Application for Approval in Accordance with Section 177AE of Planning and Development Act 2000 (as Amended) for

'Nore River Facilities Kilkenny'

Prepared by

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For

Kilkenny County Council



Kilkenny County Council

Comhairle Chontae Chill Chainnigh

Ailtirí ARCHITECTS

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1. INTRODUCTION AND BACKGROUND

The proposed development consists of the provision of a water sports activity centre and associated public realm development on existing lands currently used as car parking facilities, commissioned by Kilkenny County Council, as part of the Platform for Growth scheme, under Fáilte Ireland. Platform for Growth is a scheme under Fáilte Ireland with the aim to support the development of shared facilities at waterways in the Republic of Ireland through the provision of funding. The funding is made available to County Councils only. A shortlist of 136 potential locations was whittled to a shortlist of 20 locations including Kilkenny.

The Facility Centres are typically on or adjacent to Blue Flag Beaches or Green Coast accredited sites. Three additional inland sites were also identified as accredited Blueway sites / well established water sports destinations - Kilkenny being one of them. It boats already established riverbend adventures - boat trips, kayaking, canoeing, stand-up paddle boarding and dragon boat clubs and activities. It was selected as a site for investment with an existing culture of water sports and potential future Blueway. (See Volume 1, Section 8.4 of the current Kilkenny City & County Development Plan). Please refer also to *the Platforms for Growth – A Programme for Tourism Investment 2019-2025 (Failte Ireland) at Appendix O.*

The intention is to consolidate existing tourism offerings and elevate the appeal of the area by providing adequate facilities. The Failte Ireland funding is supported by detailed design specifications and additional supports; however, each site has potential for site specific alterations/additions as deemed necessary by the individual Local Authorities. The scheme is guided also by the County Development Plan, National Tourism Policy and the Kilkenny Tourism Strategy.

Kenneth Hennessy Architects Ltd (now trading as Ailtirí Architects) were commissioned in late 2022-early 2023 to deliver a water sports activity centre on an urban site within the grounds of the Civic Offices along John Street in Kilkenny City Centre. The site, currently in use as a car park with a small maintenance store, lies adjacent to the River Nore across the river from Kilkenny Castle. Planning design for this project is now complete, with this report forming part of the Application by Kilkenny County Council to An Bord Pleanála. Approval is sought for this development in accordance with the procedure outlined in Article 249 of the Planning and Development Regulations 2000 (as amended) and Section 177AE of the Planning and Development Act 2000 (as amended).

The proposed scheme represents an opportunity to revitalise an under-utilised, river-adjacent site within the city, and to ensure that it provides suitable and accessible facilities for all. The proposed facility will create a safe place for people to sit and enjoy, engage in river-based activities, as well as pass through, with the potential for the facility to be used for community events and activities. By simply occupying the space and promoting a vibrant culture adjacent to the water, it is envisaged that any potential for anti-social behaviour can be mitigated, and the facility users can feel safe. In addition, the buildings, including covered exterior spaces, will be secured after hours to prevent loitering in these areas. The whole area will be CCTV monitored and adequately lit without negative impact upon flora/fauna along the riverbank. A condition of the Failte Ireland – Platforms for Growth Scheme is that the Local Authority enters into a Management Agreement to maintain ongoing upkeep, cleaning, maintenance and repair of the facility where necessary. See Appendix O – Platforms for Growth – A Programme for Tourism Investment by Failte Ireland, for further details.



Figure 1 – Existing site within council carpark area. Maintenance store to left for demolition to accommodate new scheme



Figure 2 – Existing flood defence berm (right) & grasscrete access road alongside carpark. View looking towards Maudlin St.



Figure 3 – View of proposed site within existing carpark area looking towards County Hall and Johns Street.

2. OBJECTIVES AND CONSTRAINTS.

The key objectives of the proposed development are as follows;

- To create a river facilities centre for Kilkenny to support community, recreational and commercial activities, thereby boosting tourism in the area,
- To create a renewed connection between the city and the River Nore for the local community and visitors to the area,
- To develop a currently under-utilised, river-adjacent site and maximise its potential as an amenity for the community,
- To provide storage space, changing, training and meeting facilities for local clubs and groups,
- To provide facilities such as accessible bathrooms and outdoor seating areas which will have a positive impact on the city and enhance its appeal as a destination for the local community and visitors alike.

The key constraints to the development were identified as follows.

- The site is bounded by a Special Area of Conservation (SAC 002162) as well as a Special Protection Area (SPA 004233),
- Possible flood risk considerations and the proximity of the site to an existing OPW flood risk mitigating measure - The site is located within the OPW 1/1000-year flood zone mapping. A site-specific Flood Risk Assessment report has been prepared and is presented in Appendix E.
- There is a Zone of Notification on the banks of the River Nore associated with a historic Dovecote, in close proximity to where a floating pontoon is proposed,
- Proximity of the development to historic city wall line – addressed within Appendix L – Archaeological Desktop Assessment
- Vehicular access requirements, including access for deliveries and emergency services, turning area for canoe/kayak/rowing boat/dragon boat loading and unloading,
- Existing infrastructure within the site, such as buried fibre internet cable,
- Existing trees foliage within the site. Insofar as possible the design was developed to minimize disruption to existing vegetation, but some is to be removed*
- Constraints with falls of existing storm / foul drainage and distance to shared system
- The site is in close proximity to an existing car park to the north-east, and a vehicular access route to the River Court Hotel running along the south-eastern boundary of the site.
- Maintaining existing walkers route atop the existing berm
-

*Note: 20 number mature trees within the lands have been identified within Appendix E of the Kilkenny City & Environs Development plan. None of the trees identified within are proposed for removal as part of these works. As per the EcIA the trees being removed are willow, which have low to negligible roost potential for bats. No roosting was identified within the trees being removed. See image overleaf plotting the approximate location of the trees identified within Appendix E of the Development Plan cited above.

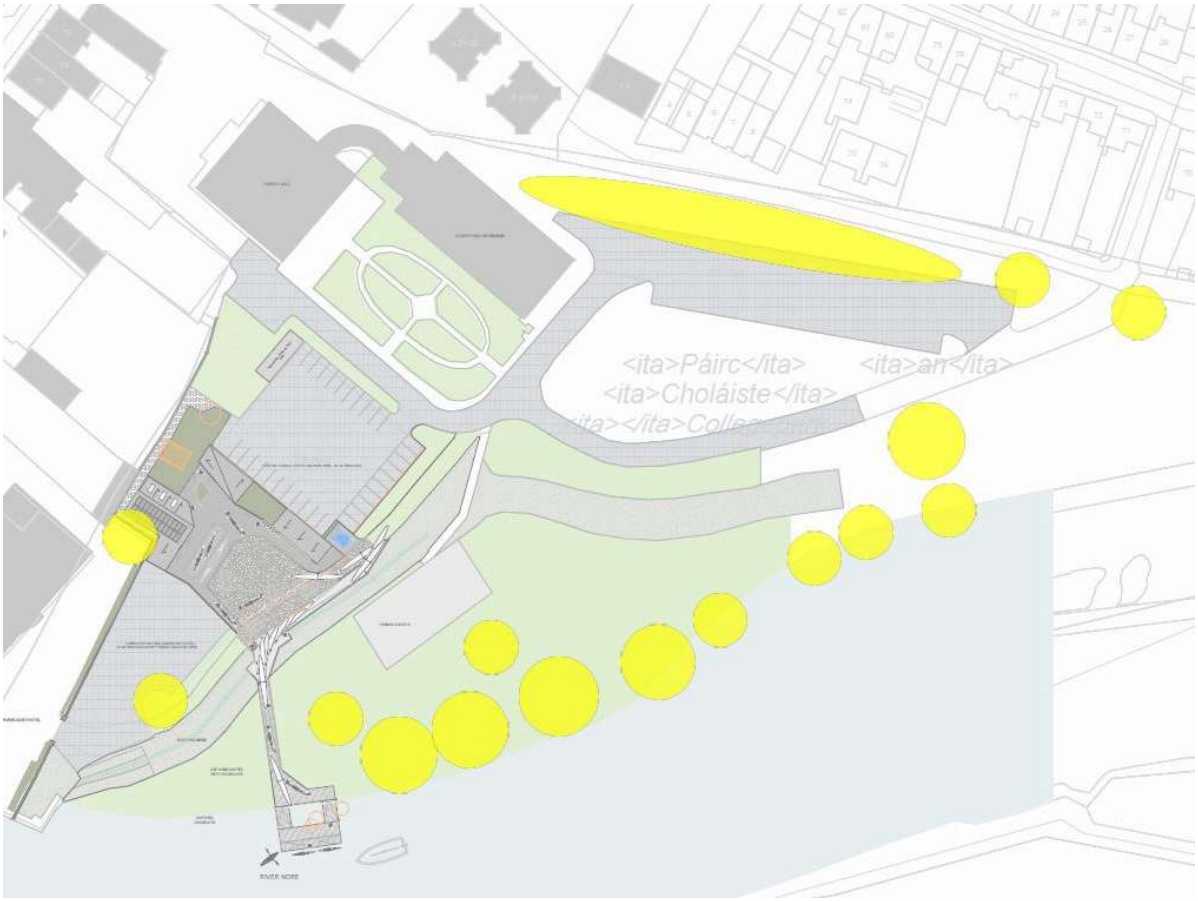


Figure 4: Proposed Site Location – Aerial View (Google Maps April 2024)

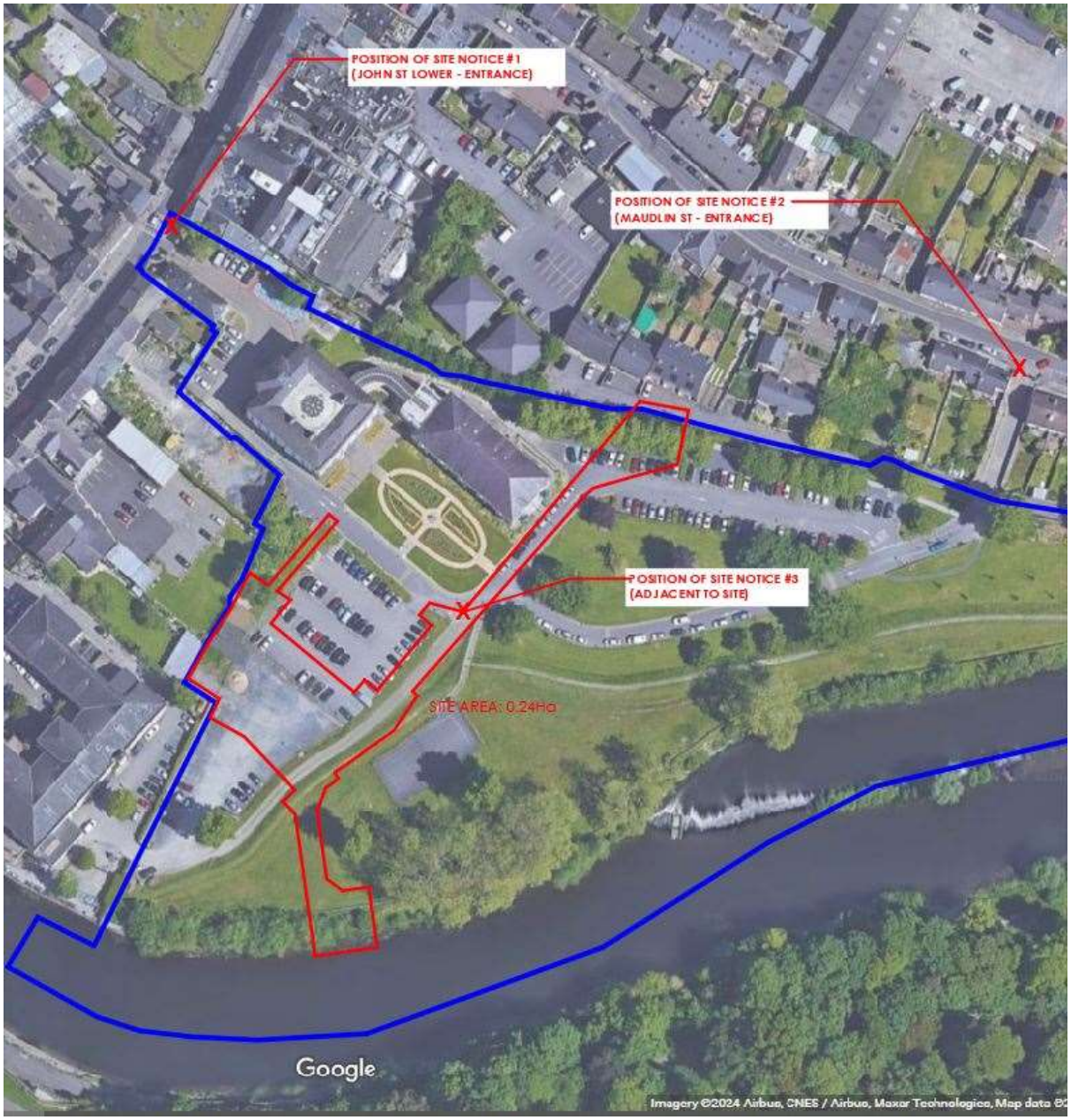


Figure 5: Proposed Site Location – Aerial View (Google Maps April 2024)

3. DESCRIPTION OF PROPOSED DEVELOPMENT

As outlined previously, the primary objective of the proposed development is to maximise the potential of a river-adjacent site, and to create a river facilities centre for the local community and visitors alike.

The site for the proposed development is currently used as a surface car park, and presents a challenge in its separation from the River Nore, and the existence of an OPW flood relief berm bisecting the access route to the river. Responding to the geometry of the site, the proposed building is in an 'L'-shape configuration, and is divided into 3 different volumes, each with unique functions: community, facilities, and storage. Additionally, a gently sloped path is proposed up and over the existing flood relief berm, allowing pedestrians whether ambulant or not, access to a proposed pontoon on the banks of the River Nore. This route has been auto tracked with a dragon boat to ensure it is fit for purpose. The pontoon is secured on piles and able to move up and down with the rivers water level.

Works comprise of the following as outlined in the public notices:

• Construction of a riverside facilities centre comprising the following;

a) Demolition of an existing single-storey maintenance store,
b) Removal of selected on-site vegetation to facilitate the works,
c) Single-storey facilities block with a flat, intensive green roof build-up, containing toilets, universally accessible bathroom, changing places facility, showering / changing cubicles, cleaner's store, outdoor showers, an external plant area, storage lockers, wash trough, and a drying room,
d) Single-storey adjoining community block with an asymmetrical pitched roof containing a community room, associated kitchenette, and a plant room / central information point,
e) Adjoining external covered terrace area with a flat intensive green roof build-up,
f) A single-storey storage block with an asymmetrical pitched roof containing equipment storage, a dragon-boat / rowing boat storage, and a maintenance store,
g) A single-storey adjoining block with a mono-pitched roof containing a boat / general storage area,
h) A hard landscaped pedestrian central space with raised central planter / seating, planted areas, boat wash-down area and associated surface water UV filtration system,
i) Proposed shared surface including a central set-down / vehicular turning area for boat loading / unloading and pedestrian use generally,
j) Access route to river over berm comprising a sloped access path with associated retaining wall, steps, landings, balustrading, and associated handrails,
k) Raised walkway from top of berm to pontoon with associated balustrading / handrails,
l) Part fixed / part floating access pontoon within the river,
m) Site services connections and drainage works including connection to existing public foul and stormwater system,
n) Universally accessible parking bay and covered bicycle parking area,
o) Public lighting to all pedestrian / vehicular / parking areas,
p) All necessary landscaping, site boundary and site development works.

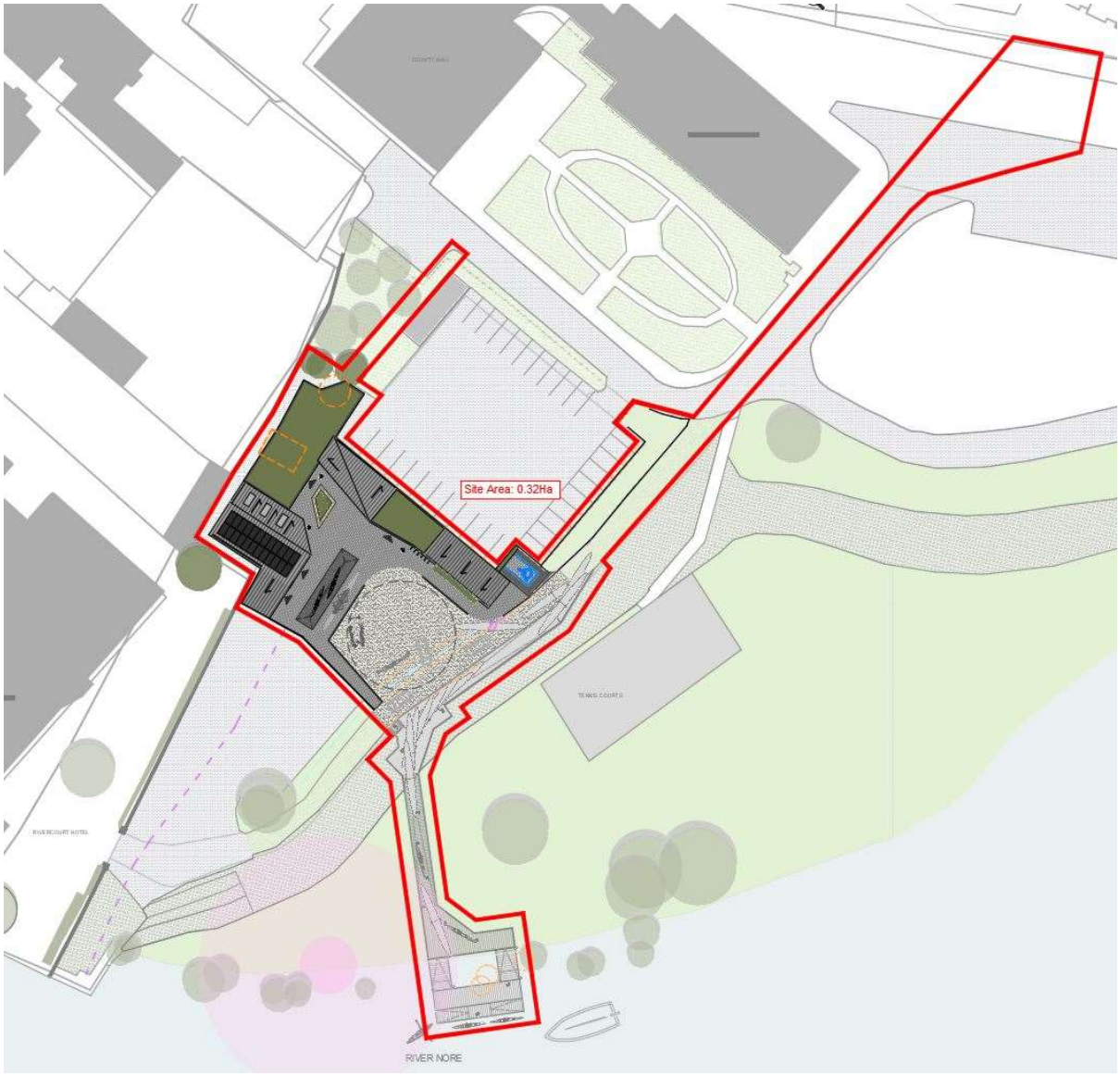


Figure 6: Proposed Site Layout Plan (Ailtirí Architects)

Main Building & Associated Site Works;

As outlined above, the main building of the proposed development is in an 'L' – shape configuration, and is divided into 3 functions; community, facilities, and storage. The overall building is single-storey in nature, with increased ceiling heights in the community and storage areas. The building has a mix of flat-roofs, mono-pitched roofs, and asymmetrical roof sections to delineate the separate functions. Externally, the building finishes include fair-faced concrete walls, accoya timber rainscreen cladding installed in a vertical fashion, select areas of weathered steel and a combination of green roofs and standing seam aluminium in a muted colour. The community section contains a community room and an external covered terrace, defining a key social space.

The community room is finished externally with vertical accoya rainscreen cladding, a fair-faced concrete plinth, and an asymmetrical roof section in a dark grey, standing-seam metal finish. The covered terrace has a fair-faced concrete finish, and a flat roof over with an intensive green roof. Tucked into the

community block is a centrally located plant room and an information display point. This is visible to all users and may highlight important rules governing water safety, building use, hygiene etc.

The facilities section of the building provides toilets, a universally accessible W/C, a Changing Places Facility in accordance with TGD M 2022, shower and changing facilities, outdoor showers, washdown area, storage lockers, and a drying room. The facilities section is externally finished with fair-faced concrete and has a flat roof over with an intensive green roof build-up. The green roofs will also be used for rainwater attenuation – Refer to the Engineers drawings and report for further details (Appendix A and D respectively)

Finally, the storage portion of the scheme comprises sloped volumes with high level north facing light only, for the storage of equipment, dragon-boats, a maintenance store and a general storage area. These areas boast asymmetrical roofs with a standing-seam metal finish in a dark grey colour. The external walls are finished in vertical accoya rainscreen cladding, with a fair-faced concrete plinth. Access doors to the storage section are finished in weathered 'corten' steel or similar.

Finally, a central space is anchored with the addition of a raised planter/ seating area in accoya and cast concrete with discreet drainage channels throughout in stainless steel. Limestone is envisaged for the public realm with a variety of sizes and finishes delineating the specific use, such as the washdown area or universal access parking bay. Refer to the landscaping plan/report at Appendix C for details.

These materials have been chosen not only for their aesthetic qualities and durability, but also to maintain a consistent material palette, giving brand identity to all water-based activity centres that have been developed by Fáilte Ireland.

Proposed Pontoon

A proposed pontoon is located to the south of the proposed building, on the banks of the River Nore, allowing for improved access to the river, to engage in river-based activities. This proposed pontoon will have a upper fixed portion, and a lower portion floating on the river, restrained with a series of piles. This will allow it to respond to the changing water levels within the river during the year.

The pontoon will be a steel framed structure supported on piles with a fibre-cement board finish providing a low maintenance slip resistant finish. The walkway to it is of a similar construction on pad footings and will have negligible impact both aesthetically and environmentally upon the landscape. Refer to the Engineers Report at Appendix D and the Construction Environment Management Plan within Appendix J for more information on construction methods and mitigation.

As outlined previously, it is located within a Zone of Notification associated with a historic dove cote to the west but has been located approximately eleven metres from the dovecote as positioned per NIAH reference. Refer to the Architects Proposed Site Plan drawing – 2257-P-1001 within Appendix A for details. A 10m buffer zone is identified as the industry standard within the Archaeological Desktop Assessment and has been observed here. Please refer to the report within Appendix L for further details. The dovecote was previously uncovered, and its location accurately recorded. See images overleaf of excavations carried out by Ian Doyle circa 2003.

