by Donald Murphy under works associated with the Drogheda Main Drainage project in the late 1990s, it is not expected that any archaeological features or deposits would be present within the proposed greenway along this route. However, the potential does exist that previously unknown archaeological feature or deposits may be exposed or identified, especially in the area adjacent to the known archaeological monuments (LH024-012001-012005) at Toberboice lane, where the potential is particularly high, within the greenfield.

Therefore, it is recommended that archaeological monitoring of all ground works within the greenfield areas should be conducted and conditioned within any grant of permission for the site. This should be carried out by a licence eligible archaeologist working under licence from the Department of Housing, Local Government and Heritage in consultation with the National Museum of Ireland.

It is also recommended that the ruinous stone structure, which will be partially impacted upon, should be subject to a detailed measured and photographic architectural survey.

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1. INTRODUCTION

This report presents the findings of an archaeological impact assessment for a site at the proposed Drogheda Greenway, North Bank, Drogheda, Co. Louth (ITM 708297, 775285 to 707096, 775464, Figures 1-3). This assessment is based on the findings of a site survey and a study of available sources. It aims to identify and describe known and potential archaeological and cultural heritage constraints within the study area and offer recommendations for the mitigation of such potential impacts.

The site extends from Horse Lane, west of Donagheys Mill, linking into the R168 Loughboy, Mell and the residential housing estate at Boyne Lodge. Part of the site is currently under a footpath, from Horse Lane to the rear of the commercial premises occupied by 'Micks Mattress'. The remainder of the route westwards lies in greenfields.

2. THE DEVELOPMENT

2.1 Proposal

This archaeological impact assessment has been carried out at the request of the client to assess the archaeological potential of the route of the proposed Drogheda Greenway (Figure 2), North Bank, Drogheda, Co. Louth (ITM 708297, 775285 to 707096, 775464, Figure 2).

2.2 Archaeological Requirements

This archaeological impact assessment was carried out at the request of the client to assess the archaeological potential of the site, and determine if any archaeological constraints are apparent in relation to the proposed development works.

2.3 Methodology

An assessment was carried out involving a literature review and consultation of the Record of Monuments and Places (RMP) and Sites and Monuments Record (SMR) compiled and updated by the National Monuments Service and the National Historic Properties Service of the Department of Housing, Local Government and Heritage. The RMP is comprised of manuals that list all known archaeological sites and monuments in a county with accompanying maps (based on Ordnance Survey (OS) six-inch maps) locating these sites. All sites included in the RMP are protected under the National Monuments Acts (1930–2004). The SMR consists of all records stored in the Archaeological Survey of Ireland national database and is presented in the Historic Environment Viewer, which also includes sites listed in the National Inventory of Architectural Heritage. The last published RMP for County Meath is dated 1996, and as such many of the sites listed in the SMR are scheduled for inclusion in the next revision of the RMP.

The Topographical Files of the National Museum of Ireland were also consulted to assess the area's archaeological potential. These files list, on a townland basis, all archaeological artefacts in the care of or known to the museum. Such a

record can provide evidence for human settlement or activity in the absence of physical remains or documentary references. The results of previous and ongoing archaeological investigations were also taken into account in order to evaluate the level of archaeological remains coming to light in the area. Historical maps held by the Map Library of Trinity College Dublin and aerial photography from the Geological Survey of Ireland were both consulted. These sources can indicate areas of archaeological potential through features like curving field boundaries, crop marks and soil marks and can provide information regarding the nature and extent of recorded archaeological sites that have become denuded since the early 19th century. Historical maps are also useful in identifying other features of cultural heritage significance.

The *Louth County Development Plan 2021 – 2027* was consulted as this contains a Record of Protected Structures. Further buildings and features of architectural interest in the area that are not included on the Record of Protected Structures are detailed in the National Inventory of Architectural Heritage (NIAH).

A site visit was also carried out; its purpose was to assess whether or not the site contained any evidence for the presence of any previously unrecorded areas or features of historical or archaeological significance.

3. ARCHAEOLOGICAL ASSESSMENT

3.1 Archaeological & Historical Background

The site extends from Horse Lane, west of Donagheys Mill, linking into the R168 Loughboy, Mell and the residential housing estate at Boyne Lodge. Part of the site is currently under a footpath, from Horse Lane to the rear of the commercial premises occupied by 'Micks Mattress'. The remainder of the route westwards lies in greenfields. The first known historical reference to the townland of Mell (*Meille*) is from AD 1177–78, when it was recorded as Melle. It was mentioned frequently in sources, and may derive from a family name Mell, also called Beille (www.logainm.ie).

Drogheda

Until AD 1412, Drogheda consisted of two separate towns on either side of the river, probably as a result of the River Boyne being chosen as the boundary between the two dioceses of Armagh and Meath (Barry 1987, 133). The settlement on the north bank of the river (in County Louth) was probably in existence before the end of the twelfth century (Bradley 1978, 105). St Peter's Church was founded before 1186 on the north side, and the principal street axis was established before 1215. The urban settlement on the south bank of the river was much smaller, probably due to restrictions placed on house construction by the high-rising scarp. This afforded the south side of the river defensive advantages, and the earliest archaeological feature here is Millmount Motte.

The placename *Droichead Atha* (ford by the bridge) was used in five different contexts between 1150 and 1210. It is evident from an entry in the annals in 1157 that "Drochat Atha" was the name applied to a large area rather than to a single feature such as a bridge or a ford (MacCarthy 1893, 130–31). It has also been used as a synonym for Mellifont Abbey (Gwynn 1954, 197) and there is a reference to a novus pons de Drogheda. The latter reference to the 'new bridge' provides the

earliest positive evidence that the Anglo-Norman settlement was located away from the original droichead atha at Oldbridge (Bradley 1978, 103).

The earliest surviving charter is from 1194, in which Walter de Lacy confirms to all his burgesses living on the south side of the bridge the law of Breuteil. The medieval town was a walled area enclosing 113 acres, making it one of the largest walled towns in medieval Ireland. Drogheda also possessed one of the most extensive series of murage grants for any Irish town, with at least 13 grants spanning the years between 1234 and 1424. The murage grants consisted of a licence to levy a toll upon goods coming into the town, with the money used to construct and repair the walls.

The archaeological remains of medieval Drogheda are fairly extensive and include the ruins of the Hospital of St Mary d'Urso (Gwynn 1954; Halpin 1996); the tower of St. Magdalene on the site of the Dominican Friary; the Tholsel at the junction of West Street and Shop Street; the Barbican of St. Laurence at the east end of the same street; the motte at Millmount; and fragments of the town wall. Archaeological excavation has uncovered the remains of St Catherine's Gate at the Mall, a twelfth-century stone building at the corner of Shop Street and Dyer Street; remains of timber revetments, a medieval harbour, a wharf, and quayside on the south of Dyer Street; a timber revetment at the south end of Shop Street; as well as burgage plots and stone-lined pits at John Street (McHugh 2019).

The town, although modified, can be described as an ongoing monument as it has preserved much of medieval Drogheda in its chequered street pattern. The main streets such as West Street, Laurence Street and Peter Street have maintained their original names, while Bothe Street is now known as Shop Street. Placenames are very informative; for example, the name Dyer Street indicates the previous existence of a specialist industry such as cloth or wool dying.