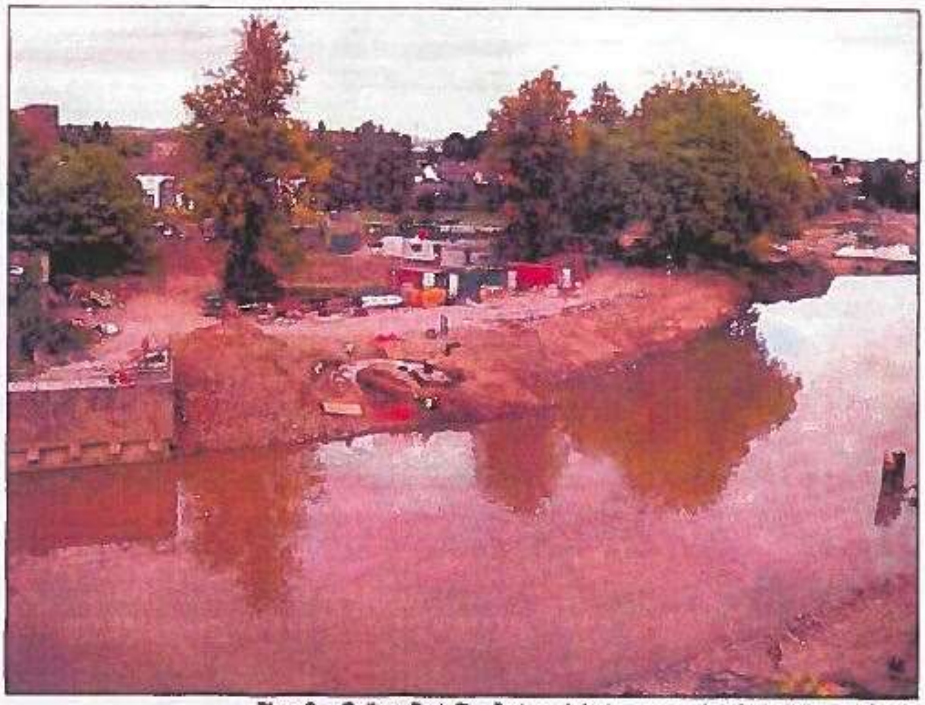


Plate 9 College Park Site B viewed during excavation from Kilkenny Castle



Plate 10 College Park Site B viewed after excavation from the north

Figure 7: Images of dovecote excavations circa 2003 by Ian Doyle taken from NIAH (cited below)

(NIAH Ref: Doyle, I.W. and O'Meara, B. 2004 River Nore (Kilkenny City) drainage scheme archaeological excavations at John's Quay/Mayor's Walk and College Park, Kilkenny 2003, 01E0821. Unpublished report. Margaret Gowen and Co Ltd.)

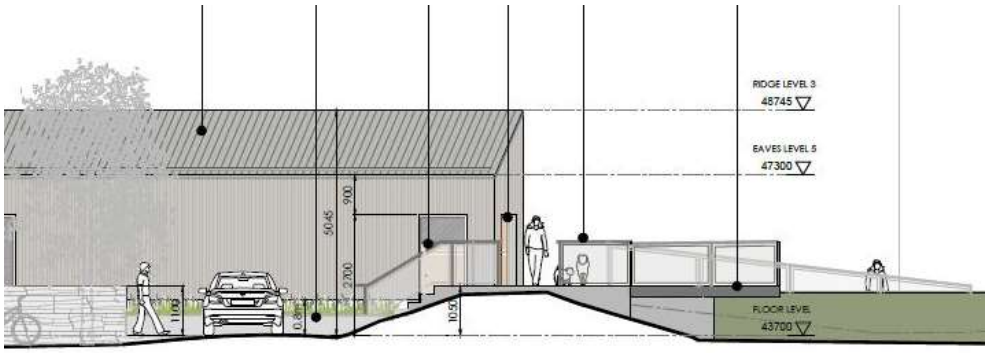
Access Ramp

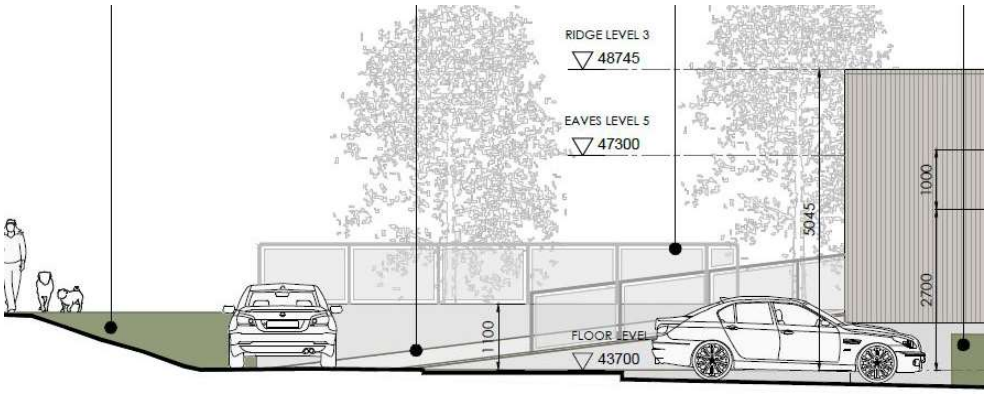
A gently sloping path is proposed to navigate up and over the exiting flood relief berm and traverse the level changes without diminishing the OPW flood defences. This berm provides much needed flood relief mitigating measures, with the area not recording any flooding since they were carried approximately twenty years ago. Refer to the Site-Specific Flood Risk Assessment in Appendix E for further details. Careful design consideration taken with the approach to negotiate the level differences, without compromising the functionality of the berm.

The proposed solution is to create an in-situ fair-faced concrete path, including edge protection, that runs parallel to the berm and rises to a height just above the top of the berm, where it levels off to merge with the existing walker's path, then a second leg leads from there down to the pontoon at the waters edge. The maximum pitch of these paths has been kept to 1:21 for ease of use. A retaining wall maintains the structural integrity of the berm on the inside edge with a glass / stainless steel balustrading on the open edges meeting the requirements of TGD K and M respectively. The material and construction of the walkways are covered elsewhere in this report. Please refer to the Engineers report within Appendix D for further details relating to the berm.

The ramp and landing area are oversized to allow for the transport of Dragon boats etc to and from the water as indicated on the architects site drawing within Appendix A – Proposed Site Layout 2257-P-1003-P01. A flight of TGD M compliant steps was incorporated into the design of the proposed landing coinciding with pedestrian desire lines.

Figures 8/9: Excerpts form Architects Elevation/Section drawings indicating the proposed walkway and steps over the berm





The proposed works to the existing berm were the subject of a separate Section 09 Application, made directly to the OPW. The works outlined above were approved with conditions. A written record of this consent from the OPW can be found at Appendix M.

4. DESIGN PROCESS

Introduction / Design Team

The design proposals for the Nore River Facilities Kilkenny have been developed by a multidisciplinary design team and additional consultants, consisting of the following:

- Architectural input from Ailtirí Architects.
- Engineering & Flood Impact Assessment input from DRA Consulting Engineers.
- Ecological and Environmental input from Ross Swift Ecology Ltd.
- Landscape design input from Cathal O'Meara Landscape Architects.
- Mechanical & Electrical Engineering input from Ronan Meally Consulting Engineers Ltd.
- Archaeological input from John Cronin & Associates.

The development of the design has been guided by all relevant directorates within Kilkenny County Council, in particular Ken Boland, a Senior Executive Engineer, with ties to local water based clubs, who has been central to the development of the brief and scheme design on behalf of Kilkenny County Council. He provided essential in-depth knowledge of the clubs and activities in the area and the River Nore itself helping to facilitate a public consultation process. This was undertaken at initial design stage, allowing us to take on board input from various stakeholders, local clubs, community groups, members and water enthusiasts.

The facilities block was closely developed alongside Failte Ireland and their Platforms for Growth Facility Centres for Water Sports Activities Guidelines, in addition to their updated exemplar and specification. This was adapted as necessary to accommodate the numerous constraints of a site within an inland urban area. The ethos of the Platforms For Growth has been maintained and the identity of the scheme synonymous with other Failte Ireland water facilities by maintaining the material palette and ultimately offering the same services within.

Consultation

A comprehensive public consultation process was undertaken by the design team leader in conjunction with Kilkenny County Council. Active groups and interested parties from the area were invited to a presentation and discussion on the scheme in March of 2023. Kilkenny Recreation & Sports Partnership compiled a contact list and promoted the event via their own channel. Interested parties were invited to a public consultation evening on Wednesday 01st February 2023 at 7.30pm. The evening was hosted in the Rivercourt Hotel adjacent to the site, with approximately 50 persons in attendance. These were a combination of local club members, residents, water safety and council staff predominantly.

Here, they were each given the opportunity to voice concern/requests for facilities to be provided within the Centre. This data was recorded and fed into a matrix to help inform the project brief. (See Figures 4 and 5 below). Follow up meetings were arranged with a member of each club/party that expressed interest at the open consultation evening. The information offered by these clubs/community groups/commercial interests helped to define the project brief and ultimate programme. See excerpt below indicating the schedule of accommodation compiled at design stage following the initial consultation period.

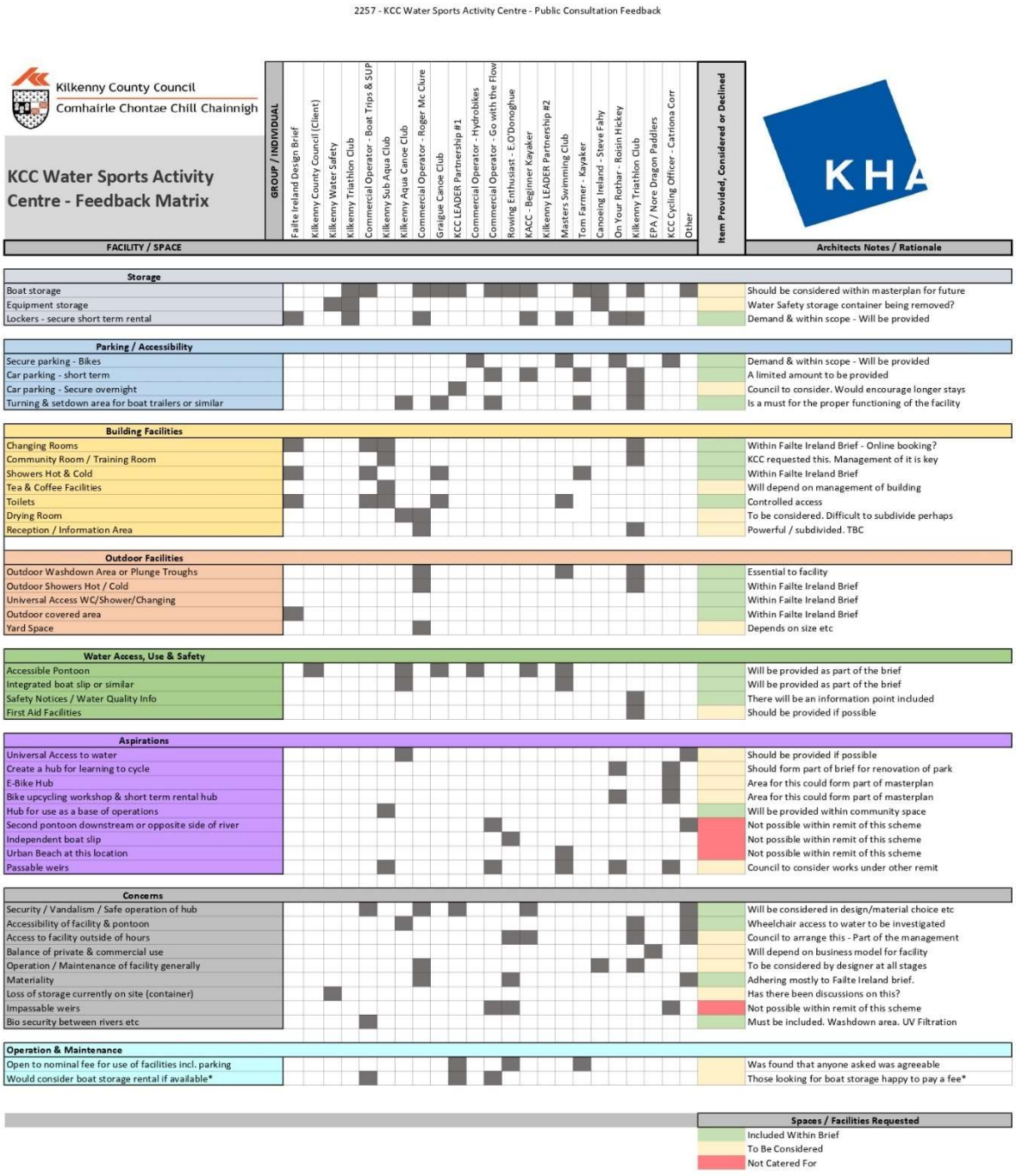


Figure 10: Public Consultation Matrix (Ailtirí Architects)

Schedule of Accommodation for KCC Water Sports Activity Centre — **04-Apr-23**

Ref	Item	No.	Area M²	Total Sqm	Comments
	HUB BUILDING - MAIN BLOCK				
1.1	Changing / Shower Room - Combined	6	2	12	Guidance on how many to cater for. Failte Ireland?
1.2	Community Room & Draught Lobby	1	45	45	Flexible indoor space - Open to outdoor covered area / terrace
1.3	Kitchenette*	1	2	2	Adjoining the community space / access via hatch also?
1.4	Toilets - Unisex	4	2	8	Individually accessed. No lobbies as per FI brief
1.5	Universal Access WC / Changing / Shower	1	8	8	Easily Accessible / Centrally located
1.6	Reception / Information Area	1	1	1	Easily visible by all / Adjacent entrance
1.7	Drying Room*	1	10	10	TBC - Pending scale of building etc
1.8	Secure Locker Area	20	0.1	2	Close proximity to dining area / lobbied.
1.9	First Aid Facilities	1	0.0	-	No room required. Defibrilator location TBC & First Aid Kit Stored
1.10	Plant Room	1	6.0	6	Centrally located but discreet. Management access only
1.11	Cleaners Store	1	1.0	1	Discreet but secure. Management access only
				95	
	OUTDOOR FACILITIES - COVERED OR ADJOINING HUB				
2.1	Outdoor Washdown Area or Plunge Troughs	1	2	2	Open plan - machines/weights along perimeter
2.2	Outdoor Showers - Cold	4	1	4	Not enclosed. Screen from wind. For people in wetsuit or similar
2.3	Outdoor covered area	1	24	24	For induction lessons etc before entering water
2.4	Yard Area for washdown of boats etc	1	20	20	Needs to be adjoining building / well drained / pedestrian only
				50	
	WATER ACCESS / USE & SAFETY				
3.1	Accessible Pontoon with slip incorporated	1	30	30	Modular - 3x2m modules x 5
3.2	Safety Notices / First Aid Facilities	1	0.0	-	Need to be clearly visible / Adjacent to pontoon
3.3	Walkway created to slip through berm	1	30	30	Contends with changes of level & flood risk. Route & Size TBC
3.4	Boat Slip for launching Dragon Boats	1	15	15	Contends with changes of level & flood risk. Route & Size TBC
				75	**Not included in overall area figures below**
	STORAGE - TO BE CONFIRMED WITH KCC				
4.1	Boat Storage Containers*	2	30	60	Consider hardstand area for container storage or future build?
4.2	Equipment Storage*	1	30	30	Kilkenny Water Safety seeking container on site. TBC
4.3	KCC Maintenance Store	1	15	20	For items currently in the shed on site being demolished
4.4	Secure Storage - Future Bicycle Hub by KCC*	1	50	50	Locate on masterplan / Help design / In area of previous shelter
				160	
	PARKING / ACCESSIBILITY				
5.1	Short term parking area	6	12.5	75	Number of spaces TBA with KCC. Need to see how many lost*
5.2	Covered Bicycle Parking	1	15	15	Location TBC. Directly accessible from path / building
5.3	E-Bike Charging Hub*	1	10	10	Location TBC. Easily accessible for all. Liaise Caitriona KCC
5.3	Car/Boat Trailer Turning & Unloading Area	1	60	60	Exact Location & Layout TBC
				160	**Not included in overall area figures below**
	Total Facilities (ex. circulation)			**305**	
	Circulation / Wall Thickness 5%			**15**	Note: Circulation area envisaged to be external & unheated predominantly
	Total Floor Area (including external spaces)			**320**	

Notes:
Parking & Accessibility figures have not been added to area calculations
Items listed are provisional only & are subject to approval from Kilkenny County Council
Circulation factor of 5% is used as circulation will be external / allows only for wall thicknesses

Figure11: Accommodation Schedule developed after Public Consultation (Ailtirí Architects)

5. DESIGN STATEMENT

Introduction and Project Justification

Failte Irelands Platforms for Growth document outlines numerous National and Regional Policies relevant to Kilkenny, with the general objective to enhance tourism and leisure amenity to cater for a growing population and also promote active tourism. These policies and objectives (listed below) recognise the need for investment in order to draw additional tourism to regional areas, grow activity tourism and help bolster local economy, while utilising the countries natural assets such as its waterways.

Project Ireland 2040 National Planning Framework (NPF)

The above policy contains ten National Strategic Outcomes and 75 National Policy Objectives. These set out where investment should be directed in order to help shape the national, regional and local spatial development from a socio-economic and environmental standpoint:

Invest in and enable access to recreational facilities, including trails networks, designed and delivered with a strong emphasis on conservation, allowing the protection and preservation of our most fragile environments and providing a wellbeing benefit for all.

National Tourism Policy 2015: People, Place and Policy: Growing Tourism to 2025

Policy Proposal 1.3.3 states: The design of future supports for capital investment in tourism will recognise the need for investment in both physical assets and in other areas that provide a lasting improvement in the overall quality of the visitor experience.

The proposed development and schemes like it are critical to enhancing that visitor experience and provide a facility which meets and surpasses the users expectations, thereby implementing key national policy.

National Marine Planning Framework (NMPF)

This frameworks objectives are the development of marine based human activities. It is a key in policy making until 2040 for state and government departments, regulatory authorities alike where marine activities are concerned.

Policies such as the following promote the sustainable development of water-based sports and recreation, while enhancing wellbeing and always considering the environmental impact – Sports & Recreation Policy 1 / 4. In addition, access to our beaches and waterways is outlined on other proposals, including enhanced and inclusive public access subject to appropriate environmental measures and decision by competent authorities – Access Policy 2. The Tourism Policy 1 recognises that where appropriate the need to support proposals enabling the additional utilisation of existing assets, promoting sustainable tourism growth and usage beyond typical patterns.

Regional Spatial and Economic Strategy Southern Region

Kilkenny falls into the Strategic Planning Area (SPA) known as The South-East Planning Area. The proposed development is supported by the following Regional Policy Objective 53 –

a) *Enhance provision of tourism and leisure amenity to cater for increased population in the Region including recreation, entertainment, cultural, catering, accommodation, transport and water infrastructure inter alia;*
b) *Promote activity tourism subject to appropriate site selection and environmental assessment processes;*

Kilkenny City and County Development Plan (2021-2027) Volume 2 – City

Kilkenny Cities own development plan includes policies reiterating those above and initiatives to promote suitable development enhancing the user experience of its waterways.

Design Concept / Context

The design concept for the proposal developed in response to the geometry, location, and nature of the site, as well as the intended use of the facility. Community spaces are aligned along the public edge, with facilities and storage stacked along the back of the site, resulting in an 'L'-shaped configuration. A central open space with hard landscaping provides an area to traverse the scheme, move, clean, and store equipment and boats, and provide seating areas. 3 specific sections were identified in the scheme, namely Community, Facilities, and Storage. Subsequently, the concept and layout of the scheme was derived from the organisation of these specific uses. This is also expressed in the materiality and overall form of the scheme. Other site constraints that informed the design concept were the existing flood relief berm, the existing access road running along the eastern edge of the site, and the travel distance between the proposed facility, and the banks of the River Nore.

Site Location

The proposed site is located within the grounds of the County Hall, behind the Kilkenny River Court Hotel, along John Street, facing the northern banks of the River Nore. The existing surface car park to the north-east of the site, has a vehicular access route running north-east to south-west to access the rear of the River Court Hotel. Running parallel to this access route is an OPW flood relief measure, consisting of a berm, atop which is a pedestrian walking path. There is an existing tennis court to the eastern end of the site on the wet side of the berm accessed via an existing ramp/steps. Vehicular access to the site is possible from the east, through the entrance on Maudlin Street, and to the north by an access road off of John Street Lower, used to access the County Hall. Both entrances are restricted by barriers at certain times of the day. It is intended to retain this arrangement.

The site is located adjacent to the River Barrow and River Nore SAC (002162), as well as the River Nore SPA (004233). The River Nore SPA has been designated a Natura 2000 site under the Birds Directive. In addition, the River Nore SAC under the Habitats Directive is also classed as a Natura 2000 site. In acknowledgement of the ecological designations of the site and its environs, potential for additional disturbance to the natural environment cannot be underestimated and has been analysed in depth in this report and its appendices, particularly Appendix G – Natura Impact Statement (NIS).

Furthermore, the entirety of the site is located within the John Street Architectural Conservation Area, as outlined in the Kilkenny City and County Development Plan 2021-2027. This was taken into account when designing the building and choosing a material palette sensitive to the surrounding context, Kilkenny Castle, City Hall and its environs.