3.2 Recorded Monuments

There are four monuments located within or in the immediate vicinity of the proposed greenway along Toberboice Lane – Souterrains LH024-012001-012002, Enclosure LH024-12004 and Burial Ground LH024-012003 (Figure 3). A list of the monuments located within immediate environs is presented in below. All these sites add to the general assessment of the archaeological potential of the development area. These descriptions are derived from the *Archaeological Inventory of County Louth* (Buckley 1986) and/or the *Archaeological Survey of County Louth* (Buckley and Sweetman 1991) but in certain instances the entries have been revised and updated in the light of recent research and are detailed in the National Monuments Service Archaeological Survey Database (http://maps.archaeology.ie/historicenvironment/).

Table 1: Recorded Monuments in the environs of the site

RMP/SMR No.	Class/ Site Type	Description
LH024-012001-	Souterrain	The site consisted of two sections of souterrain and a cemetery site (LH024-012003-) within an enclosure (LH024-012004-) discovered during pipe-laying. The two sections of souterrain were situated 8–10m apart. The E section of the souterrain consisted of a drystone-built passage (L 2m). The W section consisted of part of a delintelled circular chamber.
LH024-012002-	Souterrain	See LH024-012001-.
LH024-012003-	Burial ground	Associated with the remains of souterrain (s) (LH024-012001- and LH024-012002-), discovered in 1983 during the course of cutting a trench for sewerage. The site was recorded by Mr C. Manning (OPW) who supervised the digging of trial trenches in 1985 and discovered a small enclosure (LH024-012004-). It was c. 50m in diameter and was defined by a ditch (Wth 2.5m, D 1.8m). The burials were very scattered but were seen to be orientated E-W and were not slab-lined. The souterrain and the burials were enclosed by the ditch.
LH024-012004	Enclosure	Located on side of slope on N side of River Boyne. Trial trenching in 1985 in advance of building revealed an enclosure (max. diam. c. 60m E-W) defined by a ditch (Wth 2.5m, D 1.4m). This enclosure is associated with the souterrain(s) (LH024-012001- and LH024-012002-) and cemetery (LH024-012003-) discovered in 1983.
LH024-012005-	Ritual site - holy well	Marked on the 1835 'OS 6-inch' map as 'Toberboice Well'. There is a tradition that St. Boice drank from this spring before he was beheaded (IFC Schools' Mss 679, 179). It was covered in concrete when inspected by ASI in 1967.

3.3 Previous Archaeological Investigations

The site was not subject to previous archaeological investigations but lands to the east and west were investigated in 1983, 1985 and 2000 (Figure 3). Two souterrains (LH024-012001- and LH024-012002-) and a burial ground (LH024-012003-) at Toberboice Lane were identified in 1983 during sewage trenching, while an associated enclosure (LH024-012004) was identified during trial trenching in 1985.

Furthermore, during test trenching in June 1998 (Licence No. 98E0285), substantial ditches were exposed and interpreted as part of an outer enclosure. A small number of shallow features were also evident, with structural remains and a substantial pit extending beyond the outer enclosure. Archaeological monitoring (Licence No. 00E0738) of a residential development to the west of the site in 2000 did not expose any archaeological remains. Archaeological monitoring was also conducted by Donald Murphy in 1995-7 of the riverbank rock armour and footpath along the riverbank during works associated with the Drogheda Main Drainage Project under licence number 96E0160.

Testing conducted by Deirdre Murphy in 2002 under licence number 22E0635 at the junction of Slane Road and Cement Road did not reveal the presence of any archaeological features in any of the eight test trenches excavated but did

uncovered human remains in Trench 6 in the topsoil. It was determined that the burial was isolated, within the topsoil only (ie. not a grave cut) and was not part of a larger cemetery or graveyard.

The details of these investigations are derived from the Summary Accounts of Archaeological Excavations in Ireland (www.excavations.ie).

Table 2: Previous archaeological investigations in the environs of the site

Site name	Licence No	Site Type	Investigation Type
Loughboy, Drogheda	98E0285	Medieval monastic	Test trenching
Slane Road, Drogheda	00E0738	No archaeological significance	Monitoring
Slane Road, Drogheda	22E0635	Human Burial.	Test Trenching.
Drogheda Main Drainage	96E0160	No archaeological significance.	Monitoring.

3.4 Protected Structures, National Inventory of Architectural Heritage (NIAH)

There are no Protected Structures contained within the site, as listed in the *Louth County Development Plan 2021–2027*, nor any other built heritage contained within the National Inventory of Architectural Heritage (NIAH). The nearest such structure is Mc Closkey's Bakery (RPS ID. DB-314; NIAH Reg. No. 13618007), located to the northeast of the site.

3.5 Topographical Files of the National Museum of Ireland

The Topographical Files of the National Museum of Ireland were consulted and listed no finds within the site or in the townland of Johnstown.

3.6 Cartographic Review

A review of available historic mapping and imagery for the area was carried out (Figures 3-10) to include the Down Survey barony and parish maps (1656–58), Newcomens map of Drogheda (1757), Wrens map of Drogheda (1766), Taylor and Skinners (1778) Map of Drogheda Rowland map of Drogheda (1855) as well as pictures by Gabriele Ricciardelli (1753-8) showing Mell, as well as the 6-inch 1835 and the 25-inch 1907 editions of the Ordnance Survey maps. Potential archaeological or cultural heritage features are marked on such maps and provide a useful resource in identifying sites, particularly if they no longer have any surface remains.

No archaeological or cultural heritage features are shown on the Down Survey map of the area (1656–58), and the site is shown outside of Drogheda town walls, within the very southeast extent of an area labelled as Melliphont. Newcomens map (Figure 5) shows a number of houses along Trinity street outside the medieval town, and the lands beyond are owned by Lord Moore. Wrens map (Figure 6) of Drogheda (1766) only shows a number of houses along Trinity street/Loughboy but does show a number of roads extending westwards along Loughboy/Slane Road and in Mell. Nothing is illustrated from the road south to the river bank. Taylor and Skinners 1778 map (Figure 7) shows Louthboy/Slane Road and a large number of structures along Trinity Street/Fair green, but nothing is illustrated beyond that point westwards apart from the road to Mell and west. Many of these are visible on Gabriele Ricciardelli (1753-8) painting of Drogheda (Figure 4) looking west from Millmount and shows a large number of terraced structures along Trinity Street and further west at Mell. A number of structures are illustrated south of Loughboy/Slane road close to the river bank, including what looks like at boat slipway. Rowland map of Drogheda (1855, Figure 8) shows how this part of the town had become much more developed over time. A large number of properties are now shown all along Trinity Street and extending westwards along Mell and 'Lugboy'. Rear property boundaries and gardens are illustrated extending southwards towards the river bank.