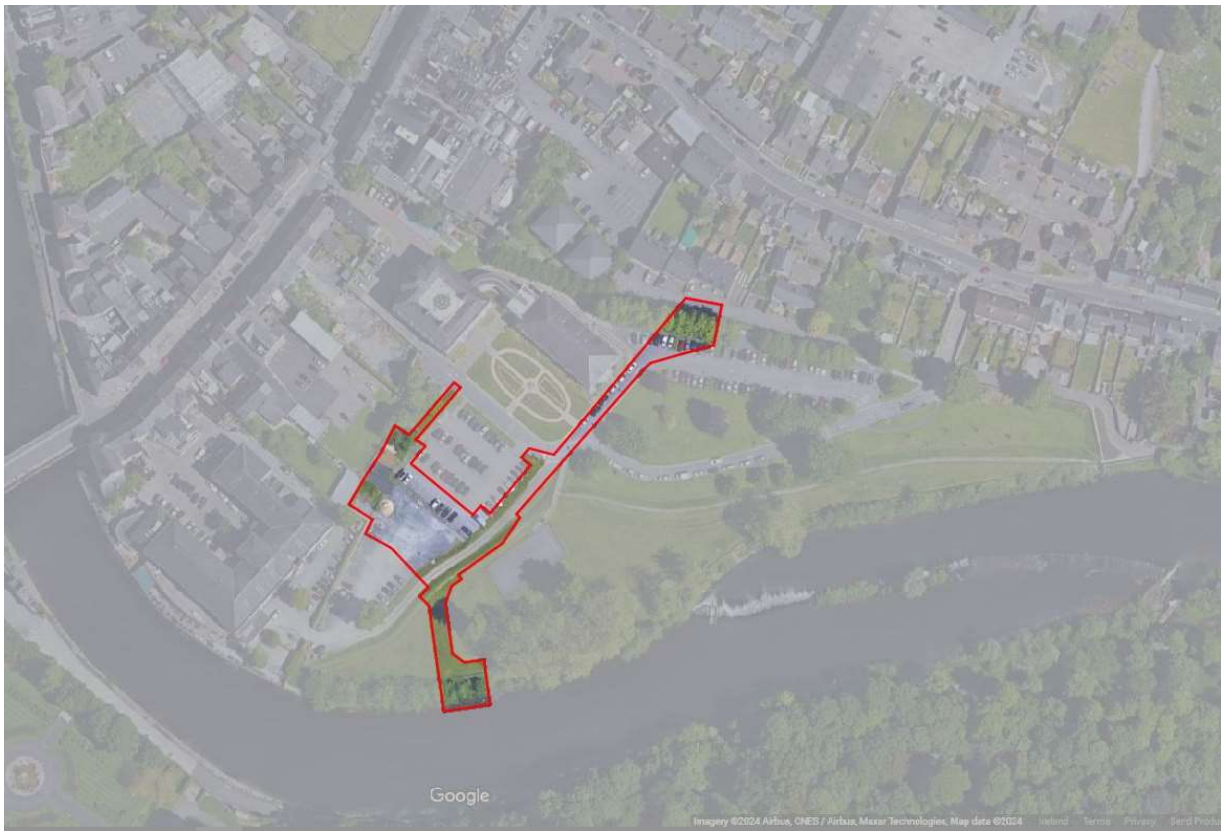


Figure 12: Site Location – Google maps image edited by author. Development site outlined in red

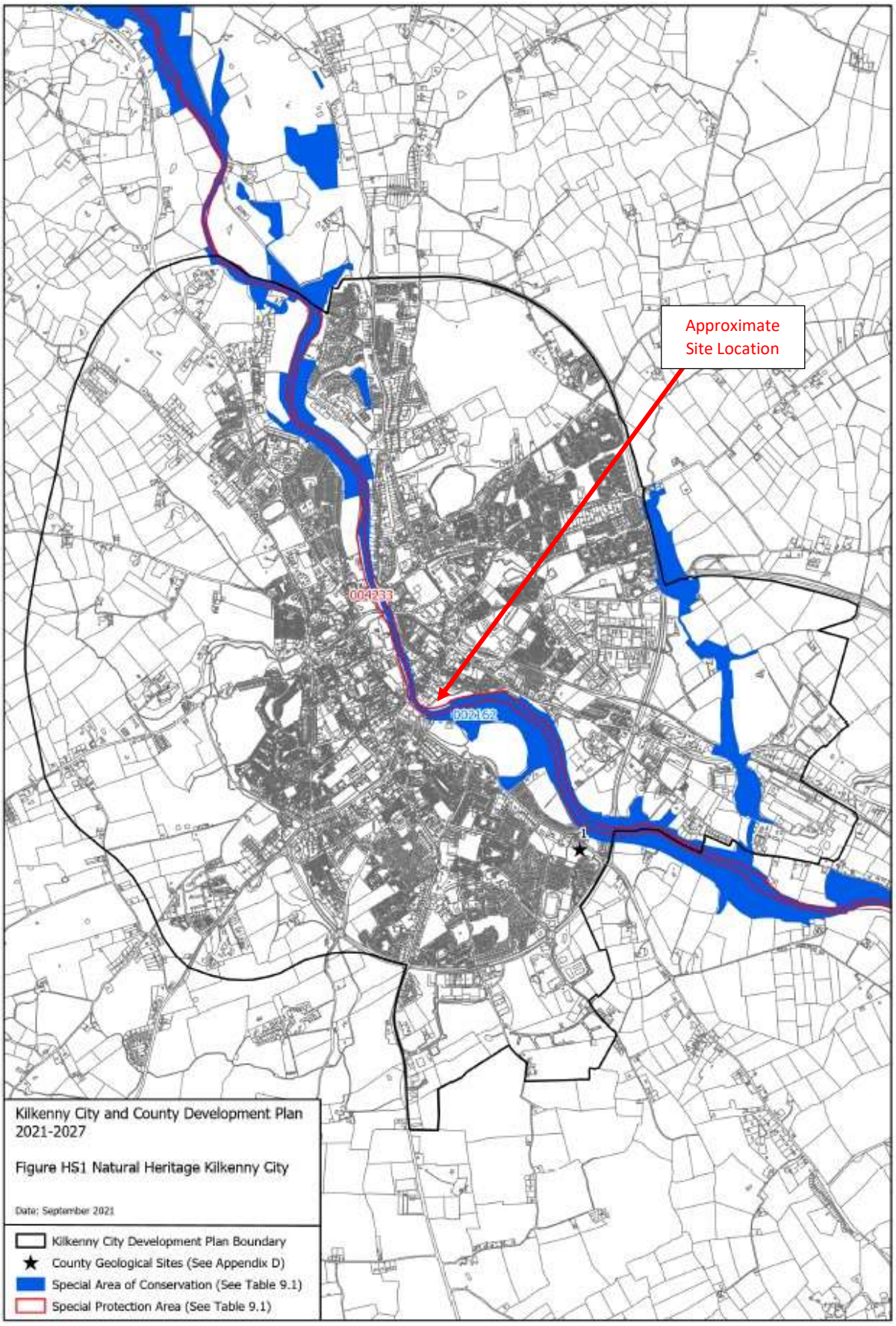


Figure 13: Site Location in relation to the River Nore SAC and SPA

6. PLANNING AND DEVELOPMENT

The likely consequences for proper planning and sustainable development on the development site, as well as Kilkenny City as a whole, will be addressed in this section.

The document referenced in this section will be the *Kilkenny City and County Development Plan 2021 – 2027 – Volumes 1 & 2*

Planning and Development Requirements

This section will deal with issues relating to site designation, parking, planning history, and general provisions of the Planning and Development Acts.

Site Zoning and Designations

Under the current Kilkenny City and County Development Plan, the site of the proposed development is zoned as "Community Facilities". The primary objective of the zoning designation is to 'protect, provide, and improve community facilities. Permitted uses under this zoning designation consist of;

- Educational Facilities
- Incubator businesses linked to established third level facilities
- Religious and Cultural Facilities
- Public Buildings
- Churches
- Hospitals
- Convents
- Community Centres and Halls
- School Playing Fields
- Hostels
- Halting Sites
- Cemeteries
- Libraries
- Public Service Installations
- Nursing Homes

The proposed development is aligned with the objective of the zoning designation for the development site and falls within the permitted uses of the zoning designation as it is considered to be a public building / community centre.

Protected Structures, ACAs and ZAPs

There are no protected structures located within or adjacent to the site, however, there a numerous protected structures to the north-west of the site, along John Street. The entirety of the site is located

within the John Street Architectural Conservation Area as outlined within the current Development Plan. This is discussed in detail in the Architectural Heritage Assessment in Section 7 of this report.

The site is not located within a Zone of Archaeological Potential (ZAP), but the section of the site containing the proposed pontoon is partially located within a Zone of Notification under Section 12 of the National Monuments Act that is associated with a historic dove cote. (See Figure 14 below). Potential interference was mitigated with the design of the proposed pontoon being separated by approximately 11 metres from the dovecote highlighted below. In addition, the construction will be steel driven piles at sufficient separation, limited footprint with any vibrations dampened by the water to prevent damage to the dovecote. Refer to the CEMP at Appendix J for more details on construction methodology.

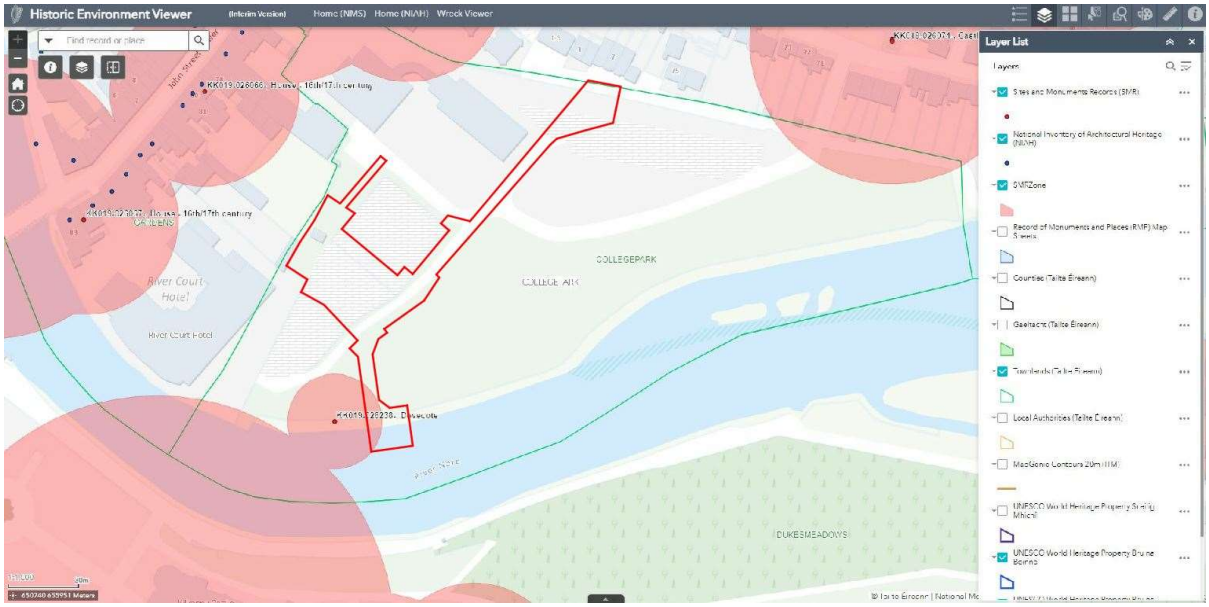


Figure 14: Protected Structures and Zones of Notification in relation to the site location

In the course of the construction works, should any archaeological material be uncovered, the developer will be required to allow a reasonable amount of time for any required excavation, monitoring, recording, consideration of excavation report and / or the removal of any material. Please refer to the Archaeological Report contained in Appendix L for further information on Archaeological Monitoring.

Planning History

There are no previous or pending planning applications in relation to the proposed development site. The site is currently used as a shared over-flow surface car park between Kilkenny County Council, and the River Court Hotel adjacent.

Planning and Development Policies: EU and National Level

Any proposal located within the proposed development site will be informed by a range of planning policies. The design process for the proposed development has been informed by key pieces of national and regional legislation, particularly with regards to habitats and the environment. The following provide for the legislative framework of the principal concerns requiring attention in the design process from which a comprehensive design response has been formulated.

Key European Legislation and Conventions

- The EU Habitats Directive (92/43/EEC) Amended by Council Directives 97/62/EC & 2006/105/EC & 2013/17/EU
- The EU Birds Directive
- Convention on Biological Diversity
- The Convention of Wetlands of International Importance
- The EU Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU), and Strategic Environmental Assessment (SEA) Directive (Directive 2001/42/EC)
- The Environmental Liability Directive
- Environmental Liability Regulations (SI 547 of 2008).

Natura 2000 Sites and Appropriate Assessment

The obligation to undertake Appropriate Assessment is derived from Articles 6 (3) and (4) of European Union (EU) Council Directive 92/43/EEC (Habitats Directive) and transposed into Irish Law by the European Communities (Birds and Natural Habitats) Regulations S.I. No 477 of 2011.

Please note the following documents and their respective Appendices that have been prepared in support of this planning application where ecology and environment are concerned:

- Appendix F – Environmental Impact Assessment Screening (EIA)
- Appendix G – Natura Impact Statement (NIS)
- Appendix H – Ecological Impact Assessment (EcIA)
- Appendix J – Construction Environmental Management Plan (CEMP)

Legislation concerning water quality and protection

- European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003)
- Water Framework Directive 2000/60/EC (WFD)
- EC Water Policy Regulations (Amendment) (S.I. No. 413 of 2005)
- The European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009)
- Urban Waste Water Treatment Directive (91/271/EEC) (Amended by Directive 98/15/EEC)
- Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001).

Alien Invasive Species

- EU Regulations 1143/2014
- EU Biodiversity Strategy to 2030

For further information on invasive species please refer to the appendices listed above, in particular the Natura Impact Statement at Appendix G.

National Legislation

- Planning and Development Act 2000 (as amended)
- The Wildlife Act 2000 (as amended)
- Flora (Protection) Order 2000
- Irish Red Data Books
- Tree Preservation Orders and Tree Felling Licenses

Planning and Development Policies: Regional and Local Level

At a local level, the *Kilkenny City and County Development Plan 2021 – 2027* is the most relevant piece of guidance in relation to the nature, extent, and development of schemes, such as the one which is the subject of this report. Within Volume 2 of the development plan, key strategic issues have been identified for Kilkenny City over the current plan period, with the applicable issues in relation to this specific development outlined below;

- To support urban regeneration through the investment in the Abbey Quarter & other initiatives to improve the public realm and regenerate underused land and buildings in the City.
- Facilitating the recovery from the impacts of Covid-19 on the Tourism sector in the city and county and further development of the tourism product as a 'Hero site' within Fáilte Ireland's branding of Irelands Ancient East.
- Maintain the quality of life offered in Kilkenny City which is renowned, as evidenced in its population growth which has exceeded the national average over the period 2006 – 2016.

The proposed river facilities centre is relevant to these key issues for Kilkenny City and is aligned with the Councils goals and objectives in terms of boosting tourism opportunities in the City centre, and providing community facilities. Specific objectives outlined in the Development Plan, are noted below.

Development Plan Objectives

Chapter 5 – Economic Development

Strategic Aim: To provide a framework for the implementation of the Council's economic strategy by fostering competitiveness and innovation in all sectors within a high-quality physical environment while having due regard to the protection of the environment and heritage, in order to position the county for sustainable economic growth.

Objectives

5C - *To continue to develop sustainable high-quality tourism, leisure and complementary activities for the City & County with the key stakeholders enhancing the position of Kilkenny as a Hero site within Ireland's Ancient East branding.*

5E - *Invest in public realm to create more multi-functional vibrant and inviting public spaces in urban areas and villages, which will greatly enhance the overall quality of place and act as a catalyst to stimulate private sector development. The public realm will be informed by the Kilkenny Access for All Strategy 2018-2021. The Council will ensure that the maintenance, cleanliness and animation of public spaces is managed in order to encourage visitors to dwell more in these spaces.*

5H - *Continue the development of projects for submission under the Outdoor Recreation Infrastructure Scheme (ORIS) and other funding schemes (e.g. LEADER Programme).*

5X - *To promote investment in Place-Making and high-quality public realm through new development, and the enhancement of existing public realm in the City as well as throughout the County's centres. The aim is to provide more attractive and vibrant urban centre and village locations, supporting retail activity and the wider commercial economy of our settlements and thereby increase footfall.*

The proposed Nore River Facilities Kilkenny is a collaborative development between Kilkenny County Council and Fáilte Ireland, under the Platform for Growth Scheme. Please refer to Appendix O – Platforms for Growth – A Programme for Tourism Investment for more information.

The proposed Nore River Facilities Centre for Kilkenny City is envisaged to not only be a high-quality amenity space for the local community, but also as an economic driver, boosting tourism and visitors to the area. The proposed site, being within the city centre, is an optimal location for this type of development given its proximity to other tourist attractions in the city.

The proposed development will act as an anchor in an under-utilised space within the city centre and will develop the connection between the city and the river. Community facilities, areas to sit and gather, and facilities to engage with the river will add to the quality of life afforded to those not only within the city centre, but also visitors and tourists.

Chapter 6 – Housing and Community

Strategic Aim: To develop and support vibrant sustainable communities in an attractive living and working environment where people can live, work and enjoy a high quality of life, with access to a wide range of community facilities and amenities, while ensuring coordinated investment in infrastructure that will support economic competitiveness.

Objectives

6B - *To secure, through the application of Development Management Requirements within the Plan, the making of quality urban spaces embodying inclusive and universal access design principles for our building stock, public realm, amenities and transport services.*

6Ba - *To ensure that people are at the centre of all placemaking activities. To ensure that co-design and participatory processes are used to engage people in shaping their built environment, with a particular focus on supporting harder to reach communities to take part in public engagement processes.*

As has been outlined previously, a public consultation with the relevant stakeholders, community groups, and local individuals was integral to the design process, and has resulted in a development which strives to meet the needs of the local community, as well as visitors and tourists to the area. The development will also create a public amenity space within an under-utilised area of the city, and will improve upon the connection between the City centre, and the River Nore.

Chapter 8 – Open Space and Recreation

Strategic Aim: To ensure the provision of open space and recreational facilities in order to maintain, and improve open spaces that contribute to the well-being and making of place for the benefit of residents, workers and visitors to the County while protecting and enhancing biodiversity.

Objectives

8D - *To undertake a feasibility study to determine the optimal location for, and to develop, a water sports hub on the River Nore*

The proposed development aligns with the councils objective of providing a water sports hub on the River Nore. The development site is on lands currently owned by the council, and is strategically located in an under-utilised, river-adjacent site within the city centre, in close proximity to other areas of interest, such as Kilkenny Castle. The proposed site is currently used as an over-flow surface car park, shared between Kilkenny County Council and the River Court Hotel. Developing this site, without having to select a previously undeveloped site, mitigates the environmental impact of the proposed development.

Chapter 9 – Heritage and Culture

Strategic Aim: To seek the protection and sustainable management of the arts, culture and heritage of Kilkenny for the benefit of current and future generations; to encourage the collection of knowledge to inform its protection; and to promote access to, awareness of and enjoyment of Heritage, Arts and Culture, to further develop the infrastructure and actively support engagement with communities.

Objectives

9J - *To ensure the preservation of the special character of each ACA listed in this Plan (See Table 9.2 and Volume 2 Heritage Strategy) with particular regard to building scale, proportions, historical plot sizes, building lines, height, general land use, fenestration, signage, and other appendages such as electrical wiring, building materials, historic street furniture, paving and shopfronts.*

As has been outlined previously in this report, the proposed development site is located within the John Street ACA (please see figure 9 below). As such, the scale of the proposed development had to be considered in relation to the surrounding context. The development is single-storey in height, thus reducing the visual impact of the proposal on the surrounding context, and retains the view of Kilkenny Castle from the Dublin Road, which is to the North-East of the proposed development.

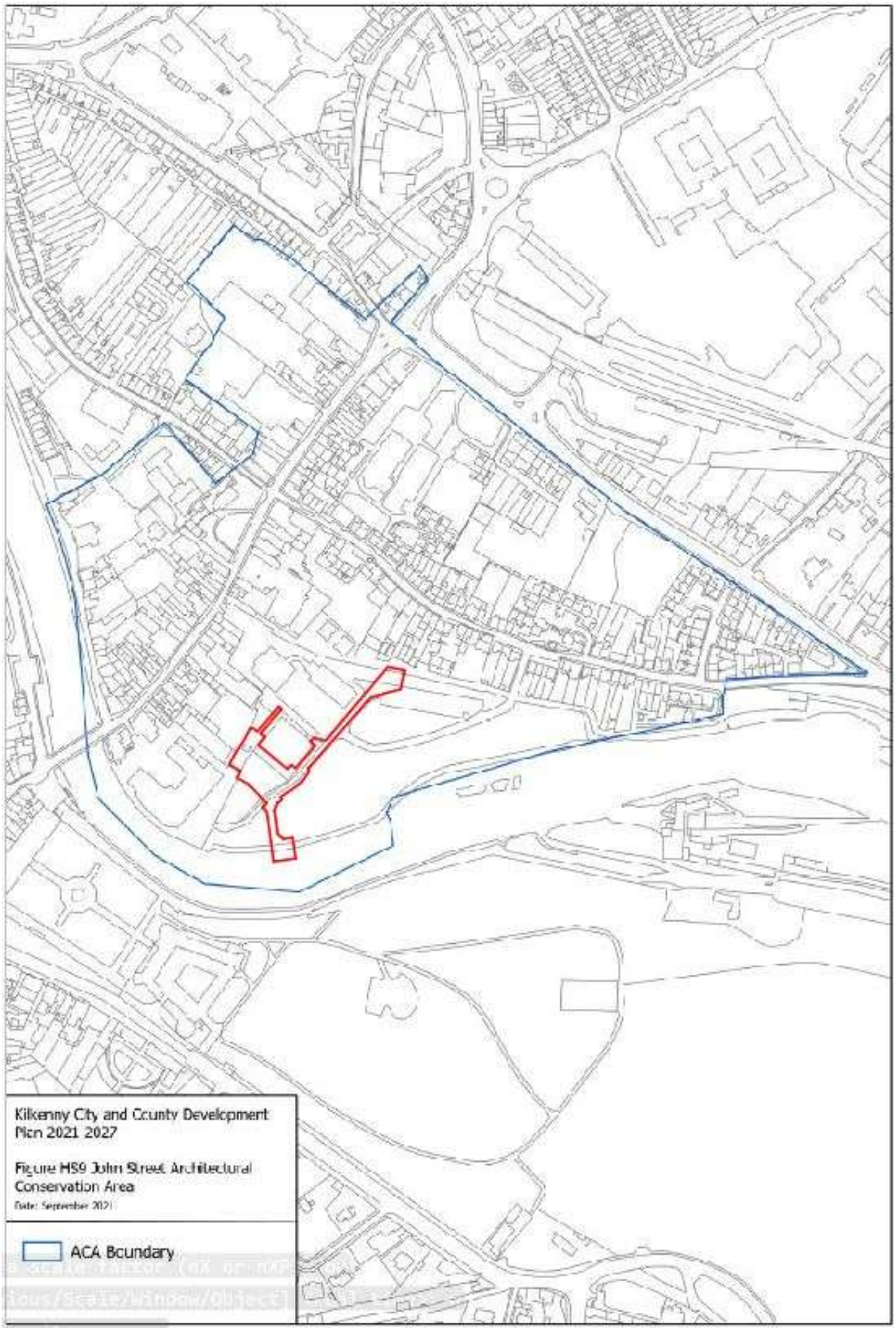


Figure 15: The proposed development site location in relation to the John Street ACA

7. EFFECTS ON THE ENVIRONMENT

The specific likely significant effects on the European site of the proposed development are dealt with in this section, both during construction, and during the operational phase of the proposed development. These include environmental factors, such as Cultural Heritage, Biodiversity, Soils, Air, Climate, and Noise.

This section should be read in conjunction with the following appendices;

- Appendix F – Environmental Impact Assessment Screening (EIA)
- Appendix G – Natura Impact Statement (NIS)
- Appendix H – Ecological Impact Assessment (EcIA)
- Appendix J – Construction Environmental Management Plan (CEMP)
- Appendix P – Visitor Management Plan (VMP)

Impact on other designations

The proposed development is not located within a Natural Heritage Area, or a Proposed Natural Heritage Area. However, the site of the proposed development is adjacent to, with the proposed pontoon within the River Nore - Special Area of Conservation (SAC 002162), and Special Protection Area (SPA 004233). As outlined within the NIS, the River Nore, which runs along the south-eastern and southern boundaries of the development site is designated as a Natura 2000 site. Given the proximity and type of development proposed, it is considered to be within the Zone of Influence (Section 4.0 of the NIS). Please refer to the Natura Impact Statement (NIS) at Appendix G for further information on the likely significant effects of the proposed development.

Construction Phases and Impacts

A full description of the proposed development can be found in Section 3 of this report. Details regarding the construction of the proposed development can be found in the associated Architects and Engineers drawings within Appendix A. For further information relating to details of the construction and operational phases and impacts, likely emissions and/or discharges, phasing, and any mitigation measures proposed, please refer to the *Construction Environmental Management Plan (CEMP) of Nore River Facilities Kilkenny 2024,* prepared by Swift Ecology Ltd within Appendix J.

The CEMP communicates the key environmental obligations that apply to all site personnel, sub-contractors and visitors to the site, while carrying out construction activities as part of the proposed development. It also defines the approach to environmental management at the proposed development site, outlining the work practices, construction procedures and responsibilities to be undertaken during the construction phase. Compliance with the CEMP, the procedures, work practices and controls would be mandatory and must be adhered to by all personnel and sub-contractors employed during the construction phase. The CEMP outlines, where necessary, the control measures that are required to avoid, minimise or mitigate potential effects on the environment and the surrounding area.

Construction Methodology Statement and Material Choice

Please refer to the Architects drawings within Appendix A for further information relating to the material choices for the proposed development, and particularly drawing 2257-P-7001 which highlights material precents. Below is the Failte Ireland material palette which has since been adapted for inland facilities to use accoya in lieu of corten steel.



Figure 16: Failte Ireland – Original material palette – Now updated to include accoya for inland facilities.

Please also refer to the Construction Environment Management Plan (CEMP) within Appendix J as stated above. The material palette has been chosen to align with Failte Irelands – Platforms for Growth facilities nationwide. Accoya timber has been added to this inland facility and elements of limestone given the sensitive nature of the site and its proximity to Kilkenny Castle and other historic monuments in the city centre generally. Green roofs have been utilised where possible over the flat portions to both attenuate water but also to soften the form within the urban landscape.