The more detailed Ordnance Survey maps were examined to identify any possible archaeological features and trace the development of the site during the nineteenth and early twentieth centuries. On the 1834 map (Figure 9), the route of the greenway appears to go through gardens to the rear of Trinity Street and a number of greenfield behind 'Mell National School'. A number of houses are depicted along Toberboice Lane adjacent to a gravel and sand pit. At the western end of the Toberboice Lane, where the ruins of the stone structure now stand, two structures are also illustrated adjacent to a depicted walled garden. The 3rd edition Ordnance Survey (OS) map (1907, Figure 10) shows a similar density of housing/structure, though now five gravel pits or quarries are illustrated, though many are shown as disused. The same is depicted again on the Cassini edition Ordnance Survey (OS, Figure 11) of 1938.

3.7 Aerial Photography Review

Aerial photographs dating between 1938 (Figure 12) and 2013 from the Ordnance Survey of Ireland were also examined. In addition, Google Earth imagery dating between 2009 and 2021 was also reviewed. The footpath extending from Horse lane westwards along the riverbank and exiting onto Loughboy/Slane road beside the commercial premises occupied by 'Micks Mattresses' is shown and it is evident that the majority of the remainder of the route westwards is within greenfields, except for those portions that intersect with Toberboice Lane. No archaeological features are visible.

3.8 Field survey

The purpose of this survey was to assess whether or not the site contained any evidence for the presence of any previously unrecorded areas or features of historical or archaeological significance.

The site was inspected on the 13th October 2022 by Donald Murphy and Ian Russell of Archaeological Consultancy Services Unit Ltd (Plates 1-24). The western portion of the route is partially occupied by greenfields covered in undergrowth adjacent

to the flood plain or the River Boyne along its northern banks. A rough-hewn footpath has been created through parts of the fields leading from the existing footpath to the commercial premises at the end of Toberboice lane and beyond towards the Boyne Cable Bridge.

No features of an archaeological nature were identified, however the remains of a roofless ruined 19th century stone structure was observed in the field west of Toberboice Lane which may be partially impacted upon by the proposed greenway where the proposed greenway turns to the northwest to link into Boyne Lodge.

4. CONCLUSIONS & RECOMMENDATIONS

The archaeological and cultural heritage impact assessment of the site at the proposed Drogheda Greenway, North Bank, Drogheda, Co. Louth was carried out.

There are four monuments located within or in the immediate vicinity of the proposed greenway along Toberboice Lane – Souterrains LH024-012001-012002, Enclosure LH024-12004 and Burial Ground LH024-012003 (Figure 3). There are no Protected Structures listed in the Louth County Development Plan 2021-2027 or structures listed within the National Inventory of Architectural Heritage for County Louth or Meath directly present within the proposed greenway. As the area presently occupied by the existing footpath along the riverbank was previously monitored by Donald Murphy under works associated with the Drogheda Main Drainage project in the late 1990s, it is not expected that any archaeological features or deposits would be present within the proposed greenway along this route. However, the potential does exist that previously unknown archaeological feature or deposits may be exposed or identified, especially in the area adjacent to the known archaeological monuments (LH024-012001-012005) at Toberboice lane, where the potential is particularly high, within the greenfield adjacent to the proposed greenway.

Therefore, it is recommended that archaeological monitoring of all ground works within the greenfield areas should be conducted and conditioned within any grant of permission for the site. This should be carried out by a licence eligible archaeologist working under licence from the Department of Housing, Local Government and Heritage in consultation with the National Museum of Ireland.

It is also recommended that the ruinous stone structure, which will be partially impacted upon, should be subject to a detailed measured and photographic architectural survey.

5. REFERENCES

Buckley, L., Murphy, E. M. and Ó Donnabháin, B. 2004. *The Treatment of Human Remains: Technical Paper for* Archaeologists. Institute of Archaeologists of Ireland, Dublin.

Eogan, G. 2012. *The Archaeology of Knowth in the First and Second Millennia AD*. Royal Irish Academy, Dublin.

McKenzie, C.J. and Murphy, E.M. 2018. *Life and Death in Medieval Gaelic Ireland: The Skeletons from Ballyhanna, Co. Donegal*. Four Courts Press, Dublin.

Murphy, D. 2017. Archaeological Excavation of a burial in Kilrathmurray Quarry, Co. Kildare. Unpublished report prepared by Archaeological Consultancy Services Unit.

O'Brien, E. 2020. *Mapping Death. Burial in Late Iron Age and Early Medieval Ireland*. Four Courts Press, Dublin.

Other Sources

Framework and Principles for the Protection of the Archaeological Heritage, Department of Arts, Heritage, Gaeltacht and the Islands, 1999 (https://www.archaeology.ie/sites/default/files/media/publications/framework-and-principles-for-protection-of-archaeological-heritage.pdf)

GeoHive by Ordnance Survey Ireland

Louth Development Plan 2021 – 2027 (https://www.louthcoco.ie/en/publications/development-plans/louth-county-development-plan-2021-2027/)

National Inventory of Architectural Heritage (http://www.buildingsofireland.ie/).

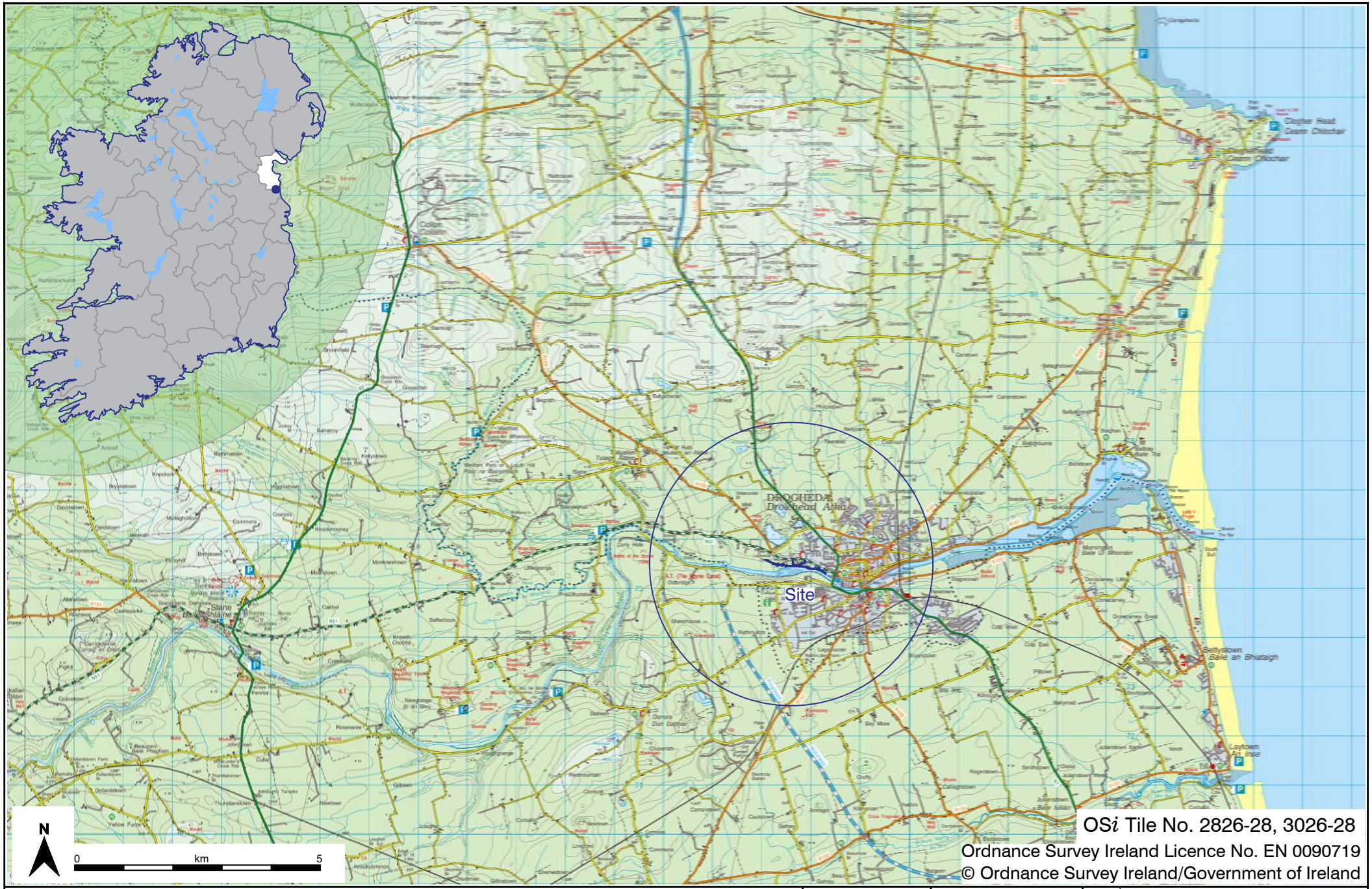
National Library of Ireland, 7–8 Kildare Street, Dublin 2.

Placenames Database of Ireland, developed by Fiontar & Scoil na Gaeilge (DCU) and The Placenames Branch (Department of Housing, Local Government and Heritage). (www.logainm.ie).

Record of Monuments and Places (RMP), the Heritage Service, 7 Ely Place, Dublin 2.) (www.maps.archaeology.ie/historicenvironment/)

Summary Accounts of Archaeological Excavations in Ireland (www.excavations.ie).

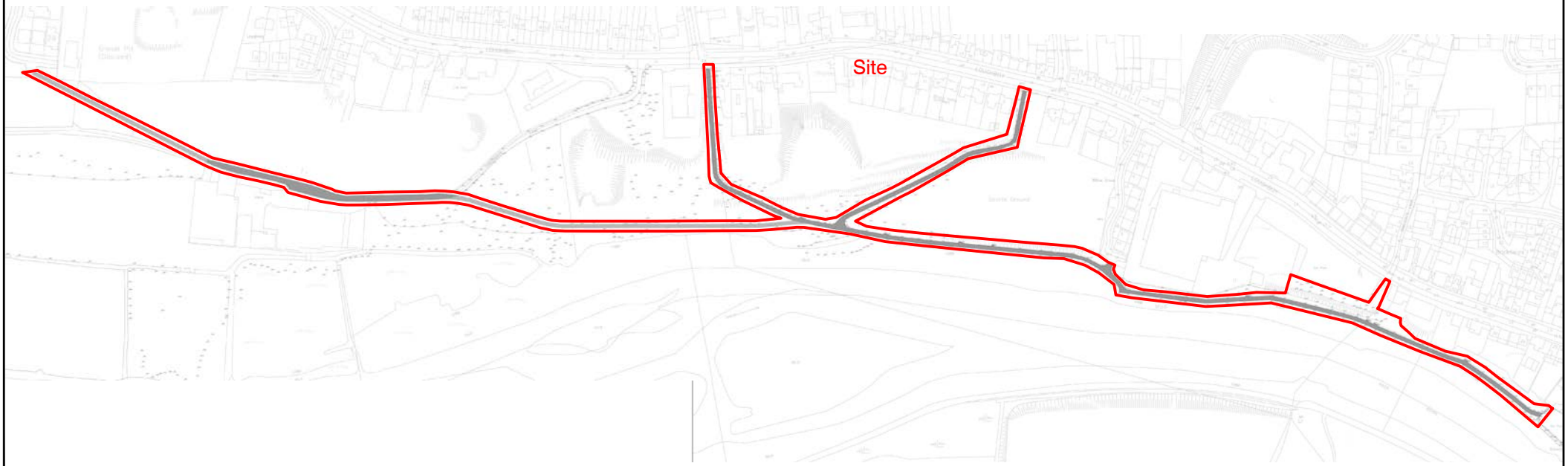
Topographical Files of the National Museum of Ireland



OS*i* Tile No. 2826-28, 3026-28

Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0001	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 1 Location of site		**Scale** 1:100,000 @ A4	

LEGEND	
SITE EXTENTS LINE	
EXISTING CORRIDOR	
PROPOSED CORRIDOR EXTENT	



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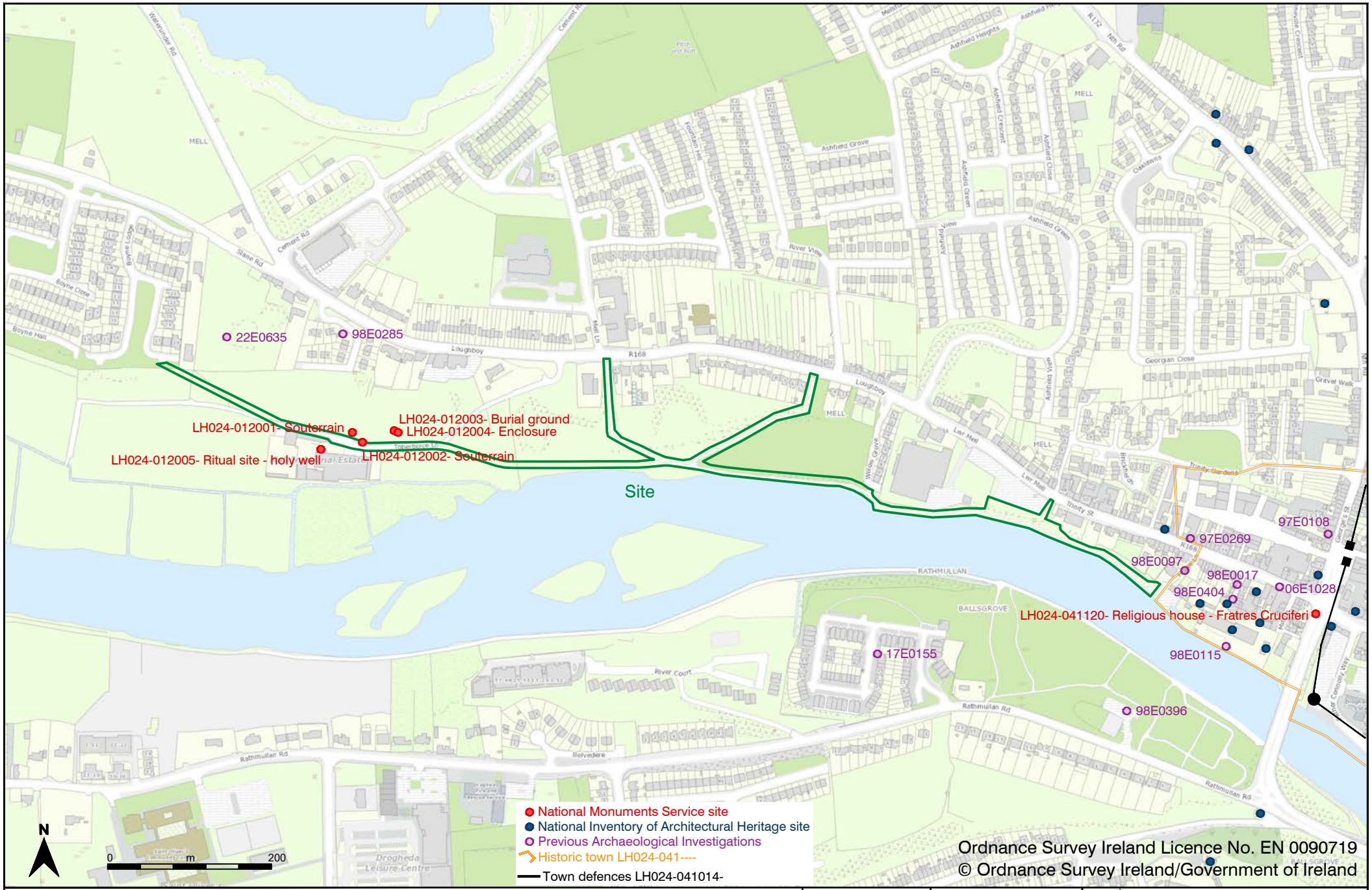
Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0002	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 2 Detail of site development		**Scale** 1:2,000 @ A4	