Architectural Heritage Impact Assessment

The site of the proposed development is located within the John Street Architectural Conservation Area, as outlined within the Development Plan. The site is not located within a Zone of Archaeological Potential (ZAP), but the section of the site containing the proposed pontoon is partially located within a Zone of Notification under Section 12 of the National Monuments Act that is associated with a historic dove cote. There are no protected structures located within or adjacent to the site, however, there a numerous protected structures to the north-west of the site, along John Street. In relation to the management requirements based on the assessment of the special character of the John Street ACA, the specific objectives relating to the proposed development are as follows;

JSACA 6: *To ensure any new developments to the south of Maudlin St. are sensitive in scale to the surrounding buildings and that any future re-development of the former petrol station and adjoining sites on the Dublin Road is sensitive in scale to the surrounding buildings.*

JSACA 9: *To ensure there is no large-scale development which interrupts the visual pleasing skyline of the city from Dublin Road looking north west.*

JSACA 10: *To ensure there is no large-scale development which interrupts the visual pleasing streetscape of John's Quay.*

The proposed development is single-storey in nature, and is located behind the existing street scape on the eastern end of John Street Lower. As such, the proposed development will have a minimal, if negligible visual impact on the surrounding properties. The development does not affect the streetscape of Johns Quay and does not impede the view of the sky-line as seen from the Dublin Road.

Photomontages have been prepared by the architect of the existing and proposed condition of the site – See Appendix A, Architects drawings, 2257-P-6002-P01. These have also been included below under Visual Impact at a smaller scale for ease of reference.

In relation to the archaeological impact of the proposed development, please refer to the Archaeological Desktop Assessment prepared by John Cronin & Associates within Appendix L.

In addition to the above, a specialist Archaeological Consultant (AMS) have been engaged. A licence was sought and a geophysical survey conducted across the lands where development is proposed. These results informed the position of future trenches for further archaeological investigation. No excavation will be carried out until such time as planning has been secured for same but Method Statements for both this and an Underwater Dive Survey are submitted in support of this application. (Refer to Appendix Q.1 & Q.2) Note: Both ground and underwater archaeological excavations will be conducted in order to complete an AIA and UAIA prior to any construction works commencing. Ministerial Consent will be sought in addition to licencing from the National Monuments service where applicable.

Visual Impact and Impact on Vicinity

The form and layout of the proposed development has been derived from the multi-functional nature of the facility, and responds to the geometry, location, and accessibility of the site. The proposal is organised in an 'L' shaped format, surrounding a main, hard-landscaped public space, with community spaces to the north-eastern end, and facilities and storage to the north-western end.

The individual functions of the scheme are articulated by the various roof types, as outlined previously in this report. The materiality of the scheme consists of fair-faced concrete, vertical accoya rain-screen cladding, and select areas of weathered corten steel. Green roofs have been utilised where possible over the flat portions to both attenuate water but also to soften the form within the urban landscape. These materials have been chosen not only for their aesthetic qualities and durability, but also because they follow a consistent material palette across all water-based activity centres that have been developed by Fáilte Ireland. Externally, an open area finished in Kilkenny Limestone paving is provided with a wash down area with a channel drain, as well as a public seating area with a rain garden.

The site of the scheme is currently used as an over-flow surface car park, in an under-utilised, river-adjacent section of the city centre. The main section of the proposal is set back from the riverbank, and

has a negligible visual impact on the surrounding buildings, being that is is single storey and sensitive in its expression materially. The scheme is primarily visible from the southern banks of the River Nore, along the Canal Walk and within the curtilage of the lands to the rear of County Hall. It cannot however be seen from Maudlin Street, Johns St. Lower or Johns Bridge.



Figure 17: Existing View of the site looking north-west towards County Hall and Johns St lower.



Figure 18: Proposed view of the site looking north-west (architects' impression)



Figure 19: Proposed view from the site looking west highlighting the material palette – board marked concrete, accoya timber cladding, corten steel, green roofs and limestone paving

From an architectural standpoint, we feel that the proposed scheme is a positive contribution to its environs and poses no negative impact on the curtilage of the County Hall or Kilkenny Castle across the river. It does not impact upon any protected views outlined within the development plan. The proposed development, including the associated pontoon cannot be seen from Johns Bridge and therefore does not impact upon protected views of the castle.

Air, Odour, and Noise Emission Assessment

Please refer to Section 6.0 of the Environmental Impact Assessment within Appendix F for details relating to Noise, Dust and Air Quality.

Ecology / Biodiversity

For details relating to the proposed schemes impact upon ecology and biodiversity, please refer to the Ecological Impact Assessment within Appendix H prepared by Ross Swift Ecology Ltd.

Public Water Supply, Surface Water Drainage, and Public Sewerage Facilities

For details relating to site services connections and applications please refer to the Civil Engineering report within Appendix D.

Flood Risk Assessment, Hydrological Assessment, and Water Framework Assessment

A site-specific Flood Risk Assessment has been prepared for the proposed scheme and can be found within Appendix E. This addresses the items noted above and how they have been considered within the design solution.

Traffic Impact Assessment

There are no proposed alterations to the existing site entrances or internal road network. Additionally, the local road networks and junctions providing access to the site are more than capable of accommodating the type of traffic associated with the proposed centre. No TIA / RSA has been prepared for this reason. Refer to Section 7.0 of the Environmental Impact Assessment Screening Report for more information on traffic movements/impact.

There is currently no parking provided for the public on the site and this will remain the case with the exception being a single universal access parking bay and secure bike parking. The activity centre will displace some parking currently on the site used by KCC staff but the intention within the KCC Development Plan is to encourage walking and cycling in the city centre and therefore result in a reduced parking requirement. Additional staff bike parking is provided elsewhere on the site for council employees. Vehicular movement as a result of the scheme, by operators/users for the delivery/collection of boats or equipment will be limited to set-down only. The vehicular movements associated with the proposed facility will be predominantly on weekends when the County Council offices are closed and the staff car-parking not in use.

There is a portion of the internal access road on approach to our scheme that is currently grasscrete and has no footpath. It was intended as a shared surface but does not function well and is difficult for pedestrians to traverse. While there is no intention to alter this arrangement, it will be resurfaced in a buff-coloured macadam or similar as indicated in the architectural drawings and also the Landscaping layout at Appendix C. this shared surface will extend into our scheme providing a turning area for cars/boat trailers etc, with pedestrian users given the right of way. The surface contrast, flush kerbs, stand-in zones as outlined in the Design Manual for Urban Roads and Streets (DMURS) have all been adhered to.

8. ENVIRONMENTAL ISSUES: The likely significant effects upon a European site

Please refer to Appendix F of this document which contains an Environmental Impact Assessment Screening Report prepared to accompany this application. The likely consequences for proper planning and sustainable development on the site and wider Kilkenny City Centre area are addressed within it. In addition, a Construction Environmental Management Plan has been prepared and is included in Appendix J, prepared by Ross Swift Ecology Ltd.

9. CONCLUSION

The proposed water activity centre along the banks of the River Nore, within the grounds of the County Hall, complies with the various relevant policies and objectives set out in the Kilkenny City and County Development Plan, and accordingly demonstrates that the development is consistent with the proper planning and sustainable development of the area. It has been demonstrated that the development will not have a negative impact on the Natura 2000 network. The proposed stormwater management and SuDS systems, including the UV treatment of washdown area waters, outlined within the Civil Engineering Report at Appendix E, are in line with Kilkenny City and County Development Plan policies and have adequate capacity to facilitate the proposed development.

The proposed development of this under-utilised parcel of land in the heart of Kilkenny City will re-activate and upgrade important riverfront space that is under-utilised at present. The proposed design will deliver long term economic, social and environmental benefits with the aim of improving the quality of life and opportunity within Kilkenny City and along the River Nore for residents, clubs and visitors alike.



Kenneth Hennessy FRIAI

For Ailtirí Architects

10. Appendices

Appendix A: Drawings - Nore River Facilities Kilkenny (Ailtirí Architects / DRA Consulting Engineers)

Appendix B: Public Notices - Newspaper/Site

Appendix C: Landscaping Layout & Report - Nore River Facilities Kilkenny
(Cathal O'Meara - Landscape Architects)

Appendix D: Engineering Report - Nore River Facilities Kilkenny
(DRA Consulting Engineers)

Appendix E: Site Specific Flood Risk Assessment - Nore River Facilities Kilkenny
(DRA Consulting Engineers)

Appendix F: Environmental Impact Assessment Screening – Nore River Facilities Kilkenny
(Ross Swift Ecology Ltd.)

Appendix G: Natura Impact Statement - Nore River Facilities Kilkenny
(Ross Swift Ecology Ltd.)

Appendix H: Ecological Impact Assessment – Nore River Facilities Kilkenny
(Ross Swift Ecology Ltd.)

Appendix J: Construction Environmental Management Plan – Nore River Facilities Kilkenny
(Ross Swift Ecology Ltd.)

Appendix K: Lighting Report & Layout – Nore River Facilities Kilkenny
(Ronan Meally Consulting Engineers)

Appendix L: Archaeological Desktop Assessment – Nore River Facilities Kilkenny
(John Cronin & Associates)

Appendix M: OPW: Section 09 Application – Written Approval (Letter)

Appendix N: Notices Issued to Prescribed Bodies (copies)

Appendix O: Platforms for Growth – A Programme for Tourism Investment (Failte Ireland)

Appendix P: Visitor Management Plan (Ross Swift Ecology Ltd.)

Appendix Q1: Method Statement for Archaeological Test Excavation
(Archaeological Management Solutions) [AMS]

Appendix Q2: Method Statement for Archaeological Dive & Detection Survey
(Archaeological Management Solutions) [AMS]

Appendix A – Drawings (Ailtirí Architects & DRA Consulting Engineers)

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PROJECT: NORE RIVER FACILITIES KILKENNY

LOCATION: AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, CO. KILKENNY

CLIENT: KILKENNY CITY COUNCIL **JOB NO:** 2257

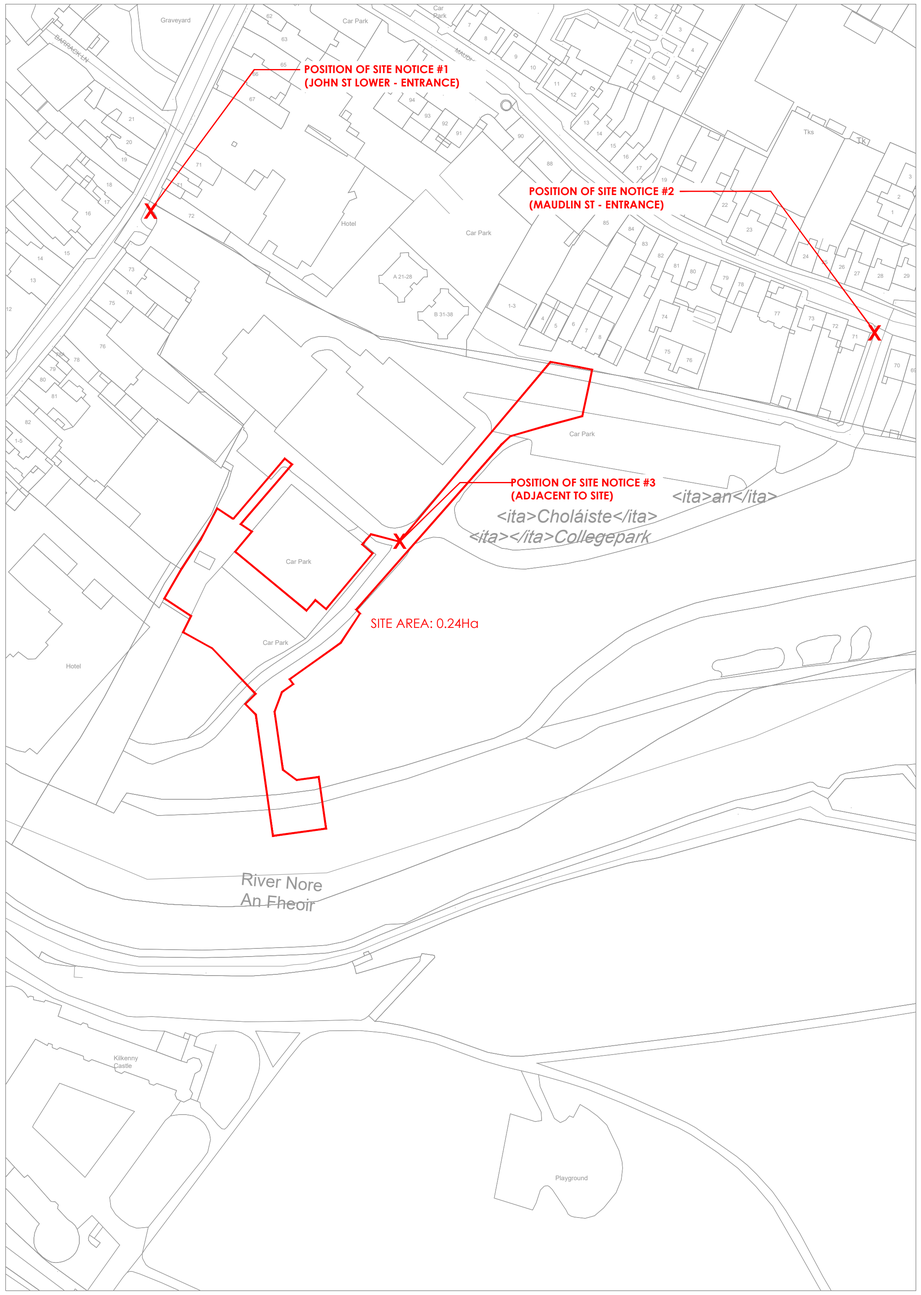
DOCUMENT REGISTER AND ISSUE SHEET

STAGE: PLANNING **Sheet 1**

DRAWING NO.	DRAWING TITLE	16.07.2024				
ARCHITECTS DRAWINGS						
2257-KHA-ZZ-00-DR-A-P-0001	Record & Urban Place Map (1:10560 & 1:1000)	P01				
2257-KHA-ZZ-00-DR-A-P-1001	Proposed Site Plan (1:500)	P01				
2257-KHA-ZZ-00-DR-A-P-1002	Proposed Site Layout (1:200)	P01				
2257-KHA-ZZ-00-DR-A-P-1100	Proposed Floorplan in Context (1:200)	P01				
2257-KHA-ZZ-00-DR-A-P-1101	Proposed Floorplan Layout (1:100)	P01				
2257-KHA-ZZ-00-DR-A-P-2001	Proposed Building Elevations (1:100)	P01				
2257-KHA-ZZ-00-DR-A-P-3001	Proposed Site Sections (1:200)	P01				
2257-KHA-ZZ-00-DR-A-P-3002	Proposed Building Sections (1:100)	P01				
2257-KHA-ZZ-00-DR-A-P-6001	Proposed 3D Views - Architects Impressions (NTS)	P01				
2257-KHA-ZZ-00-DR-A-P-6002	Photomontage - Existing & Proposed (NTS)	P01				
2257-KHA-ZZ-00-DR-A-P-7001	Material / Finishes Precedents (NTS)	P01				
ARCHITECTS DOCUMENTS						
ARCHITECTURAL REPORT	Architects Planning Report	•				
CIVIL & STRUCTURAL ENGINEERS						
REFER TO DRA ENGINEERS DOCUMENT SCHEDULE		•				
MECHANICAL & ELECTRICAL ENGINEERS						
SITE SERVICES LAYOUT & LIGHTING REPORT		•				

ISSUED TO					
CLIENT	•				
CONTRACTOR					
STRUCTURAL ENGINEER					
QUANTITY SURVEYOR					
SERVICES ENGINEER					
OTHER					

Purpose	I-Info / A-Approval / P-Planning / T-Tender / C-Construction	P				
Document Type	P-Paper / D-Disk / E-Email / SP - Sharepoint	E				
Issued by		AQ				



Extent of development site

URBAN PLACE MAP (Scale 1:1000)

Description:
Digital Landscape Model (DLM)

Publisher / Source:
Ordnance Survey Ireland (OSi)

Data Source / Reference:
PRIME2

File Format:
Autodesk AutoCAD (DWG_R2013)

File Name:
v_50394758_1.dwg

Clip Extent / Area of Interest (AOI):
LLX,LLY= 650669.8216,655601.5411
LRX,LRY= 651099.8216,655601.5411
ULX,ULY= 650669.8216,656184.5411
URX,URY= 651099.8216,656184.5411

Projection / Spatial Reference:
Projection= IRENET95_Irish_Transverse_Mercator

Centre Point Coordinates:
X,Y= 650884.8216,655893.0411

Reference Index:
Map Series | Map Sheets
1:1,000 | 4766-09
1:1,000 | 4766-14

Data Extraction Date:
Date= 16-Apr-2024

Source Data Release:
DCMLS Release V1.175.118

Product Version:
Version= 1.4

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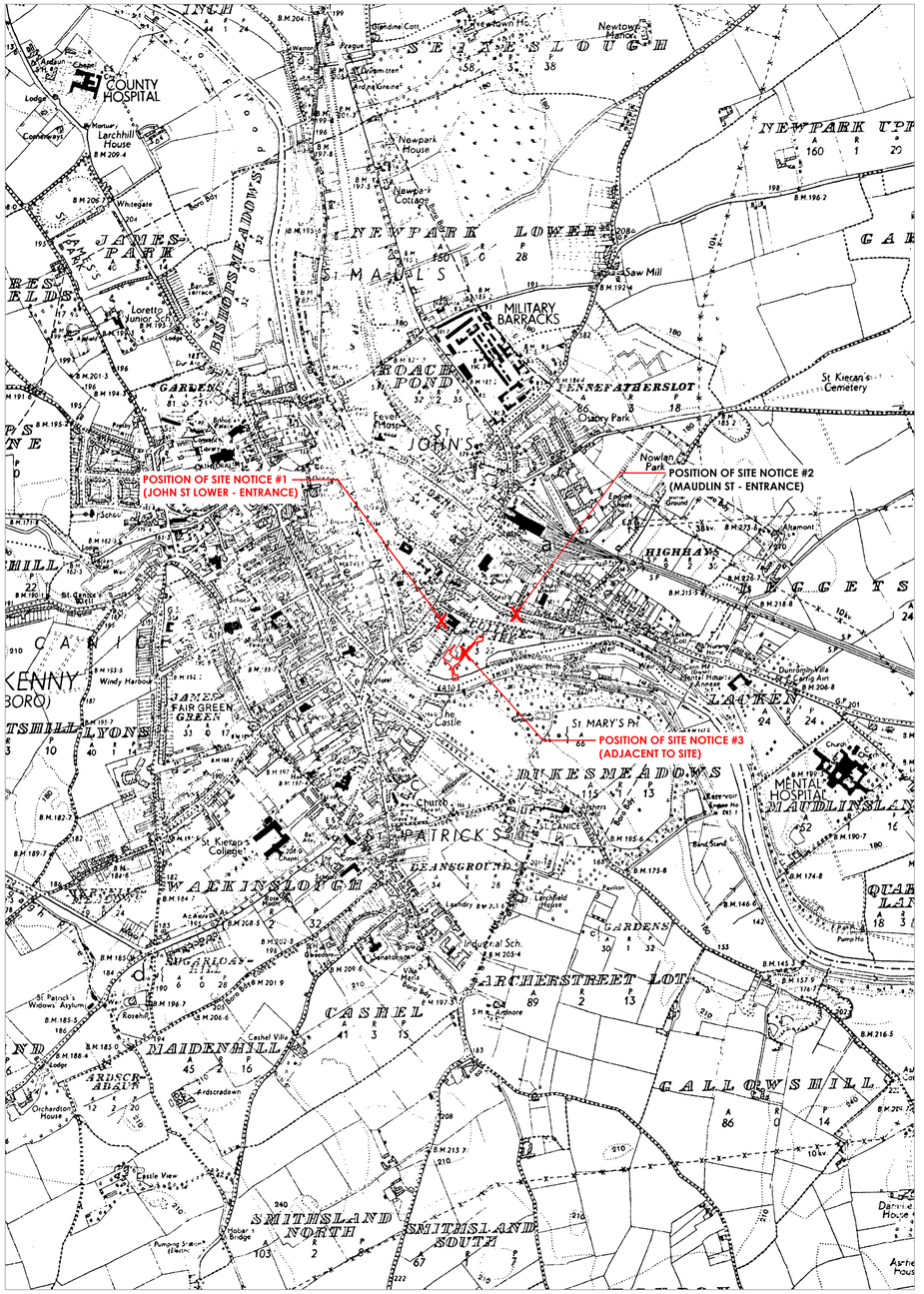
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Extent of development site

RECORD PLACE MAP (Scale 1:10560)

Description:
Historic 6" Latest Edition

Publisher / Source:
Ordnance Survey Ireland (OSi)

Data Source / Reference:
KK019
Revision Date =
Survey Date =
Levelled Date = 31-Dec-1948

File Format:
Tagged Image File Format (TIFF)

File Name:
R_50394758_1.tif

Clip Extent / Area of Interest (AOI):
LLX,LLY= 649067.8216,653432.0411
LRX,LRY= 652701.8216,653432.0411
ULX,ULY= 649067.8216,658354.0411
URX,URY= 652701.8216,658354.0411

Projection / Spatial Reference:
IRENET95_Irish_Transverse_Mercator

Centre Point Coordinates:
X,Y = 650884.8216,655893.0411

Data Extraction Date:
16-Apr-2024

Product Version:
1.3

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ORDNANCE SURVEY MAPS

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-	--/--/----	- - -	-	-	-
-	--/--/----	- - -	-	-	-
P01	15.07.2024	ISSUED FOR PLANNING - SECTION 177 AE - -	DC	AQ	KB

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SCALE: 1:10560/1:1000@ A1

STATUS: PLANNING

CLIENT: KILKENNY COUNTY COUNCIL

PROJECT: 'NORE RIVER FACILITIES KILKENNY' AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY

DRAWING TITLE: RECORD & URBAN PLACE MAPS

PROJECT:	ORIGIN:	VOLUME:	LEVEL:	TYPE:	DISC:	CATEGORY:	NUMBER:	STATUS:	REVISION:
2257	KHA	ZZ	00	DR	A	P	0001	S0	P01

A2



Extent of development site

To be demolished / removed

Note: For position of site notices please refer to Urban Place Map drawing - 2257-P-0001-P01

Removal of tree indicated here in dashed orange to accommodate new development. Note: None of the trees removed are cited within Appendix F of the Development Plan - Council Offices Johns St.

Proposed extensive green roof over facilities block. Refer to 3D views.

Existing single storey maintenance building to be removed. Suspected asbestos in roof. To be surveyed and removed by specialist prior to demolition. Refer to CEMP for details

Proposed PV cells to south facing roof to offset the electrical loading of scheme as per Failte Ireland specifications

Proposed external wash-down area finished in dark coloured paving sett or similar to discharge to UV filtration system - Refer to Engineers drawings and specification

Proposed single storey maintenance store to replace that being removed on site - low profile monopitch roof in grey standing seam aluminium roofing or similar

Proposed Kilkenny limestone paving to external pedestrian areas. Boundary wall to south of scheme to comprise fair faced concrete or similar in keeping with Failte Ireland material pallette

Note: Existing grasscrete shared surface to be maintained in this area providing alternate access to rivercourt hotel overflow parking area.

Size and location of historic dovecote (KK019-026238) indicated here as per dimensions and ITM coordinates given on NIAH, with potential ZAP surrounding it. Approximate separation distance from pontoon indicated here.
Refer to Archaeological Report for additional commentary
Construction methods associated with proposed pontoon falling partly inside the ZAP are outlined in the Construction Environmental Management Plan

No proposed alterations to County Hall building or formal gardens surrounding it

Proposed bicycle shelter by other - Not forming part of this application

Accoya timber cladding rainscreen finish to walls of buildings generally as indicated to a height of approximately 1m from ground level. Below this level, walls finish to comprise a fair faced concrete or similar as per Failte Ireland material pallette
Corten steel overhead folding doors or similar. See elevations 2257-P-2001-P01 & 3D Views

Proposed central raised seating area around raingarden with canopy over

Single storey storage area to accommodate doubles rowing sculls or similar. Fitted with high level north facing glass. See 3d views

Proposed shared surface, comprising turning circle and loading / unloading area for boats in semi-permeable finish - Resin bonded aggregate / Buff coloured macadam or similar
Material from proposed turning area to extend across road here delineating extension of shared surface zone where pedestrian has right of way

Carve new fair faced concrete gently sloped access to waters edge out of public side of berm as indicated. Functionality/overall height of berm not to be diminished. Refer to cross section drawing indicating proposed works to berm - **2257-P-3001-P01**

Note: These works are the subject of OPW conditions granted under a separate Section 9 application (see Appendix M).
Second leg of access on 'wet' side of berm to be formed using composite fibre cement cladding on steel framework and pads in accordance with engineers details and specification.

Pontoon area to be secured by weld mesh fencing or similar to a height of 2m to prevent unauthorised access

Proposed pontoon - composite fibre cement finish & steel piled structure. Refer to NIS / CEMP accompanying this planning application for details of proposed construction methods along river bank.

Existing trees to be removed hatched in orange. Scrub in this area also to be cleared to accommodate new pontoon.
Note: None of the trees being removed are cited as protected within Appendix F of the Development Plan - Council Offices Johns St.
Refer to architects planning report for further information on this.

PROPOSED SITE PLAN

SCALE 1:500

1:500

0 5 10 20 30M

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P01	15.07.2024	ISSUED FOR CLIENT REVIEW / COMMENT - -	AQ	KH	KB

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Clonmel, Co. Tipperary

SCALE: 1/500

STATUS: PLANNING

CLIENT: KILKENNY COUNTY COUNCIL

PROJECT: 'NORE RIVER FACILITIES KILKENNY' AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY

DRAWING TITLE: PROPOSED SITE PLAN

PROJECT	ORIGIN	VOLUME	LEVEL	TYPE	DISC	CATEGORY	NUMBER	STATUS	REVISION
2257	KHA	ZZ	00	DR	A	P	1001	S1	P01

A2

No proposed alterations to existing rubble stone walls surrounding the site.

Provision of 5no. restricted access heated shower/change areas and cleaner store adjacent Universally accessible WC / Standard WCs and Changing Places Facility is also provided opposite

Former storage building on the site to be demolished to accommodate new water sports activity centre. Suspected asbestos in existing roof - to be surveyed and removed by specialist prior to demolition - Refer to CEMP for further details

This area dedicated to external plant items - Refer to Building Services Engineer drawings

Note: Facility generally to be wheelchair accessible with level access threshold available to each of the blocks. Facilities block contains TGD M compliant bathroom, changing & showering facilities in addition to a 'Changing Places' facility. Refer to Floorplan: **2257-P-1100-P01**

Trough style washdown area with lockers to reverse side for secure storage of users belongings reverse side of external covered circulation area also secured with roller shutter or similar out of hours

Facility secured out of hours with use of perforated metal overhead roller shutters or similar

Heated drying room - Subdivided by club or similar

Roof overhangs in this area to provide shelter for temporary upright storage of canoes/kayaks against wall while people use showers etc

Boat washdown area - Limestone paving dished locally to discreet stainless steel drainage channel or similar before discharging to collection tank for UV filtration. **Refer to Engineers drawings/report for details.**

Universally accessible parking bay to be delineated using dark coloured paving slabs or similar in this area

For details of hard / soft ground treatment surrounding buildings please refer to Landscape Plan

Turning area has been designed to cater for emergency vehicle and fire tender. Turning and setdown/unloading area only for car/boat trailer drop off. No parking

No proposed alterations to existing overflow parking area. Scheme to be shielded to 1100mm high.
Existing fence to southern edge to be replaced by 1100mm high cast in situ fairfaced concrete wall or limestone clad wall

No proposed alterations to existing gasscrete shared pedestrian and vehicular surface except where indicated

Note: For details regarding foul / storm drainage please refer to Engineers drawings and report accompanying this application.



	Demolished / Removed / Altered
	Proposed Public Lighting
	Proposed Constuction
	Proposed Enclosed Floor Area
	Proposed Covered Circulation
43.70m	Proposed Finished Floor Level
	Existing Walking Route Maintained
	Extent of Existing Low Level Planting
	Extent of Existing Grass
	Extent of Existing Grassed Berm
	Extent of Existing Carpark Area
	Extent of Existing Grasscrete
	Extent of Proposed Raingarden
	Extent of Proposed Shared Surface (Colour Macadam/Bonded Aggregate)
	Extent of Proposed Limestone Paving
	Extent of Proposed Washdown Area & Accessible Parking Circulation
	Extent of Proposed Pontoon Access (Fairfaced concrete path / landing)
	Extent of Proposed Pontoon Access (Suspended walkway - Fibre cement)
	Extent of ZAP surrounding dovecote

PROPOSED SITE LAYOUT

SCALE 1:200

1:200
0 1 2 4 6 8 10M

N S

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-	--/--/----	- -	-	-	-
-	--/--/----	- -	-	-	-
P01	15.07.2024	ISSUED FOR PLANNING - SECTION 177 AE - -	AQ	KH	KB

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Clonmel, Co. Tipperary

SCALE: **1/200**

STATUS: **PLANNING**

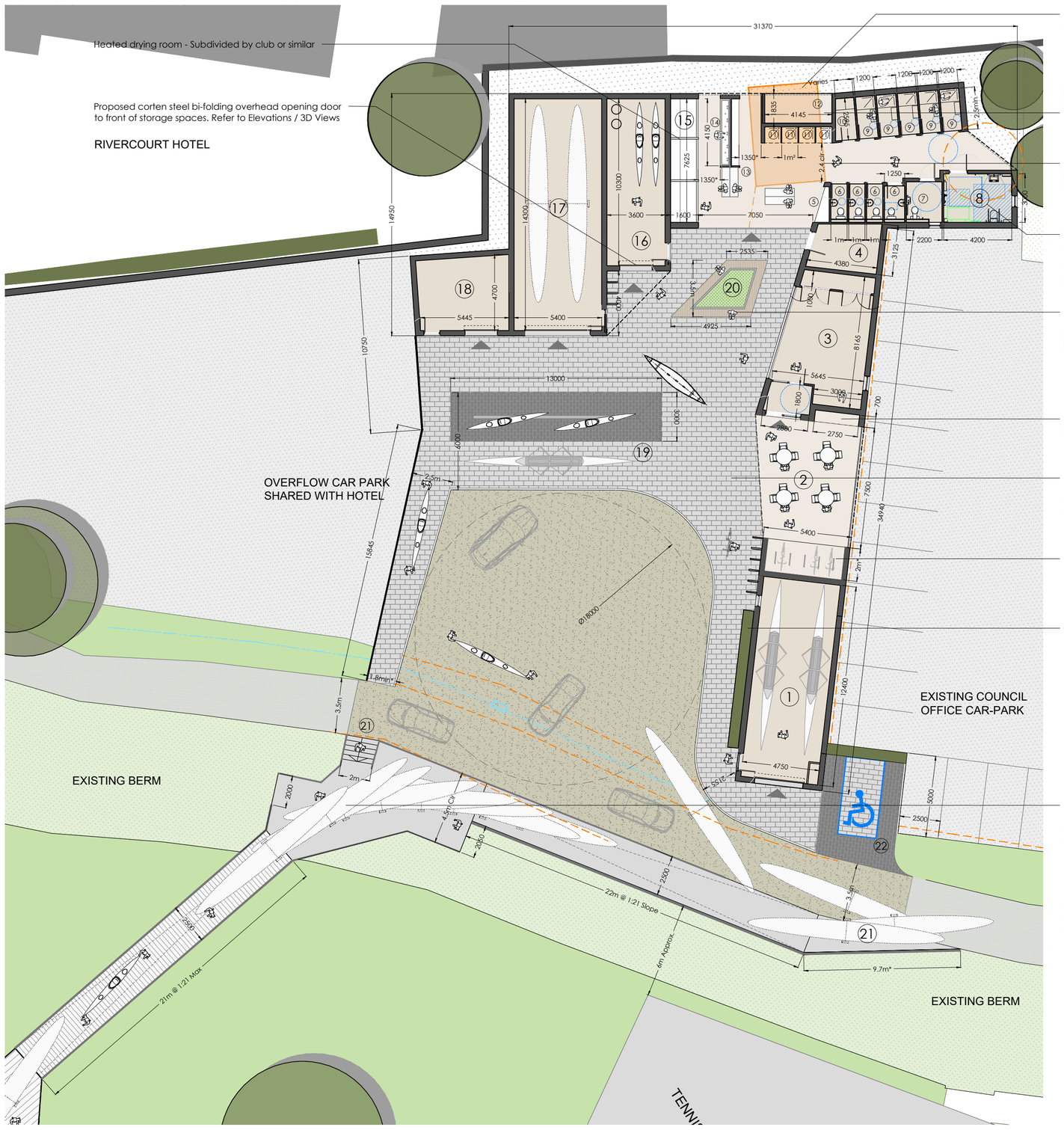
CLIENT: **KILKENNY COUNTY COUNCIL**

PROJECT: **'NORE RIVER FACILITIES KILKENNY' AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY**

DRAWING TITLE: **PROPOSED SITE LAYOUT**

PROJECT	ORIGIN	VOLUME	LEVEL	TYPE	DISC	CATEGORY	NUMBER	STATUS	REVISION
2257	KHA	ZZ	00	DR	A	P	1002	S1	P01

A2



Outline of existing single storey maintenance store to be removed.

This area dedicated to external plant items - Refer to Building Services Engineer drawings Dashed line indicates perforated roller shutter or similar to secure the area after hours

This area dedicated to external plant items - Refer to Building Services Engineer drawings Dashed line indicates perforated roller shutter or similar to secure the area after hours

'Changing Places' facility provided in accordance with TGD M 2022 - comprising an accessible sanitary facility with; toilet, hoist, basin, adult changing bench, shower for people with a range of abilities.

Central space to comprise seating area in fair faced concrete and thermally modified timber over rain garden Refer to Landscaping layout for details of proposed rain garden

Recess within covered area to house vending machines or similar in addition to refuse bins

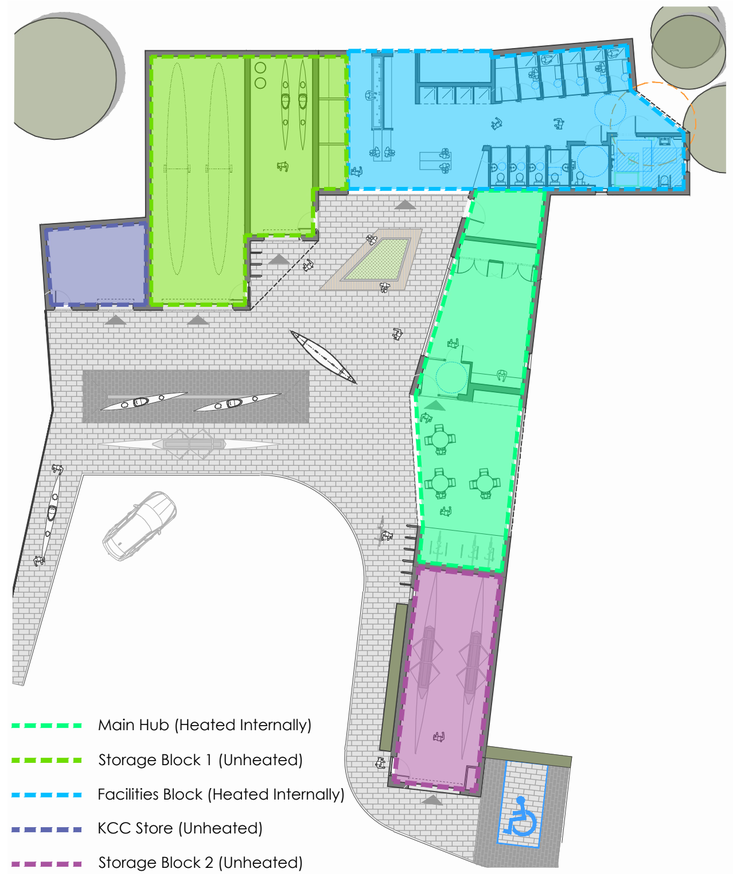
Select Kilkenny limestone paving or similar to the pedestrian public realm areas. Washdown area denoted in smaller darker limestone paving sett or similar

Private bike store here for users of facility only. Additional bike storage is supplied elsewhere on site. Refer to Site Layout drawing.

Note: Please refer to landscaping layout accompanying planning pack for details of vegetation/planters etc

Note: Pontoon access route has been autotracked for use by Dragon Boat (dimensions indicated 12.2m long x1.2m wide on central trolley with handlers front and rear)

Note: Drawings are to be read in conjunction with civil engineers drainage layouts & landscaping plan



- Main Hub (Heated Internally)
- Storage Block 1 (Unheated)
- Facilities Block (Heated Internally)
- KCC Store (Unheated)
- Storage Block 2 (Unheated)

FLOORPLAN - LEGEND

1. Boat Storage - 59m²
2. Covered Terrace - 42m²
3. Community Room - 45m²
4. Plant - 8m²
5. Info Point / First Aid - 1m²
6. Toilets - Unisex - 2m²
7. Universal Access WC- 7m²
8. Changing Places Facility - 12.6m²
9. Shower / Changing - 2m²
10. Cleaner Store - 2m²
11. Outdoor Shower - 1m²
12. External Plant - 8m²
13. Lockers - 2m²
14. Wash trough - 3m²
15. Drying Room - 12m²
16. Equipment Storage - 37m²
17. Dragon-boat Store - 75m²
18. Maintenance Store - 25m²
19. Wash Down Area - 39m²
20. Public Seating Area / Raingarden
21. Access to water / pontoon
22. Universal parking bay

FLOORPLAN - ZONING

1:250

0 1 2 5 10 15M

SCHEDULE OF AREAS - HUB

Facilities Block Area: **159 sq.m / 1711 sq.ft**
Excluding Circulation: 86.3 sq.m / 929 sq.ft

Heated Space: 97.5 sq.m / 1050 sq.ft
Unheated Space: 124.5 sq.m / 1340 sq.ft

Overall Floor Area: **460 sq.m / 4951 sq.ft**
(includes 42sq.m covered external area & 73sq.m covered circulation space)

- To be Demolished / Removed
- FFL:43.70 Finished Floor Level
- Proposed Covered Circulation
- Proposed Internal Spaces
- Proposed Constuction

PROPOSED FLOORPLAN LAYOUT (IN CONTEXT)

1:200

0 1 2 4 6 8 10M

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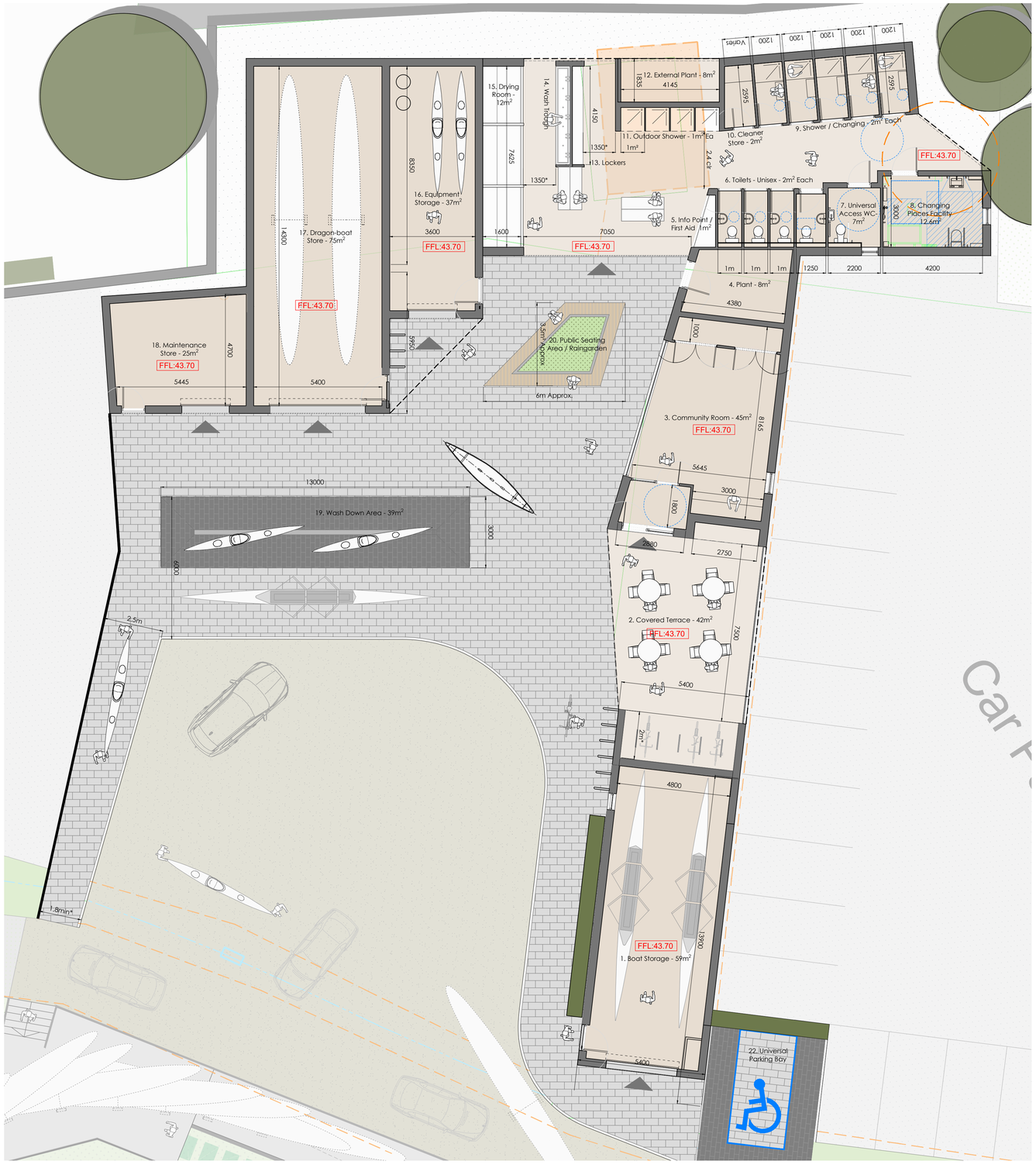
CLIENT: **KILKENNY COUNTY COUNCIL**

PROJECT: **'NORE RIVER FACILITIES KILKENNY' AT COUNTY HALL, JOHNS ST LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY**

DRAWING TITLE: **PROPOSED FLOORPLAN (IN CONTEXT)**

PROJECT	ORIGIN	VOLUME	LEVEL	TYPE	DISC	CLASSIFICATION	NUMBER	STATUS	REVISION
2257	KHA	ZZ	00	DR	A	P	1100	S1	P01

A1



PROPOSED FLOORPLAN - GENERAL ARRANGEMENT

1:100

0 1 2 3 4 5M

	Demolished / Removed / Altered
	Proposed Public Lighting
	Proposed Constuction
	Proposed Enclosed Floor Area
	Proposed Covered Circulation
43.70m	Proposed Finished Floor Level
	Existing Walking Route Maintained
	Extent of Existing Low Level Planting
	Extent of Existing Grass
	Extent of Existing Grassed Berm
	Extent of Existing Carpark Area
	Extent of Existing Grasscrete
	Extent of Proposed Raingarden
	Extent of Proposed Shared Surface (Colour Macadam/Bonded Aggregate)
	Extent of Proposed Limestone Paving
	Extent of Proposed Washdown Area & Accessible Parking Circulation
	Extent of Proposed Pontoon Access (Fairfaced concrete path / landing)
	Extent of Proposed Pontoon Access (Suspended walkway - Fibre cement)
	Extent of ZAP surrounding dovecote

SCHEDULE OF AREAS - HUB

Facilities Block Area: **159 sq.m / 1711 sq.ft**
Excluding Circulation: 86.3 sq.m / 929 sq.ft

Heated Space: 97.5 sq.m / 1050 sq.ft
Unheated Space: 124.5 sq.m / 1340 sq.ft

Overall Floor Area: **460 sq.m / 4951 sq.ft**
(includes 42sq.m covered external area & 73sq.m covered circulation space)

- To be demolished
- FFL:43.70 Finished Floor Level
- Proposed Covered Circulation
- Proposed Internal Spaces
- Proposed Constuction

STANDARD INSTRUCTIONS

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Anglesea House, Anglesea Street
Clonmel, Co. Tipperary