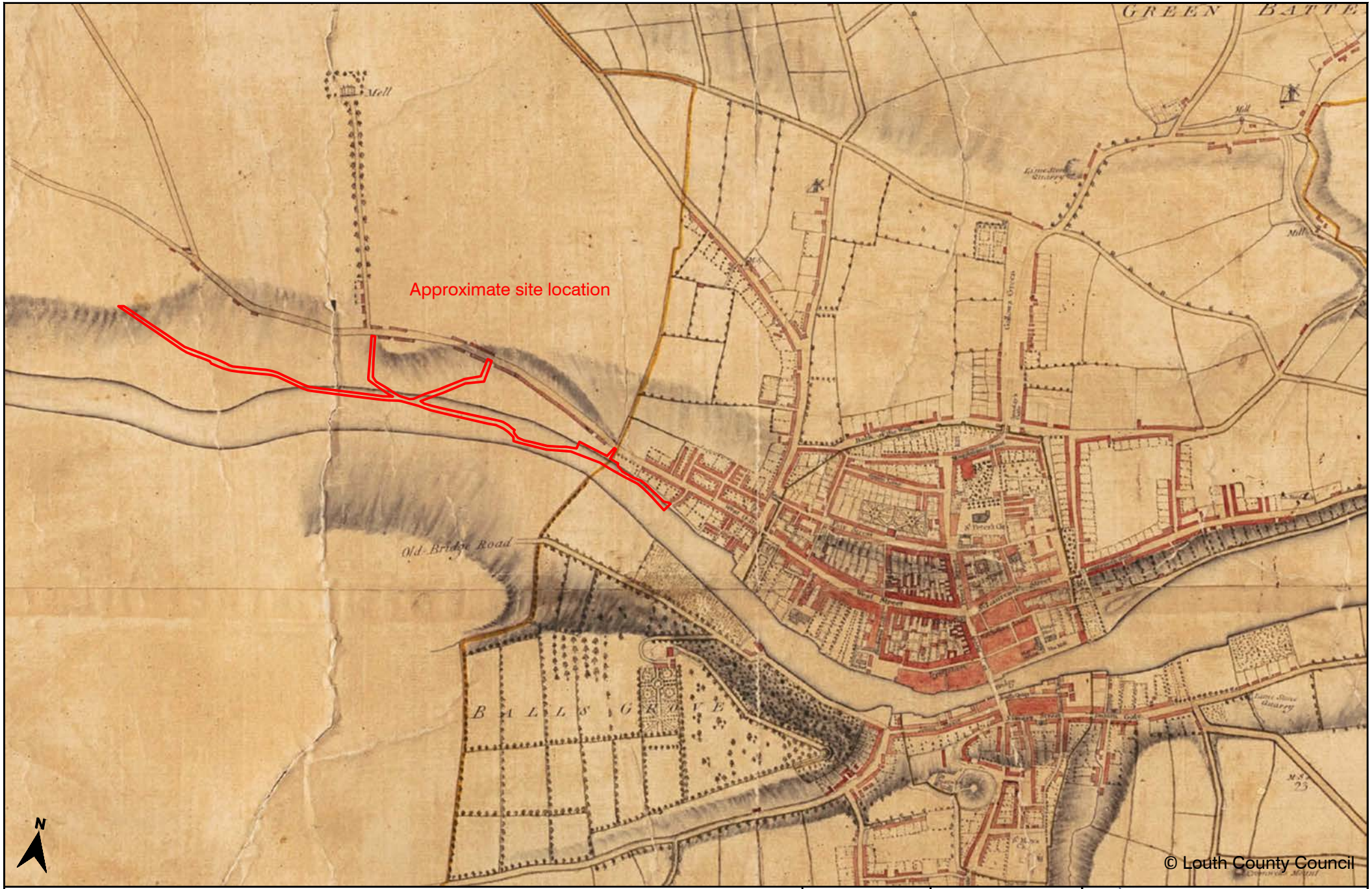
Project Boyne Greenway		**Date** October 2022	**Drawing No.** 22111_C0003
Figure 3 Location of site, previous archaeological investigations and nearby *Sites and Monuments Record* sites			**Scale** 1:6,000 @ A4

ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT

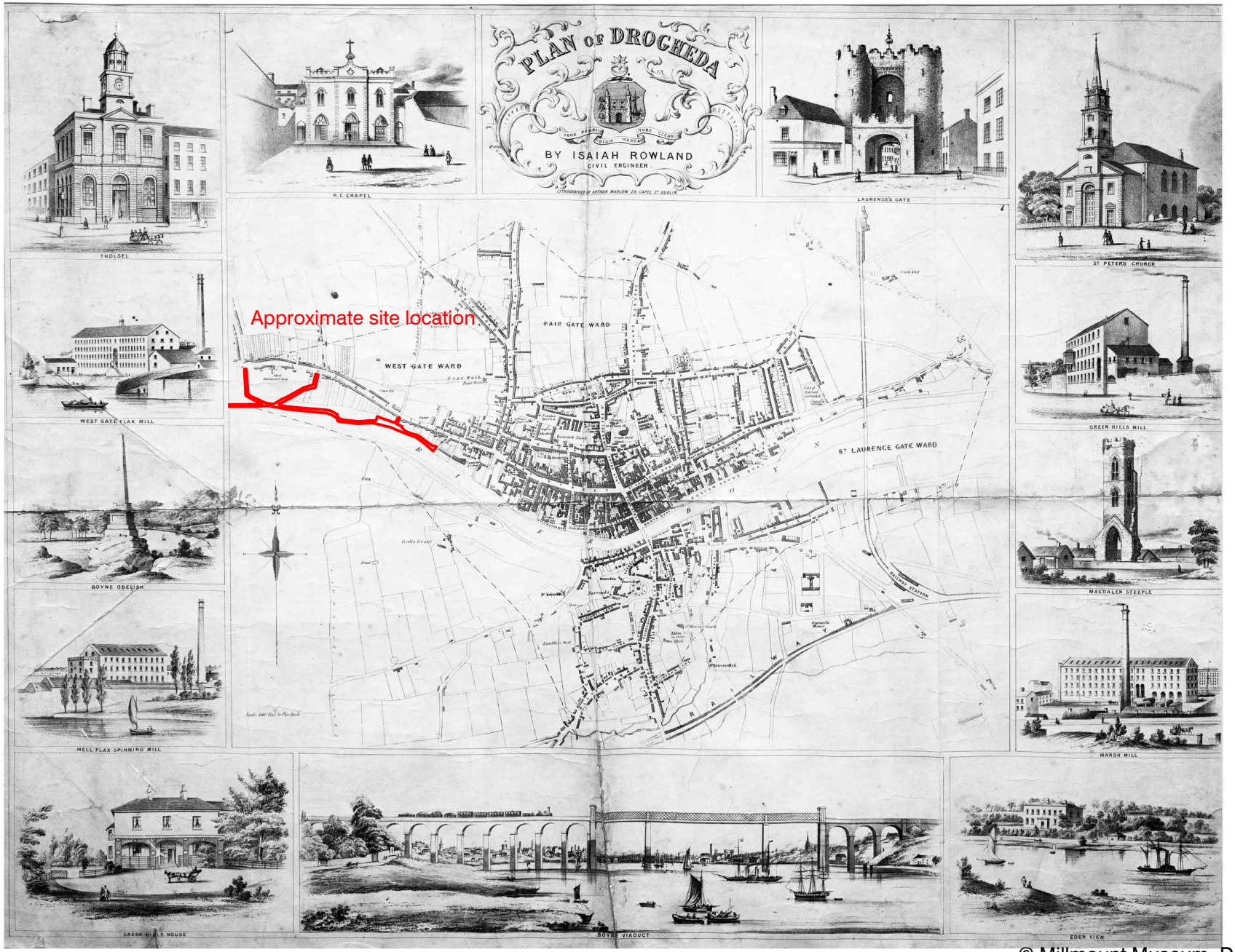
Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0004	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 4 View of Drogheda from Millmount, looking west by Gabriele Ricciardelli (1753-8)		**Scale** Not to scale	

Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0005	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 5 Extract from Plot of the town of Drogheda by Robert Newcomen (1657) - from Historic Town Atlas 2019, showing approximate location of site		**Scale** Not to scale	

Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0006	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 6 Extract from *A topographical map of the county of Louth* by Matthew Wren (1766) - from Historic Town Atlas 2019, showing approximate location of site		**Scale** Not to scale	



Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0007	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 7 Extract from Map of the town and county of Drogheda by George Taylor and Andrew Skinner (1778) - from Historic Town Atlas 2019, showing approximate location of site		**Scale** Not to scale	