SCALE: **1:100@ A1**

STATUS: **PLANNING**

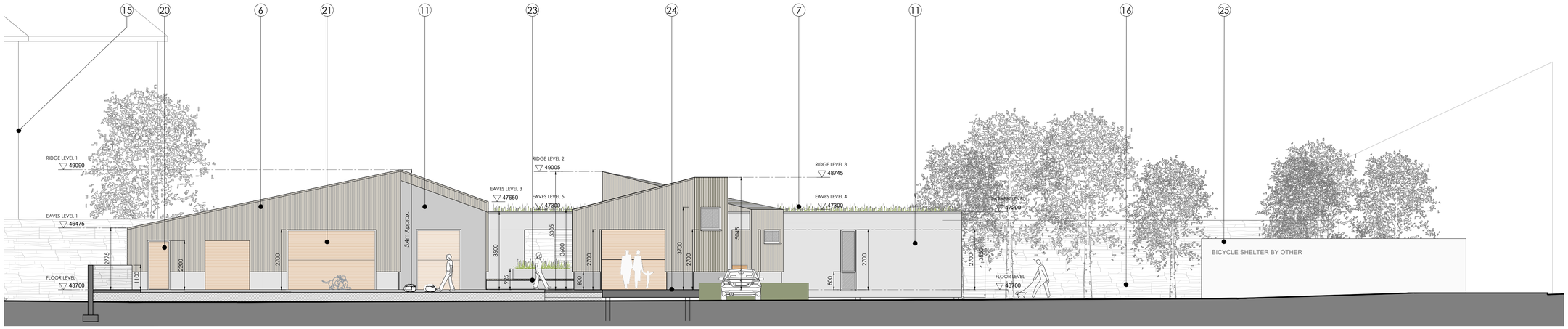
CLIENT: **KILKENNY COUNTY COUNCIL**

PROJECT: **'NORE RIVER FACILITIES KILKENNY' AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY**

DRAWING TITLE: **PROPOSED FLOORPLAN GENERAL ARRANGEMENT**

PROJECT	ORIGIN	VOLUME	LEVEL	TYPE	DISC	CATEGORY	NUMBER	STATUS	REVISION
2257	KHA	ZZ	00	DR	A	P	1101	S0	P01

A1



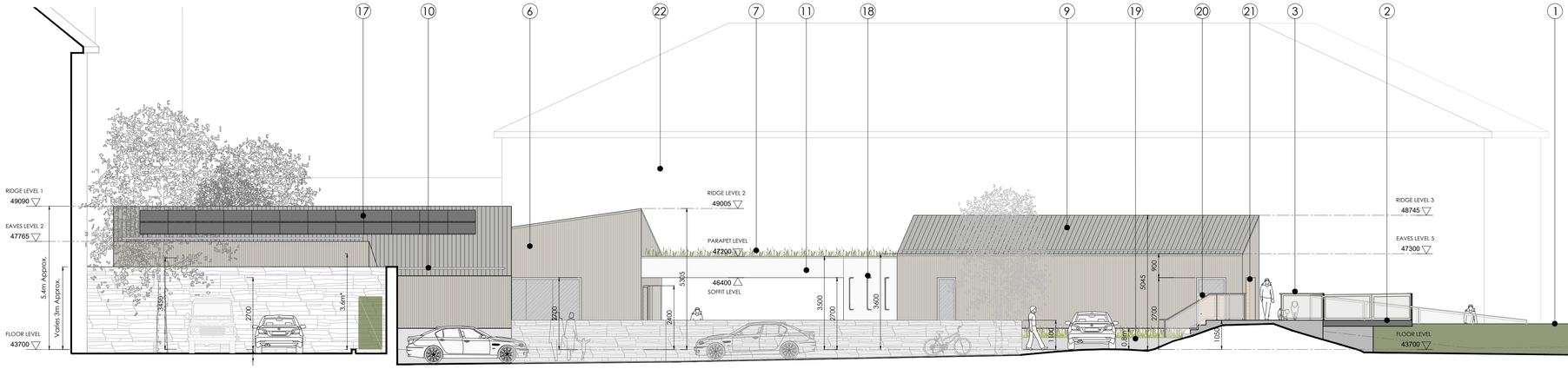
PROPOSED ELEVATION - SOUTH EAST



LEGEND - SCALE 1:2000

OUTLINE SPECIFICATION

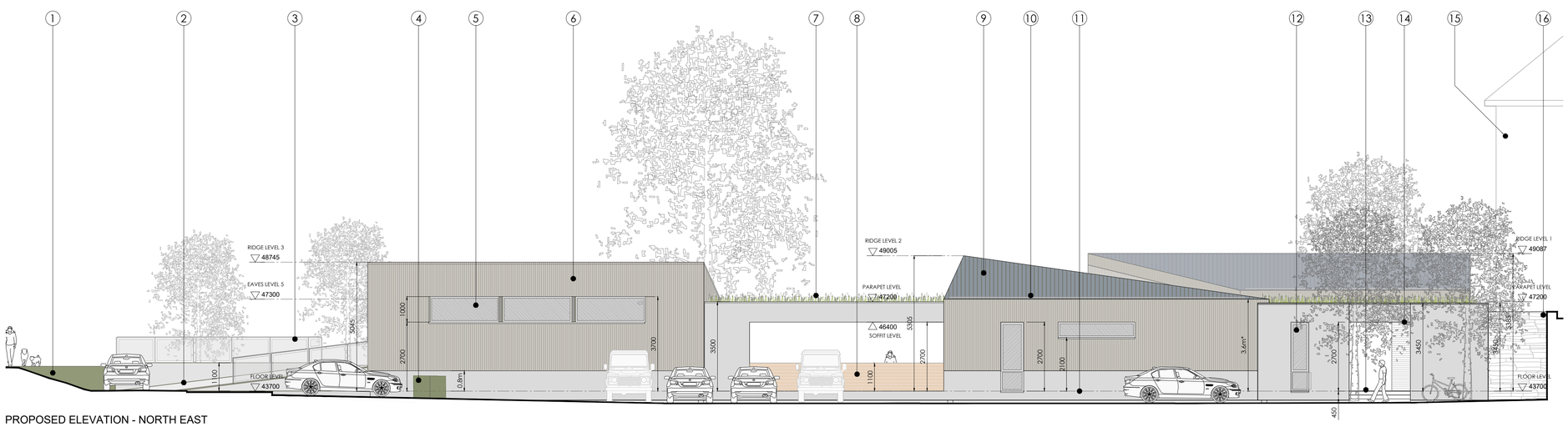
1. Existing flood defence berm - Proposed alterations - Section 09 application to OPW
2. Cast in-situ concrete access walkway, retaining wall and steps leading to pontoon
3. Balustrading to comprise laminated safety glass with stainless fixings and handrails
4. Low level screen planting or similar - Refer to landscaping drawing for details
5. Thermally broken aluminium clerestorey windows in black/anthracite grey colour
6. Thermally modified Accoya rainscreen timber cladding installed vertically or similar
7. Intensive green roof build up to flat roof portions of the building as indicated
8. Perforated corten steel balustrading or similar 1100mm high as indicated
9. Standing seam metal finish or similar to mono-pitched roofs in select grey colour
10. Hidden gutter within roof construction discharging to discreet aluminium gutters
11. Cast in-situ concrete wall or building plinth with fair faced finish
12. Thermally broken aluminium windows double/triple glazed in black / anthracite
13. Cast in-situ concrete steps in board marked finish at pedestrian exit
14. Perforated steel security roller shutters or similar open during hours of operation
15. Existing Rivercourt Hotel building & boundaries - No proposed alterations
16. Existing rubble stone boundary wall not to be altered as part of the works
17. Photovoltaic cells or similar installed on south facing roof face as indicated
18. Surface mounted brushed stainless steel supports for upright storage of kayaks etc
19. Precast concrete planter with low level vegetation - Refer to landscape drawing
20. Personnel door in solid corten steel finish or similar with fanlight overhead as indicated
21. Bi-folding / overhead roller door in select corten steel finish or similar - See 3D views
22. Existing County Hall building / extension - No proposed alterations
23. Raised planter in fair faced concrete or similar with thermally modified Accoya timber seating area or similar. Refer to landscape drawings for further details
24. Select limestone paving flags used in public realm area with darker cobbles or similar to washdown area and universal access parking bay - Refer to landscape layout
25. Bicycle store/parking area by other - Not forming part of this application
26. For structural & civils details please refer to engineers drawings and report
27. Please refer to Services Consultant planning pack for services layouts & lighting report
28. Soffit of covered terrace / circulation area within facilities block finished with space cedar battens or similar with lighting inset
29. Opal multiwall polycarbonate integrated rooflight or similar within standing seam roof
30. Cedar battens applied to rear wall of community space with discreet doors to adjoining storage



PROPOSED ELEVATION - SOUTH WEST



LEGEND - SCALE 1:2000



PROPOSED ELEVATION - NORTH EAST



LEGEND - SCALE 1:2000

PROPOSED ELEVATIONS - BUILDING

1:100
0 1 2 3 4 5M

To be demolished

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P01	15.07.2024	ISSUED FOR PLANNING - SECTION 177 AE - -	AQ	KH	KB

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STATUS: PLANNING

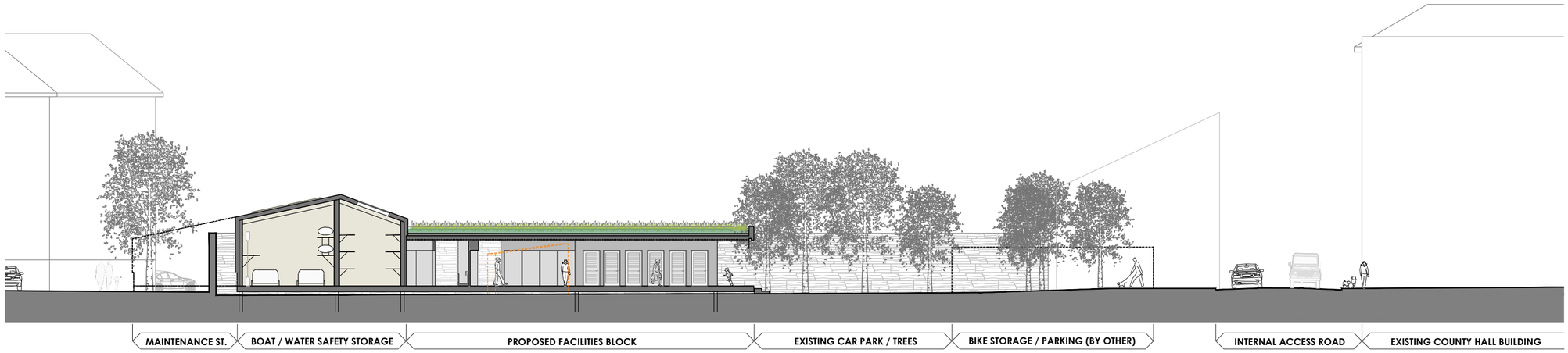
CLIENT: KILKENNY COUNTY COUNCIL

PROJECT: 'NORE RIVER FACILITIES KILKENNY' AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY

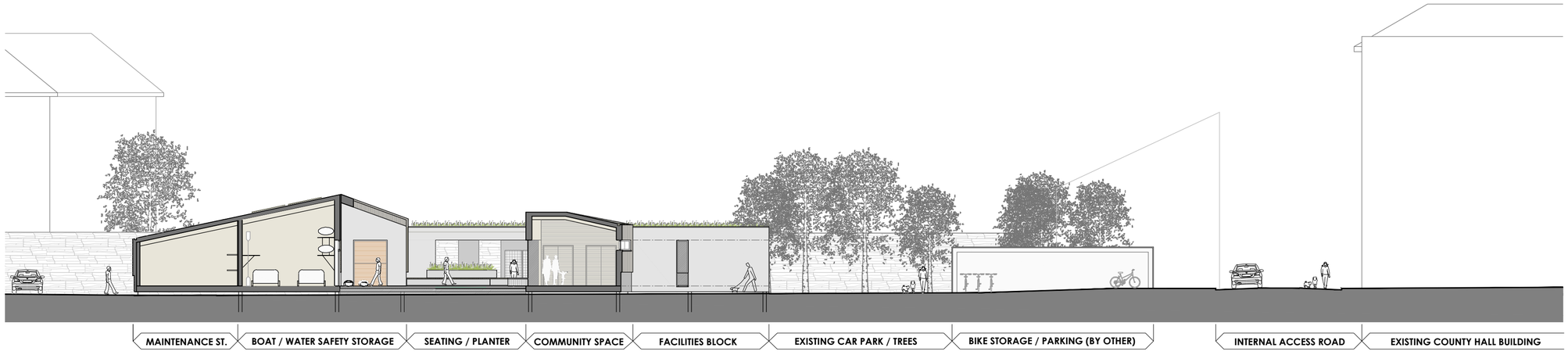
DRAWING TITLE: PROPOSED BUILDING ELEVATIONS

PROJECT:	ORIGIN:	VOLUME:	LEVEL:	TYPE:	DISC:	CATEGORY:	NUMBER:	STATUS:	REVISION:
2257	KHA	ZZ	00	DR	A	P	2001	S0	P01

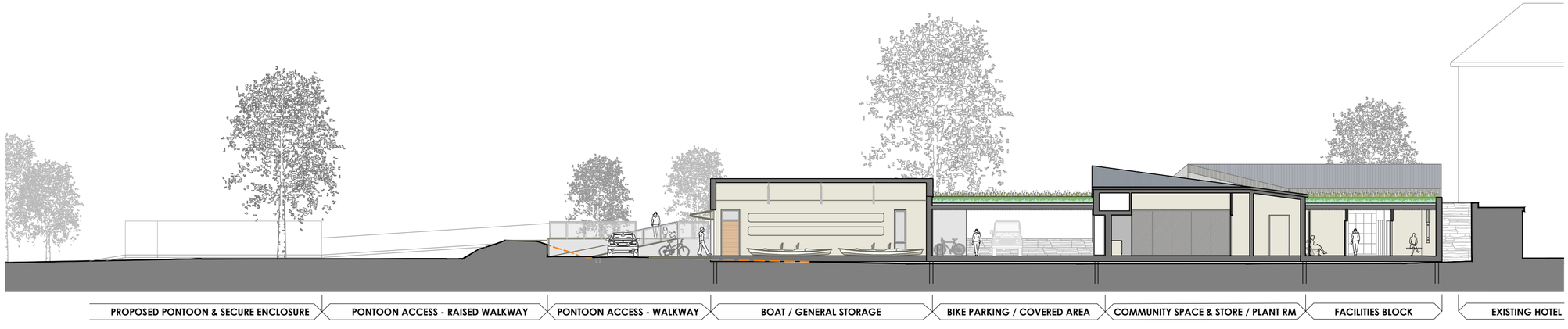
A2



PROPOSED SECTION AA - STORAGE & FACILITIES



PROPOSED SECTION BB - STORAGE & COMMUNITY SPACE



PROPOSED CROSS SECTION CC - FACILITIES BLOCK, COMMUNITY SPACE & COVERED TERRACE

Proposed Constuction

To be demolished



LEGEND - SCALE 1:2000



LEGEND - SCALE 1:2000



LEGEND - SCALE 1:2000

PROPOSED SITE SECTIONS

1:200

0 1 2 4 6 8 10M

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SCALE: **1/200**

STATUS: **PLANNING**

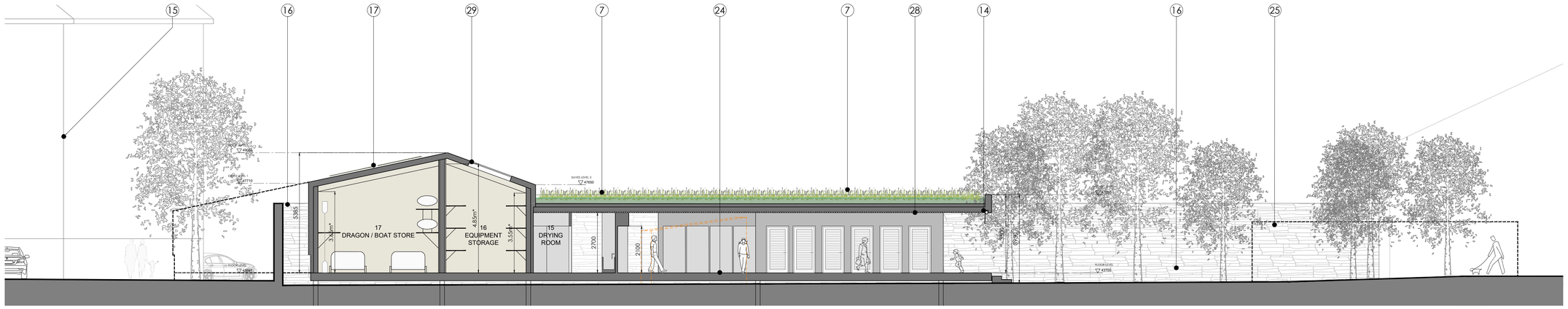
CLIENT: **KILKENNY COUNTY COUNCIL**

PROJECT: **NEW WATER SPORTS ACTIVITY CENTRE AT COUNTY HALL, JOHNS ST. CITY CENTRE, CO. KILKENNY**

DRAWING TITLE: **PROPOSED SITE SECTIONS**

PROJECT:	ORIGIN:	VOLUME:	LEVEL:	TYPE:	DISC.	CATEGORY:	NUMBER:	STATUS:	REVISION:
2257	KHA	ZZ	00	DR	A	P	3001	S1	P01

A1



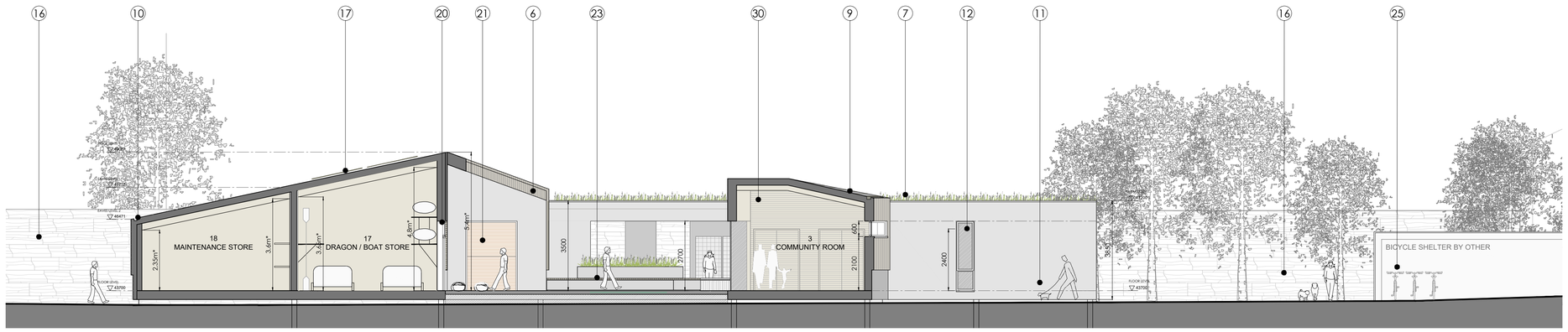
PROPOSED SECTION AA - STORAGE & FACILITIES



LEGEND - SCALE 1:2000

OUTLINE SPECIFICATION

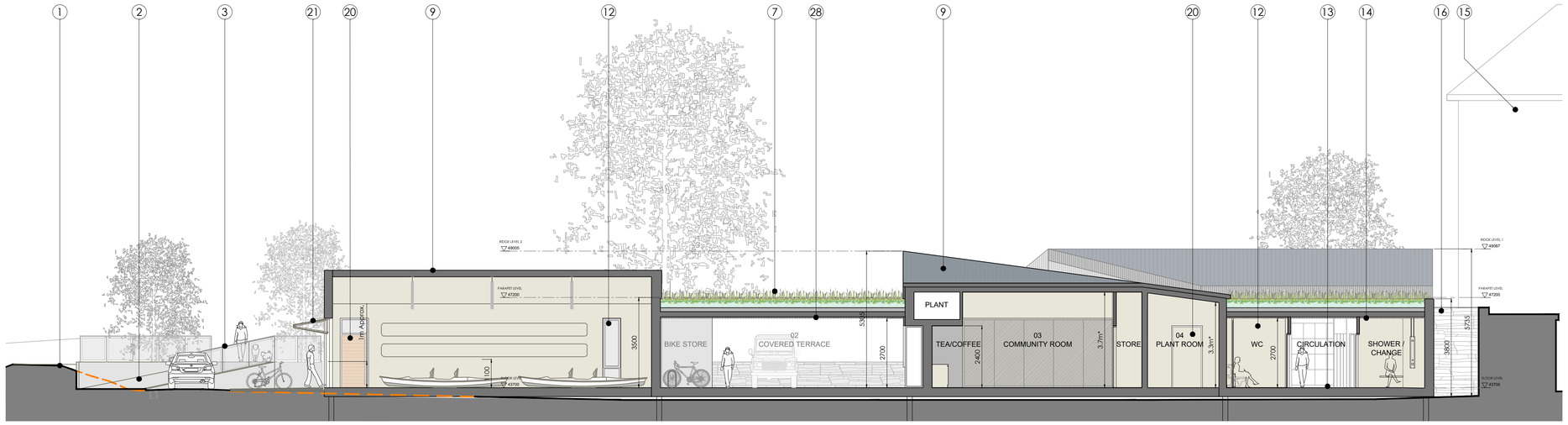
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PROPOSED SECTION BB - STORAGE & COMMUNITY SPACE



LEGEND - SCALE 1:2000



PROPOSED CROSS SECTION CC - FACILITIES BLOCK, COMMUNITY SPACE & COVERED TERRACE



LEGEND - SCALE 1:2000

PROPOSED BUILDING SECTIONS

1:100
0 1 2 3 4 5M

Proposed Constuction

To be demolished

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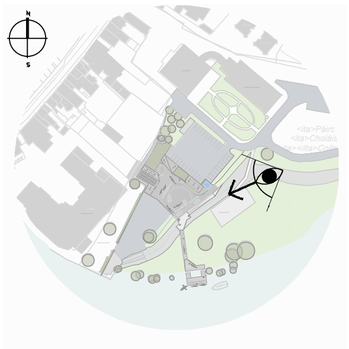
PROJECT: 'NORE RIVER FACILITIES KILKENNY' AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY

DRAWING TITLE: PROPOSED BUILDING SECTIONS

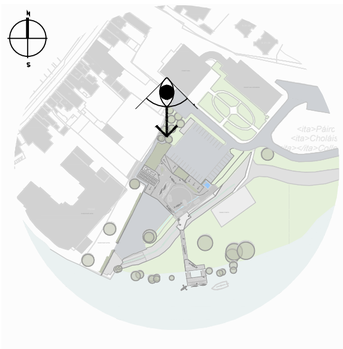
PROJECT:	ORIGIN:	VOLUME:	LEVEL:	TYPE:	DISC:	CATEGORY:	NUMBER:	STATUS:	REVISION:
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A2

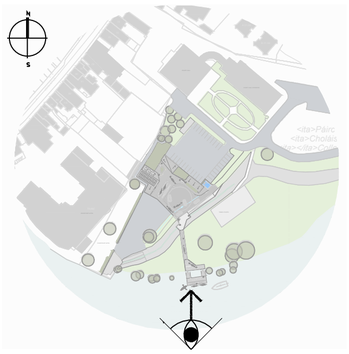




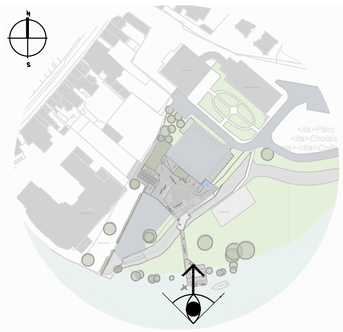




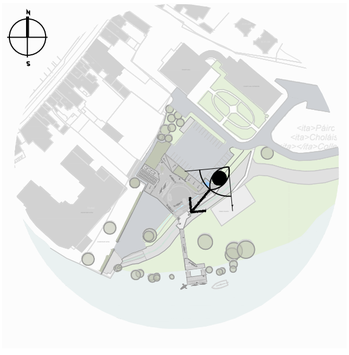




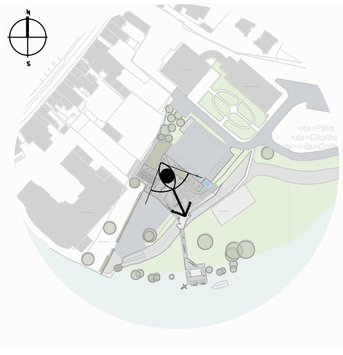












PROPOSED 3D VIEWS - ARCHITECTS IMPRESSIONS

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REV	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
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-	--/--/----	- - -	-	-	-
P01	15.07.2024	ISSUED FOR PLANNING - SECTION 177 AE - -	GS	AQ	KB

KENNETH HENNESSY ARCHITECTS

tel: 052 6128966
fax: 052 6180690
email: info@kharchitects.ie

Anglesea House, Anglesea Street
Clonmel, Co. Tipperary

SCALE: NTS

STATUS: PLANNING

CLIENT: KILKENNY COUNTY COUNCIL

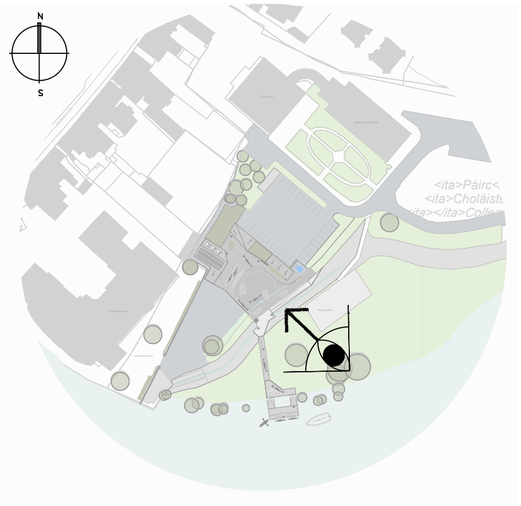
PROJECT: 'NORE RIVER FACILITIES KILKENNY' at COUNTY HALL, JOHNS ST. LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY

DRAWING TITLE: PROPOSED 3D VIEWS - ARCHITECTS IMPRESSIONS

PROJECT	ORIGIN	VOLUME	LEVEL	TYPE	DISC	CATEGORY	NUMBER	STATUS	REVISION
2257	KHA	ZZ	00	DR	A	P	6001	S1	P01



EXISTING SITE LOOKING NORTH WEST TOWARDS CITY HALL





PROPOSED WATER SPORTS ACTIVITY HUB



ZOOMED VIEW OF CENTRAL SPACE / MATERIALS

PHOTOMONTAGE - EXISTING & PROPOSED

STANDARD INSTRUCTIONS

1 THE MAIN CONTRACTOR, SUB-CONTRACTOR OR SUPPLIER SHALL:

VERIFY ALL DIMENSIONS ON SITE AND IMMEDIATELY REPORT TO THE ARCHITECT ANY DISCREPANCIES ON THE DRAWINGS.

WORK TO FIGURED DIMENSIONS ONLY (EXCEPT WHERE FULL SIZE DETAILS ARE PROVIDED).

NOT VARY ANY WORK SHOWN ON THE DRAWINGS WITHOUT OBTAINING PRIOR APPROVAL FROM THE ARCHITECT.

BE RESPONSIBLE FOR REQUESTING FROM THE ARCHITECT ANY ADDITIONAL INFORMATION REQUIRED.

SUPPLY TO THE ARCHITECT ALL SHOP DRAWINGS, ILLUSTRATIONS, SPECIFICATIONS, ETC, OF ALL SPECIALIST WORK TO BE INCORPORATED IN THE MAIN CONTRACT WORKS.

IMMEDIATELY INFORM THE ARCHITECT IF ANY WORK SHOWN ON THIS DRAWING IS NOT IN ACCORDANCE WITH THE RELEVANT CODES OF PRACTICE RECOGNISED GOOD PRACTICE THROUGHOUT THE INDUSTRY AND DOES NOT COMPLY WITH THE RELEVANT LOCAL AUTHORITY BYE-LAWS OR BUILDING REGULATIONS.

IMMEDIATELY ADVISE THE ARCHITECT / QUANTITY SURVEYOR OF THE EFFECT UPON PROGRAMME AND COST OF ANY ALTERATIONS TO THE PROPOSED WORKS SHOWN ON THIS DRAWING.

2 THIS DRAWING SUPERSEDES ALL PREVIOUS ISSUES OF THE SAME DRAWING NUMBER WITH EARLIER REVISIONS.

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GENERAL NOTES

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P01	15.07.2024	ISSUED FOR PLANNING - SECTION 177 AE - -	GD	AQ	KB

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Anglesea House, Anglesea Street
Clonmel, Co. Tipperary

SCALE: **NTS**

STATUS: **PLANNING**

CLIENT: **KILKENNY COUNTY COUNCIL**

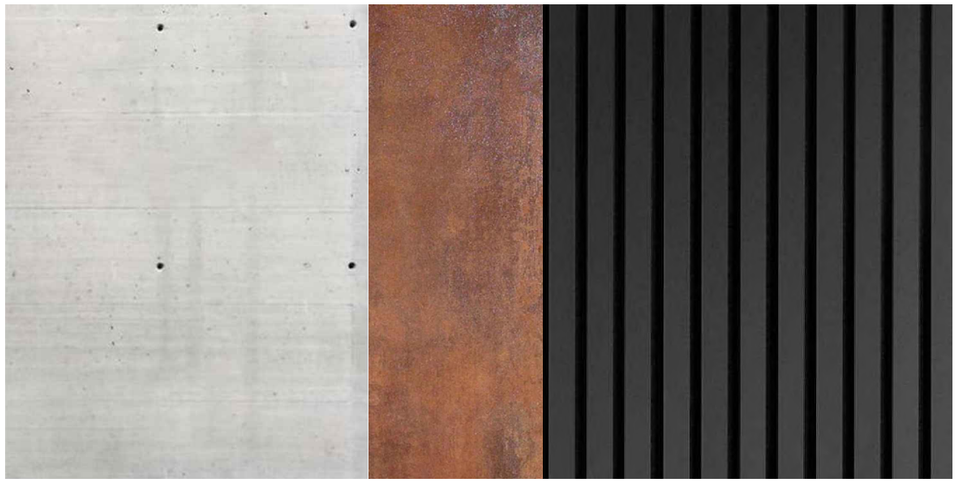
PROJECT: **NEW WATER SPORTS ACTIVITY CENTRE AT COUNTY HALL, JOHNS ST. CITY CENTRE, CO. KILKENNY**

DRAWING TITLE: **PHOTOMONTAGE EXISTING & PROPOSED**

PROJECT	ORIGIN	VOLUME	LEVEL	TYPE	DISC	CATEGORY	NUMBER	STATUS	REVISION
2257	KHA	ZZ	00	DR	A	P	6002	S1	P01

MATERIAL / FINISHES PRECEDENTS

NTS



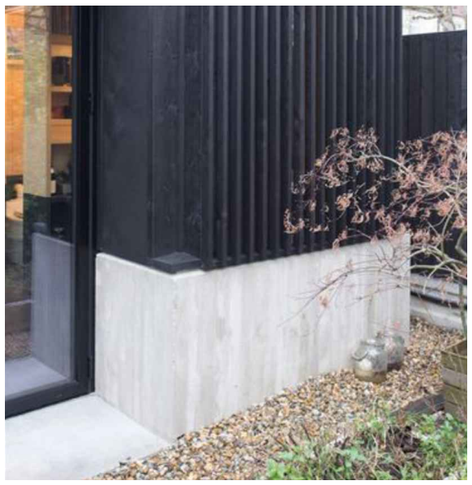


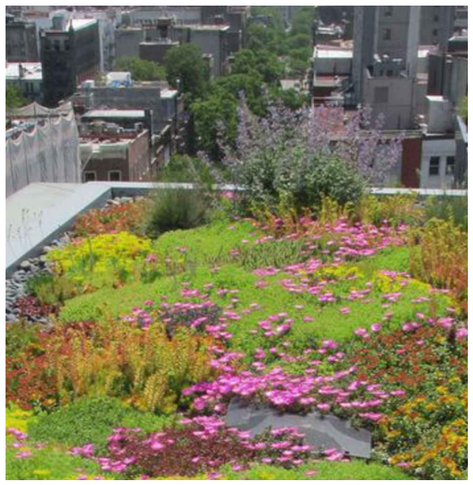














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Project No.:	22175	**Pages:**	**1 of 1**
Project Title:	Nore River Facilities Kilkenny		
	Co. Hall, John Street, Co. Kilkenny		
Client:	**Kilkenny County Council**		

Doc Control:	**Producer**	**Reviewer**	**Approver**	**Issue Date**
Name:	STR	KD	BH	12/07/2024
Date:	12/07/2024	12/07/2024	12/07/2024	

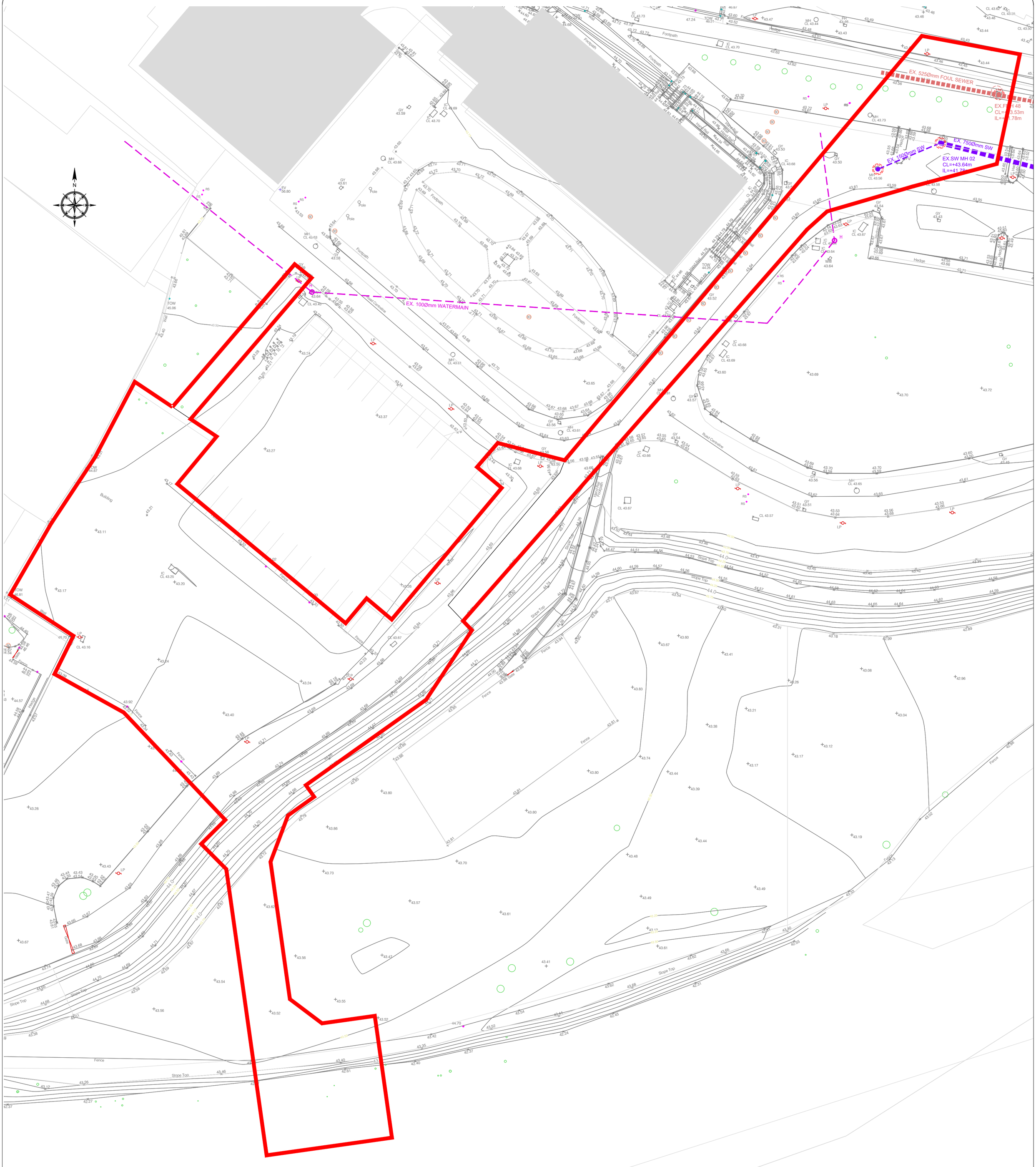
Drawing Title	**Drawing No.**	**Revisions**
Existing Site Plan & Existing Water Services	22175-100	1
Proposed Water Services Layout & Details	22175-150	1
Proposed Site Levelss	22175-170	1
OPW Section 9 Application	22175-175	1

Document Title	**Document No.**	**Revisions**
Civil Enginneing Planning Report		1
Flood Risk Assessment		1

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EXISTING SITE PLAN AND EXISTING SEVICES

SCALE 1:250 @ A1

LEGEND:

- SITE BOUNDARY
- EXISTING SURFACE WATER SEWER
- EXISTING FOUL SEWER
- EXISTING WATERMAIN

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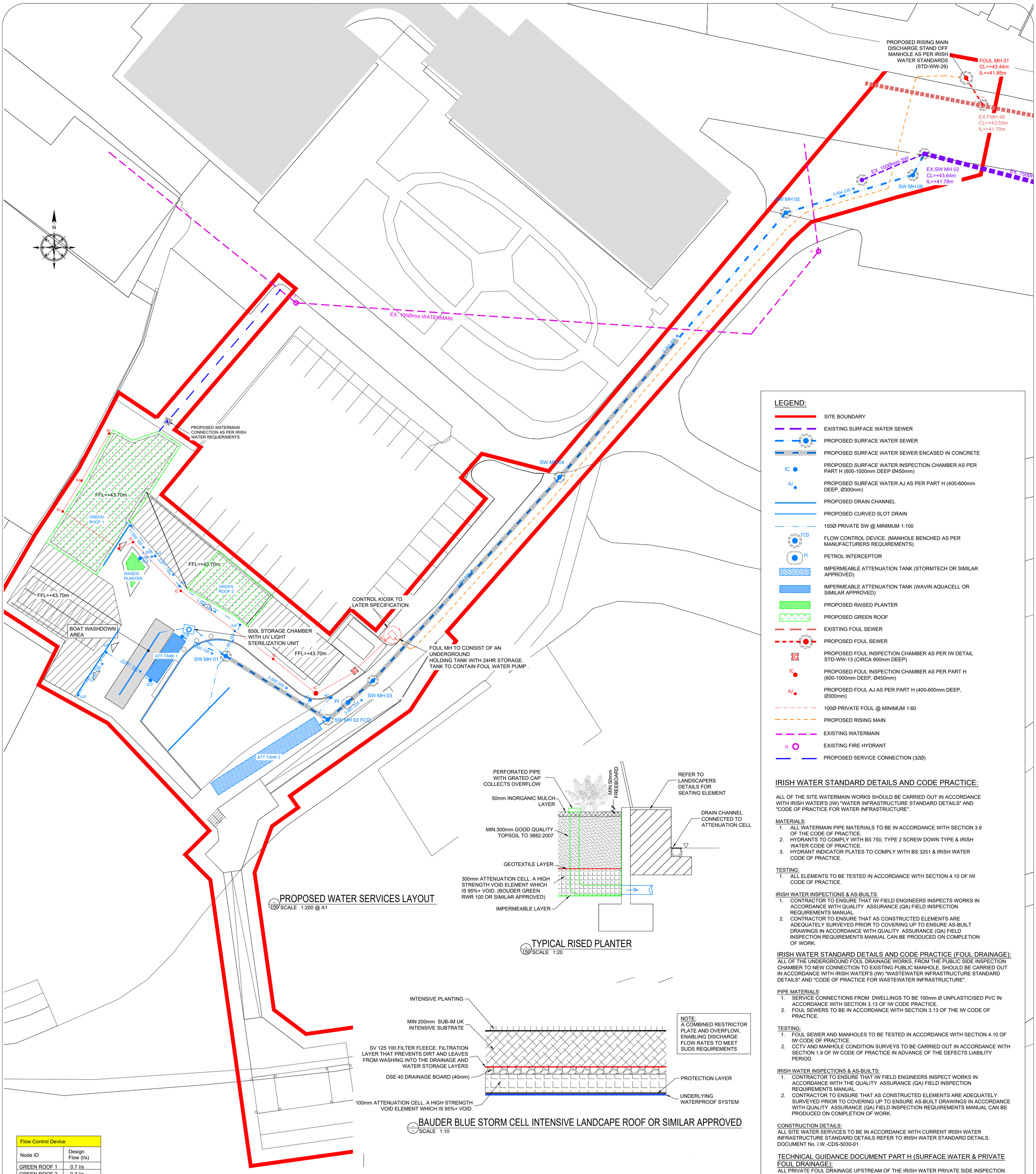
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W: www.draconsulting.ie

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CLIENT:	KILKENNY COUNTY COUNCIL
PROJECT:	NORE RIVER FACILITIES KILKENNY AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY
TITLE:	EXISTING SERVICES
DATE:	12/07/2024
SCALES:	AS SHOWN @ A1
DESIGNER:	STR
PRODUCER:	STR
VERIFIER:	BH
APPROVER:	KD
DRG. No.	22175-100
REV.	1



LEGEND:

- SITE BOUNDARY
- EXISTING SURFACE WATER SEWER
- PROPOSED SURFACE WATER SEWER
- PROPOSED SURFACE WATER SEWER ENCASED IN CONCRETE
- IC — PROPOSED SURFACE WATER INSPECTION CHAMBER AS PER PART H (600-1000mm DEEP Ø450mm)
- AJ — PROPOSED SURFACE WATER AJ AS PER PART H (400-600mm DEEP, Ø300mm)
- PROPOSED DRAIN CHANNEL
- PROPOSED CURVED SLOT DRAIN
- 150Ø PRIVATE SW @ MINIMUM 1:100
- FCD — FLOW CONTROL DEVICE. (MANHOLE BENCHED AS PER MANUFACTURERS REQUIREMENTS)
- PI — PETROL INTERCEPTOR
- IMPERMEABLE ATTENUATION TANK (STORMTECH OR SIMILAR APPROVED)
- IMPERMEABLE ATTENUATION TANK (WAVIN AQUACELL OR SIMILAR APPROVED)
- PROPOSED RAISED PLANTER
- PROPOSED GREEN ROOF
- EXISTING FOUL SEWER
- PROPOSED FOUL SEWER
- IC — PROPOSED FOUL INSPECTION CHAMBER AS PER IW DETAIL STD-WW-13 (CIRCA 900mm DEEP)
- IC — PROPOSED FOUL INSPECTION CHAMBER AS PER PART H (600-1000mm DEEP, Ø450mm)
- AJ — PROPOSED FOUL AJ AS PER PART H (400-600mm DEEP, Ø300mm)
- 100Ø PRIVATE FOUL @ MINIMUM 1:60
- PROPOSED RISING MAIN
- EXISTING WATERMAIN
- H — EXISTING FIRE HYDRANT
- PROPOSED SERVICE CONNECTION (32Ø)

PROPOSED WATER SERVICES LAYOUT

150 SCALE 1:200 @ A1

TYPICAL RISED PLANTER

150 SCALE 1:20

BAUDER BLUE STORM CELL INTENSIVE LANDCAPE ROOF OR SIMILAR APPROVED

SCALE 1:10

Flow Control Device	
Node ID	Design Flow (l/s)
GREEN ROOF 1	0.7 l/s
GREEN ROOF 2	0.7 l/s
IC2.1	2.0 l/s
IC8	2.0 l/s
SW MH 02 FCD	5.0 l/s

ROOF STORAGE	
Node ID	Volume (m³)
GREEN ROOF 1	14.25 m³
GREEN ROOF 2	4.56 m³

RAIN GARDEN STORAGE	
Node ID	Volume (m³)
RAIN GARDEN	1.8 m³

ATTENUATION TANK				
Node ID	Volume (m³)	CL (m)	IL (m)	ToT(m)
ATT.TANK 1	5.32 m³	43.64m	42.68m	43.08m
ATT.TANK 2	16.78 m³	43.65m	42.52m	43.22m

Link ID	Length (m)	Slope (1:X)	Dia (mm)	US Node ID	US CL (m)	US IL (m)	Dia (mm)	DS Node ID	DS CL (m)	DS IL (m)	Dia (mm)
1.000	5.332	19.0	150	AJ1	43.690	43.140	300	IC2	43.690	42.860	450
1.001	5.350	89.2	150	IC2	43.690	42.860	450	IC3	43.680	42.800	450
1.002	9.954	99.5	150	IC3	43.680	42.800	450	IC4	43.690	42.700	450
1.003	4.744	59.3	150	IC4	43.690	42.700	450	SW MH 01	43.480	42.620	1200
2.000	7.099	100.0	150	AJ5	43.690	43.140	300	AJ6	43.690	43.069	300
2.001	8.026	25.2	150	AJ6	43.690	43.069	300	IC7	43.640	42.750	450
2.002	7.456	106.5	150	IC7	43.640	42.750	450	IC8	43.640	42.680	450
2.003	6.076	101.3	150	IC8	43.640	42.680	450	SW MH 01	43.480	42.620	1200
3.000	16.609	166.1	225	SW MH 01	43.480	42.620	1200	SW MH 02 FCD	43.710	42.520	1200
3.001	8.225	164.5	225	SW MH 02 FCD	43.710	42.520	1200	SW MH 03	43.640	42.470	1200
3.002	38.212	173.7	225	SW MH 03	43.640	42.470	1200	SW MH 04	43.580	42.250	1200
3.003	48.134	171.9	225	SW MH 04	43.580	42.250	1200	SW MH 05	43.600	41.970	1200
3.004	21.369	164.4	225	SW MH 05	43.600	41.970	1200	SW MH 06	43.450	41.840	1200
3.005	10.252	170.9	225	SW MH 06	43.450	41.840	1200	CONNECTION	43.530	41.780	1200
4.000	2.106	105.3	150	IC2.1	43.660	42.880	450	IC2	43.690	42.860	450
5.000	1.333	0.4	100	GREEN ROOF 1	46.700	46.200	-	AJ1	43.690	43.146	300
6.000	1.096	54.8	150	RAIN GARDEN	43.650	42.900	-	IC2.1	43.660	42.880	450
7.000	1.379	0.4	100	GREEN ROOF 2	46.700	46.200	-	IC4	43.690	42.933	450

IRISH WATER STANDARD DETAILS AND CODE PRACTICE:

ALL OF THE SITE WATERMAIN WORKS SHOULD BE CARRIED OUT IN ACCORDANCE WITH IRISH WATER'S (IW) "WATER INFRASTRUCTURE STANDARD DETAILS" AND "CODE OF PRACTICE FOR WATER INFRASTRUCTURE".

MATERIALS:
1. ALL WATERMAIN PIPE MATERIALS TO BE IN ACCORDANCE WITH SECTION 3.9 OF THE CODE OF PRACTICE.
2. HYDRANTS TO COMPLY WITH BS 750, TYPE 2 SCREW DOWN TYPE & IRISH WATER CODE OF PRACTICE.
3. HYDRANT INDICATOR PLATES TO COMPLY WITH BS 3251 & IRISH WATER CODE OF PRACTICE.

TESTING:
1. ALL ELEMENTS TO BE TESTED IN ACCORDANCE WITH SECTION 4.10 OF IW CODE OF PRACTICE.

IRISH WATER INSPECTIONS & AS-BUILTS:
1. CONTRACTOR TO ENSURE THAT IW FIELD ENGINEERS INSPECTS WORKS IN ACCORDANCE WITH QUALITY ASSURANCE (QA) FIELD INSPECTION REQUIREMENTS MANUAL.
2. CONTRACTOR TO ENSURE THAT AS CONSTRUCTED ELEMENTS ARE ADEQUATELY SURVEYED PRIOR TO COVERING UP TO ENSURE AS-BUILT DRAWINGS IN ACCORDANCE WITH QUALITY ASSURANCE (QA) FIELD INSPECTION REQUIREMENTS MANUAL CAN BE PRODUCED ON COMPLETION OF WORK.

IRISH WATER STANDARD DETAILS AND CODE PRACTICE (FOUL DRAINAGE):

ALL OF THE UNDERGROUND FOUL DRAINAGE WORKS, FROM THE PUBLIC SIDE INSPECTION CHAMBER TO NEW CONNECTION TO EXISTING PUBLIC MANHOLE, SHOULD BE CARRIED OUT IN ACCORDANCE WITH IRISH WATER'S (IW) "WASTEWATER INFRASTRUCTURE STANDARD DETAILS" AND "CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE".

PIPE MATERIALS:
1. SERVICE CONNECTIONS FROM DWELLINGS TO BE 100mm Ø UNPLASTICISED PVC IN ACCORDANCE WITH SECTION 3.13 OF IW CODE PRACTICE.
2. FOUL SEWERS TO BE IN ACCORDANCE WITH SECTION 3.13 OF THE IW CODE OF PRACTICE.

TESTING:
1. FOUL SEWER AND MANHOLES TO BE TESTED IN ACCORDANCE WITH SECTION 4.10 OF IW CODE OF PRACTICE.
2. CCTV AND MANHOLE CONDITION SURVEYS TO BE CARRIED OUT IN ACCORDANCE WITH SECTION 1.9 OF IW CODE OF PRACTICE IN ADVANCE OF THE DEFECTS LIABILITY PERIOD.

IRISH WATER INSPECTIONS & AS-BUILTS:
1. CONTRACTOR TO ENSURE THAT IW FIELD ENGINEERS INSPECT WORKS IN ACCORDANCE WITH THE QUALITY ASSURANCE (QA) FIELD INSPECTION REQUIREMENTS MANUAL.
2. CONTRACTOR TO ENSURE THAT AS CONSTRUCTED ELEMENTS ARE ADEQUATELY SURVEYED PRIOR TO COVERING UP TO ENSURE AS-BUILT DRAWINGS IN ACCORDANCE WITH QUALITY ASSURANCE (QA) FIELD INSPECTION REQUIREMENTS MANUAL CAN BE PRODUCED ON COMPLETION OF WORK.