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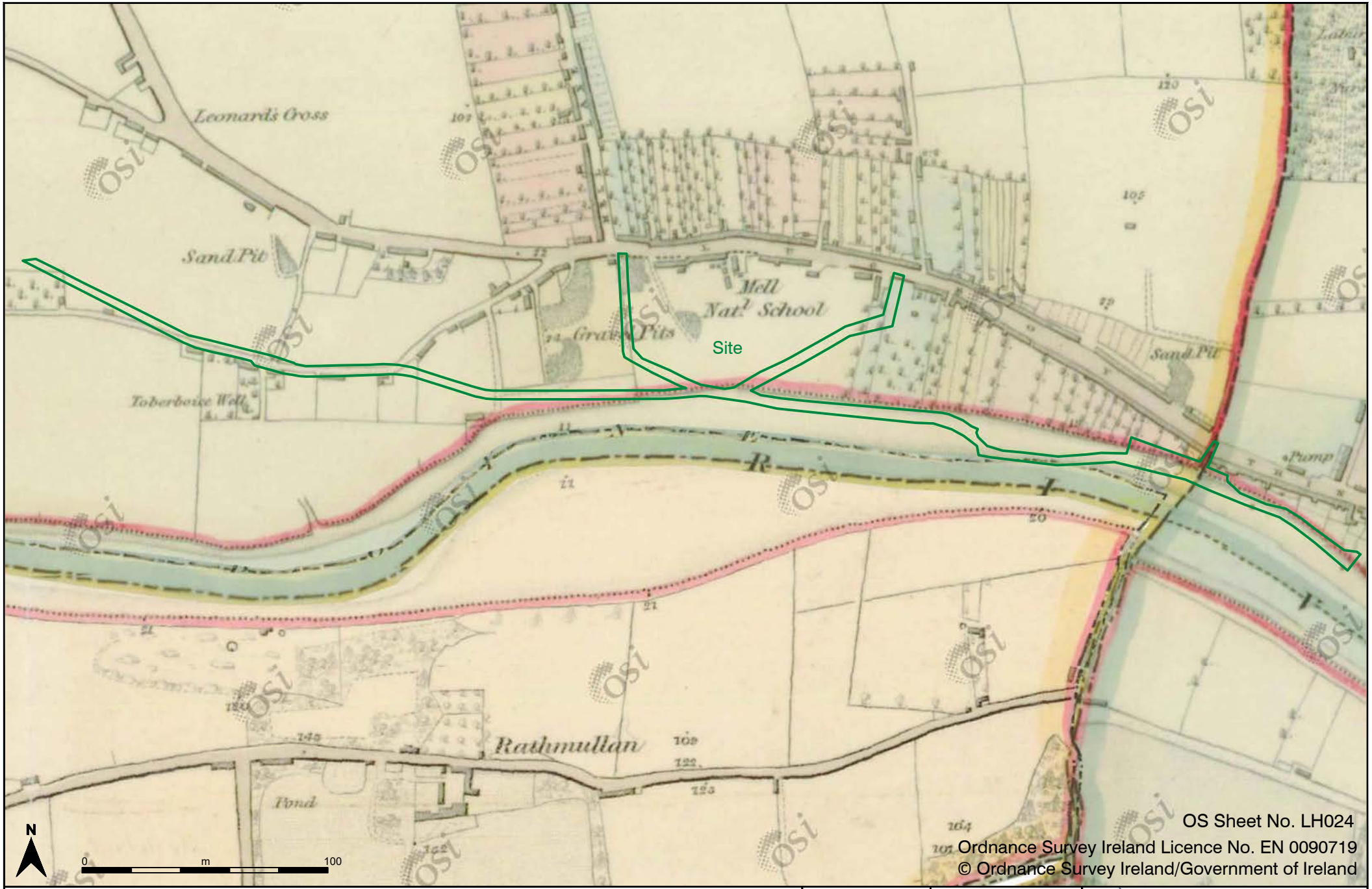
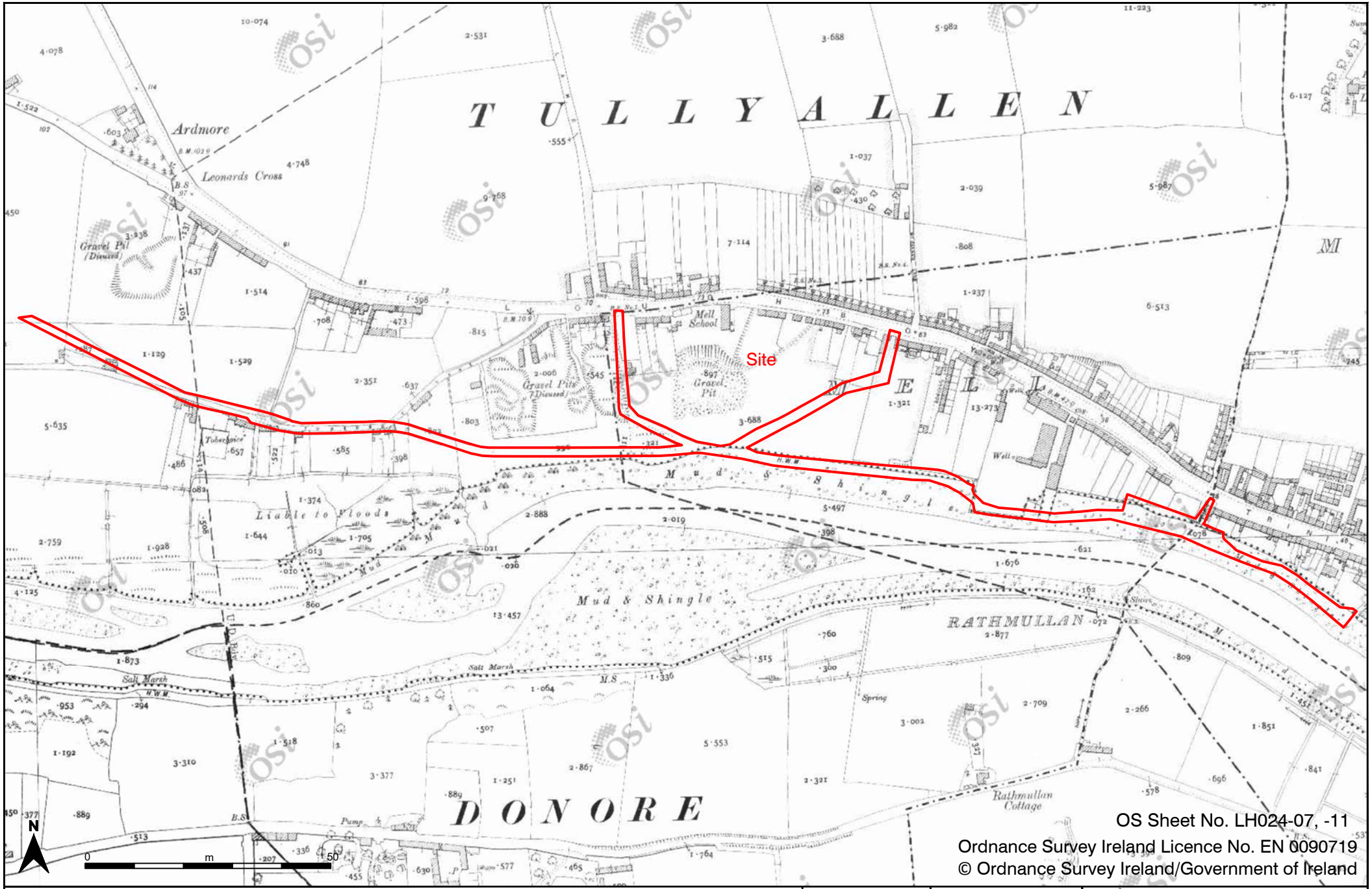
Project Boyne Greenway		**Date** October 2022	**Drawing No.** 22111_C0008
Figure 8 *Plan of Drogheda* by Isaiah Rowland (1855) - from Historic Town Atlas 2019, showing approximate location of site			**Scale** Not to scale

ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT

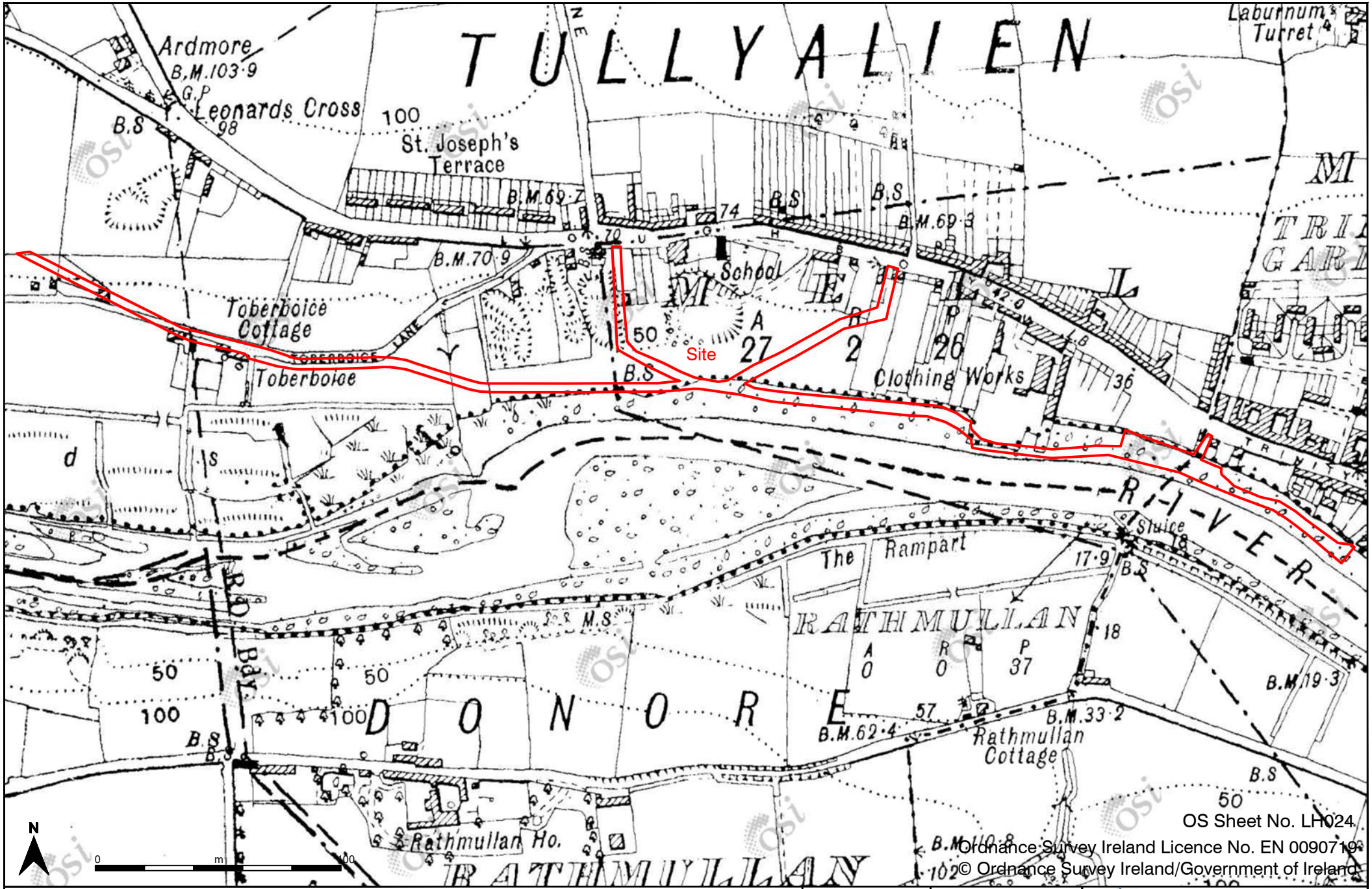


Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0009	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 9 Extract from 1st edition Ordnance Survey (OS) 6-inch map (surveyed 1834 - published 1836), showing location of site		**Scale** 1:4,500 @ A4	

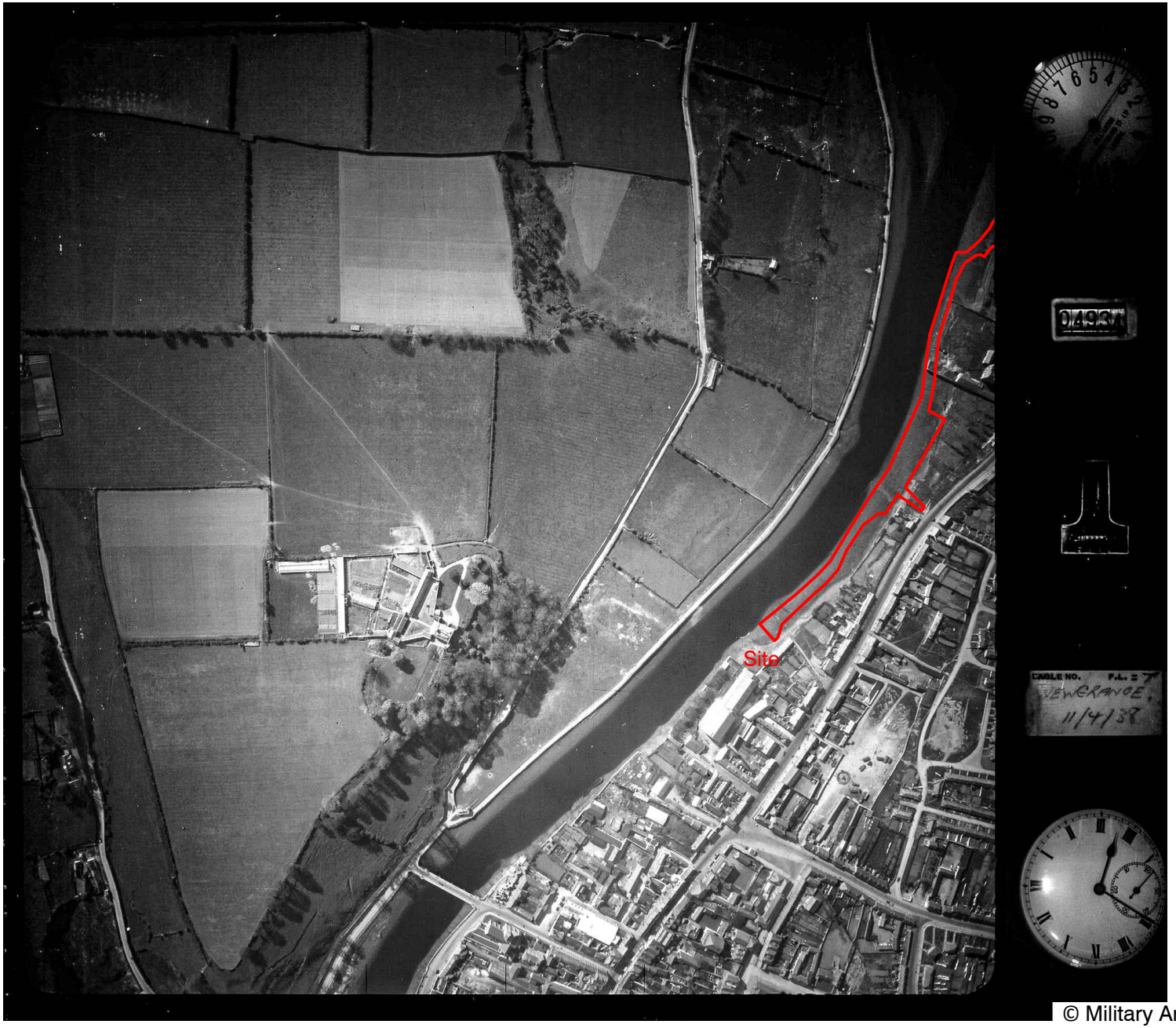


OS Sheet No. LH024-07, -11

Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0010	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 10 Extract from 3rd edition Ordnance Survey (OS) 25-inch map (surveyed 1907 - published 1910), showing location of site		**Scale** 1:4,500 @ A4	



Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0011	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 11 Extract from Cassini edition Ordnance Survey (OS) 6-inch map (1938-39), showing location of site		**Scale** 1:4,500 @ A4	



Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0012	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 12 Extract from Air Corps vertical aerial photograph - IE-MA-ACVN-P12-V38-04934 (1938), showing location of site		**Scale** Not to scale	

Project Boyne Greenway	**Date** October 2022	**Drawing No.** 22111_C0013	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 13 Aerial view of site		**Scale** 1:4,500 @ A4	

Plate 1: General view of existing path looking west from Horse Lane.

Plate 2: General view of existing path looking east.

Plate 3: General view of existing path looking east towards town centre.

Plate 4: General view of existing path looking west.

Plate 5: Existing path looking east along river bank.

Plate 6: General view of existing path looking northwest. A portion of the proposed path turns left at this point.

Plate 7: Existing path looking northeast along river bank.

Plate 8: Existing path looking northeast.

Plate 9: Existing path from river bank to Mell looking northeast.

Plate 10: Existing path from Mell looking southeast.

Plate 11: Existing paths looking northeast towards Mell.

Plate 12: Site of proposed path looking west through greenfield.

Plate 13: Proposed path at Toberboice Lane looking southeast.

Plate 14: Proposed path at Toberboice Lane looking east.

Plate 15: General view of Toberboice Lane looking west.

Plate 16: General view of Toberboice Lane looking east.

Plate 17: General view of landscape west of Toberboice Lane.

Plate 18: Existing ruined structure looking northwest.

Plate 19: Site of proposed path looking northwest.

Plate 20: Toberboice Lane looking east.

Plate 21: General view of ruined structure looking northwest.

Plate 22: Site of proposed path to Boyne Lodge looking west.

Plate 23: Toberboice Lane and site of recorded monuments looking south-east.

Plate 24: Site of proposed path looking west behind ruined structure.