CONSTRUCTION DETAILS:
ALL SITE WATER SERVICES TO BE IN ACCORDANCE WITH CURRENT IRISH WATER INFRASTRUCTURE STANDARD DETAILS REFER TO IRISH WATER STANDARD DETAILS. DOCUMENT No. I.W.-CDS-5030-01

TECHNICAL GUIDANCE DOCUMENT PART H (SURFACE WATER & PRIVATE FOUL DRAINAGE):

ALL PRIVATE FOUL DRAINAGE UPSTREAM OF THE IRISH WATER PRIVATE SIDE INSPECTION CHAMBER AND ALL OF THE SURFACE WATER DRAINAGE SHOULD BE CARRIED OUT IN ACCORDANCE WITH PART H - DRAINAGE & THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.

MATERIALS:
1. ALL UNDERGROUND PIPEWORK TO BE IN ACCORDANCE WITH TABLE 7 OF PART H & SECTION 11 OF THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.

MANHOLES:
1. ALL SURFACE WATER MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION 9 OF THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.

BEDDING:
1. ALL UNDERGROUND PIPEWORK TO BE IN ACCORDANCE WITH DIAGRAM 8 OF PART H & SECTION 11 OF THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS

TESTING:
1. TESTING TO BE IN ACCORDANCE WITH SECTION 12 OF THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
2. ALL EXISTING SEWERS WITHIN THE SITES BOUNDARY SHOULD BE CCTV SURVEYED PRIOR TO COMMENCEMENT OF WORKS.
3. ALL NEW DRAINAGE SHOULD BE CCTV SURVEYED ON COMPLETION OF WORKS.

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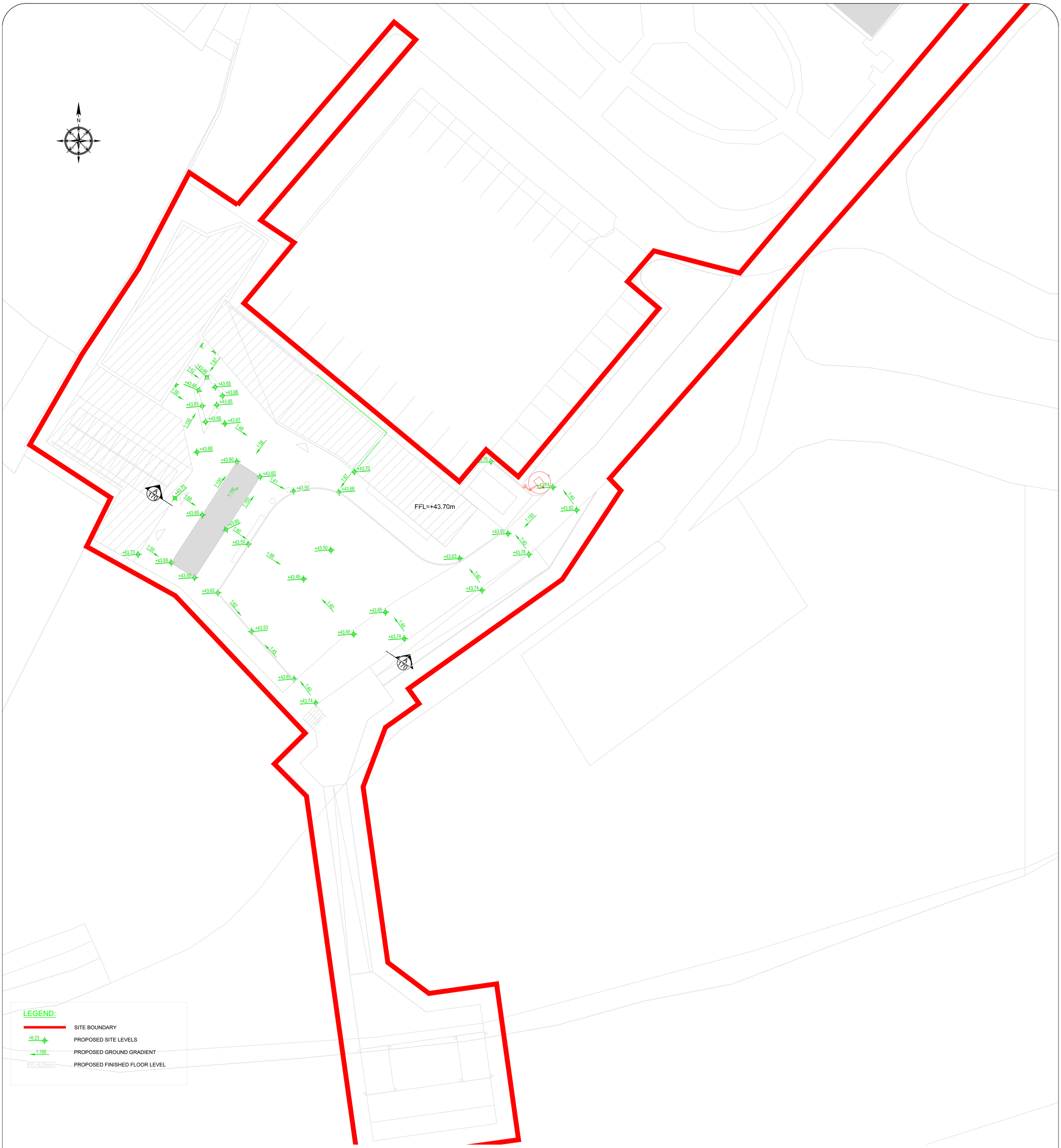
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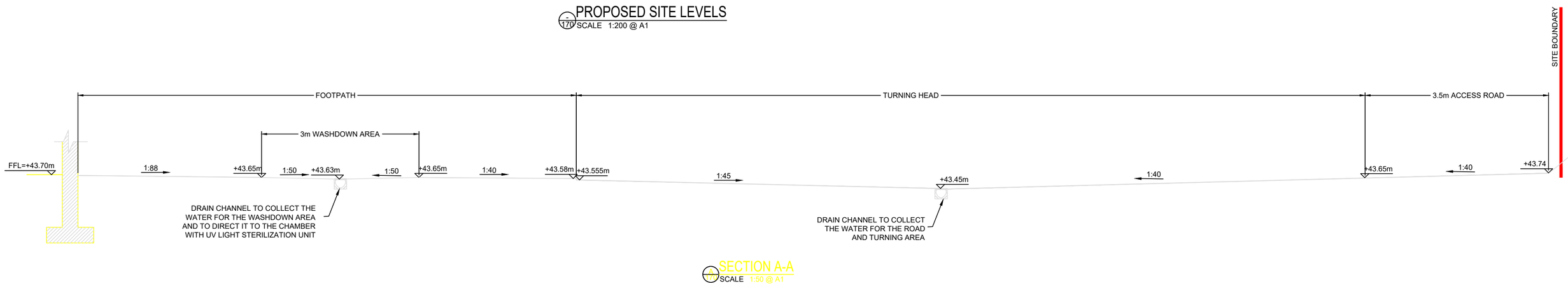
PROJECT: NORE RIVER FACILITIES KILKENNY AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY

TITLE: PROPOSED WATER SERVICES LAYOUT AND DETAILS

DATE:	12/07/2024	SCALES: AS SHOWN @ A1	
DESIGNER:	STR	DRG. No.	REV.
PRODUCER:	STR	22175-150	1
VERIFIER:	BH		
APPROVER:	KD		



PROPOSED SITE LEVELS
170 SCALE 1:200 @ A1



SECTION A-A
A SCALE 1:50 @ A1

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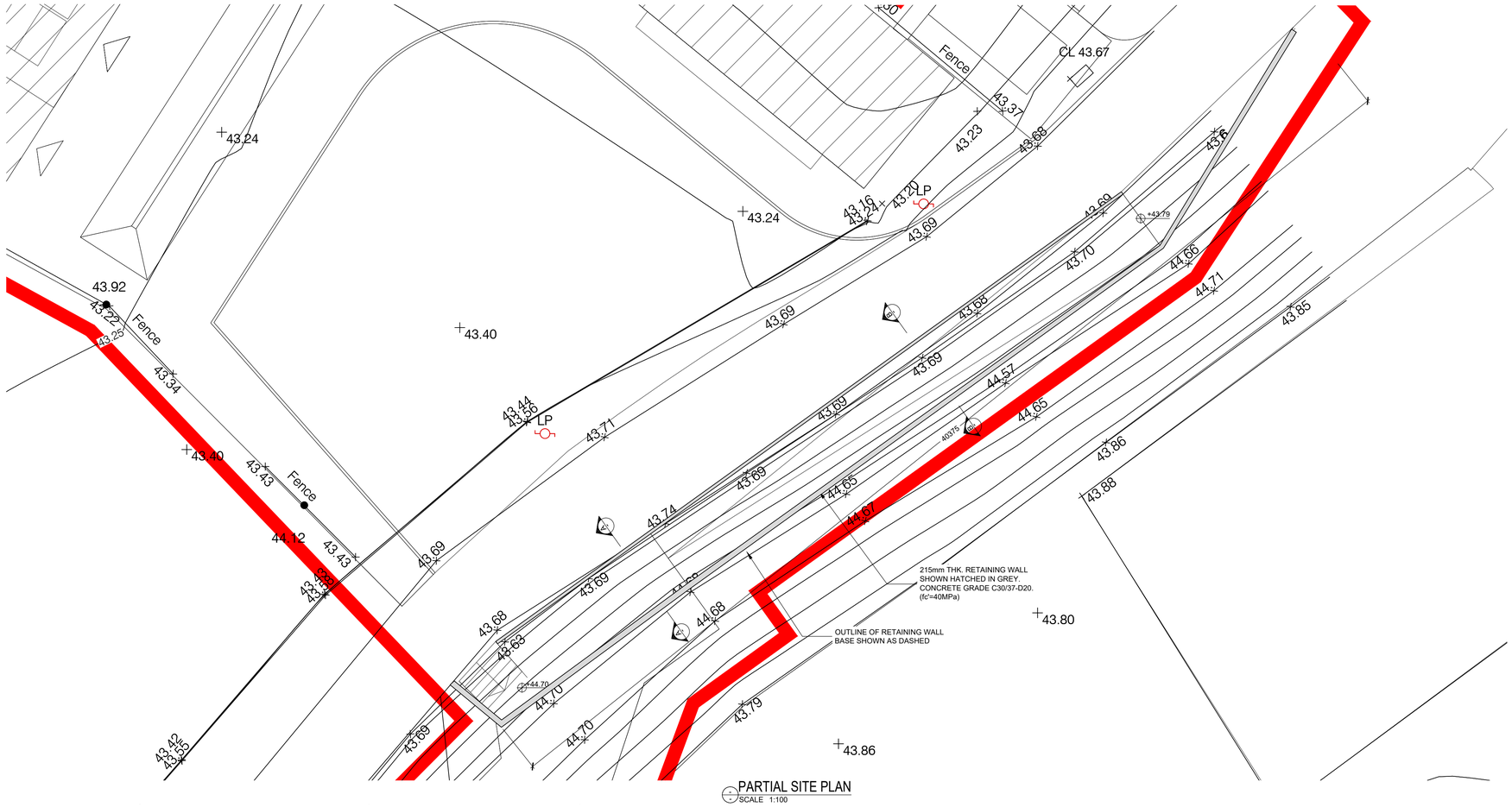
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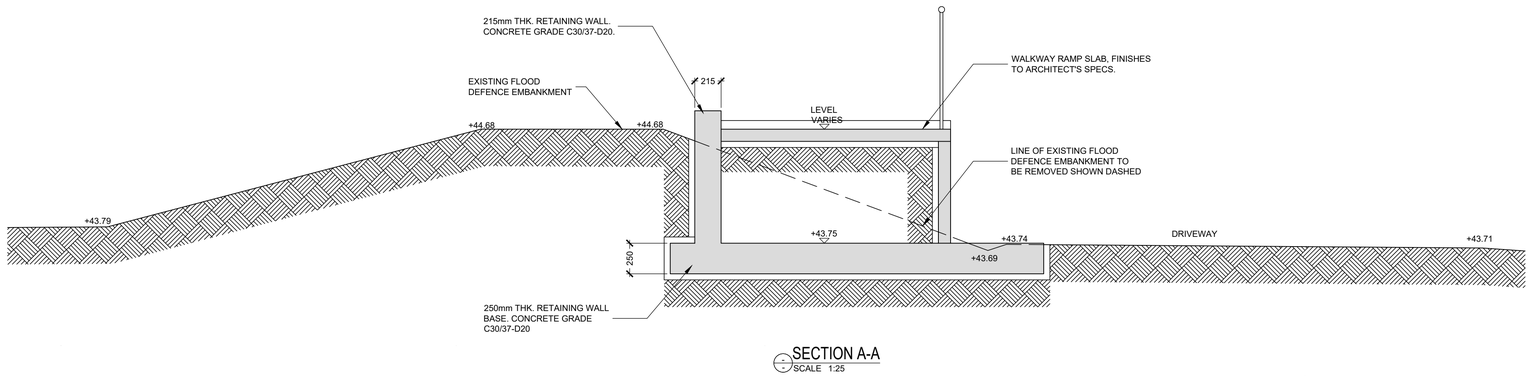
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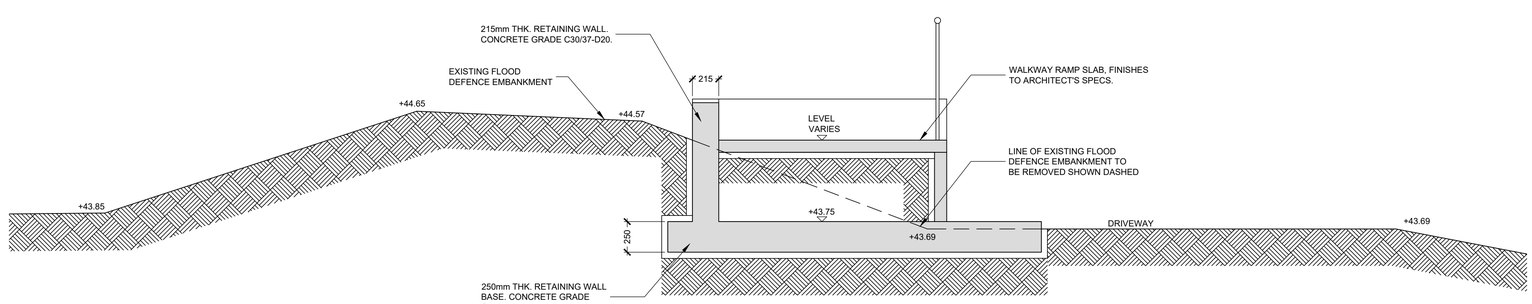
CLIENT:	KILKENNY COUNTY COUNCIL
PROJECT:	NORE RIVER FACILITIES KILKENNY AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY
TITLE:	PROPOSED SITE LEVELS AND SECTION
DATE:	12/07/2024
SCALES:	AS SHOWN @ A1
DESIGNER:	STR
PRODUCER:	STR
VERIFIER:	BH
APPROVER:	KD
DRG. No.	22175-170
REV.	1



PARTIAL SITE PLAN
SCALE 1:100



SECTION A-A
SCALE 1:25



SECTION B-B
SCALE 1:25

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NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS IN METRES UNLESS NOTED OTHERWISE.
2. USE FIGURED DIMENSIONS ONLY. DO NOT SCALE.
3. DRAWINGS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEER'S, ARCHITECTS AND SERVICE ENGINEER'S DRAWINGS AND SPECIFICATIONS.
4. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS.

REV.	DESCRIPTION	PROD.	VERIF.	APPR.	DATE

PLANNING

DRA CONSULTING ENGINEERS
NSAI
DUBLIN T: 01-216-2956 | LIMERICK 061-310-701 | WEXFORD 053-915-2814
E: info@draconsulting.ie
W: www.draconsulting.ie

CLIENT: KILKENNY COUNTY COUNCIL

PROJECT: NORE RIVER FACILITIES KILKENNY AT COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY

TITLE: OPW SECTION 9 APPLICATION

DATE:	12/07/2024	SCALES:	AS SHOWN @ A1
DESIGNER:	STR	DRG. No.	22175-175
PRODUCER:	STR	REV.	1
VERIFIER:	KD		
APPROVER:	BH		

Appendix B.1 – Public Notices – Newspaper

Comhairle Chontae Chill Chainnigh
Kilkenny County Council

NEWS & NOTICES

Are you registered to vote?

Forms can be obtained from any Council Office or on **Checktheregister.ie**

You cannot vote if you are not registered!

Comhairle Chontae Chill Chainnigh
Kilkenny County Council

NOTICE PURSUANT TO: SECTION 177AE OF THE PLANNING AND DEVELOPMENT ACT 2000 (AS AMENDED) AND THE PLANNING AND DEVELOPMENT REGULATIONS 2001 (AS AMENDED).

PROPOSED FÁILTE IRELAND PLATFORMS FOR GROWTH SHARED COMMUNITY FACILITIES AT JOHNS STREET LOWER, COLLEGEPARK, KILKENNY CITY, CO. KILKENNY.

NOTICE OF PLANNING APPLICATION TO AN COIMISIÚN PLEANÁLA FOR APPROVAL

Notice is hereby given that Kilkenny County Council intends to seek the approval of An Coimisiún Pleanála under Section 177AE of the Planning and Development Act 2000 (as amended) for the proposed development which involves the construction of the 'Nore River Facilities Kilkenny' at a site of approximately 0.24 HA, located within the grounds of County Hall at Johns Street Lower, Collegepark, Kilkenny City, Co. Kilkenny.

The proposed development will consist of: Construction of a riverside facilities centre comprising the following;

a) Demolition of an existing single-storey maintenance store,
b) Removal of selected on-site vegetation to facilitate the works,
c) Single-storey facilities block with a flat, intensive green roof build-up, containing toilets, universally accessible bathroom, changing places facility, showering / changing cubicles, cleaner's store, outdoor showers, an external plant area, storage lockers, wash trough, and a drying room,
d) Single-storey adjoining community block with an asymmetrical pitched roof containing a community room, associated kitchenette, and a plant room / central information point,
e) Adjoining external covered terrace area with a flat intensive green roof build-up,
f) A single-storey storage block with an asymmetrical pitched roof containing equipment storage, a dragon-boat / rowing boat storage, and a maintenance store,
g) A single-storey adjoining block with a mono-pitched roof containing a boat / general storage area,
h) A hard-landscaped pedestrian central space with raised central planter / seating, planted areas, boat wash-down area and associated surface water UV filtration system,
i) Proposed shared surface including a central set-down / vehicular turning area for boat loading / unloading and pedestrian use generally,
j) Access route to river over berm comprising a sloped access path with associated retaining wall, steps, landings, balustrading, and associated handrails,
k) Raised walkway from top of berm to pontoon with associated balustrading / handrails,
l) Part fixed / part floating access pontoon within the river,
m) Site services connections and drainage works, including connection to existing public foul and stormwater system,
n) Universally accessible parking bay and covered bicycle parking area,
o) Public lighting to all pedestrian / vehicular / parking areas,
p) Associated archaeological investigations, including test excavations and underwater surveys,
q) All necessary landscaping, site boundary and site development works.

A Natura Impact Statement (NIS) has been prepared in respect of the proposed development and accompanies the application to An Coimisiún Pleanála for approval.

An EcIA (Ecological Impact Assessment), an EIA (Environmental Impact Assessment) Screening Report, VMP (Visitor Management Plan) and a CEMP (Construction Environmental Management Plan) have also been completed in support of this application and are included as part of the plans and particulars forming this submission.

An Coimisiún Pleanála may, in relation to an application for approval under section 177AE of the Planning and Development Act 2000 as amended, approve with or without modifications, approve in part only with or without modifications, or refuse to approve.

The Natura Impact Statement, together with Plans and Particulars of the proposed development will be available for inspection free of charge or may be purchased on payment of a small fee (which fee shall not exceed the reasonable cost of making such a copy) during public opening hours **9.00am-1.00pm & 2.00pm-4.00pm Monday to Friday (excluding public holidays)** within the period from **Wednesday 1st July - Wednesday 12th August 2026**, inclusive, at the following locations:

- The offices of An Coimisiún Pleanála, 64 Marlborough Street, Dublin 1, D01 V902
- By appointment at Kilkenny County Council, County Hall, Johns Street Lower, Collegepark, Kilkenny, R95A39T. Appointments must be arranged in advance by emailing https://consult.kilkenny.ie or by contacting (056) 7794010.
- On Kilkenny County Council's online consultation portal at: https://consult.kilkenny.ie/en

Submissions and observations are invited relating to -

(I) The implications of the proposed development for the proper planning and sustainable development in the area in which it is proposed to situate the proposed development,
(II) The likely effects on the environment of the proposed development and
(III) The likely significant effects of the proposed development on a European site, if carried out.

Submissions or observations should only be made in writing to An Coimisiún Pleanála, 64 Marlborough Street, Dublin 1, D01 V902, not later than 5.00pm on Wednesday 12th August 2026.

A person may question the validity of a decision by An Coimisiún Pleanála by way of an application for judicial review, under Order 84 of the rules of the Superior Courts (S.I. No.15 of 1986) in accordance with Section 50 of the Planning and Development Act 2000 (as amended).

Practical information in respect of the judicial review process can be accessed on the Board's website www.pleanala.ie or on the Citizens Information's website www.citizensinformation.ie.

Dated this 26th June 2026
Signed:
Tim Butler,
Director of Services
Kilkenny County Council

Comhairle Chontae Chill Chainnigh
Kilkenny County Council

Section 75 of the Roads Act, 1993

TEMPORARY CLOSURE OF ROADS

NOTICE IS HEREBY GIVEN of the intention of Kilkenny County Council to close the outbound (northwest bound) lane of the following public road in Kilkenny City to vehicular traffic from Monday, 13th July to Friday 31st July 2026, to facilitate the installation of a Gas connection for Gas Networks Ireland.

Outbound Lane to be Closed	Duration of Closure	Alternative Routes
Castlecomer New Road (R712) (from Gas House Lane to Old Mart Road)	From Monday 13th July to Friday 31st July 2026	Via Hebron Road, Pennyfeather Way, Newpark Drive & Castlecomer Road Or John's Green, Wolfe Tone Street, Old Mart Road & Castlecomer Road (HGV's Route) Or Hebron Road, Kilkenny Ring Road & Castlecomer Road (HGV's Route)

Local diversions will be in place, and local access will be facilitated as far as practicable.

Appropriate signage will be erected on site.

Any person who wishes to make a submission, observation and/or objection in respect of the proposed, temporary lane closure of this public road may do so in writing to the undersigned or via email to **kmd@kilkennycoco.ie** . Submissions, observations and/or objections must be received no later than **12 noon on Thursday, 25th June, 2026.**

Stan Cullen,
A/Senior Engineer,
Kilkenny Municipal District,
Kilkenny County Council,
Patrick's Court,
Patrick Street, Kilkenny.

Comhairle Chontae Chill Chainnigh
Kilkenny County Council

Notice of Making of Variation No. 8B to the Kilkenny City & County Development Plan 2021

In accordance with Section 58 (18) (a) & (b) of the Planning & Development Act 2024, as amended, notice is hereby given that, at a meeting of Kilkenny County Council on Monday the 15th June 2026, Kilkenny County Council resolved to make Variation No. 8B as follows:

- To change the zoning of land in Callan, Thomastown and Graiguenamanagh, to reflect the requirements of the Government's National Planning Framework Implementation Guidelines.
- A copy of the City and County Development Plan, as varied, will be available for inspection by 20th July 2026 at the following locations:
- Online at https://**kilkennycoco.ie/eng/services/planning/development-plans/city-and-county-development-plan/adopted-city-and-county-development-plan.html**
- The Planning Department, County Hall, John Street, Kilkenny

Tim Butler
Director of Services
24/06/2026

Appendix B.2 – Public Notices – Site

Comhairle Chontae Chill Chainnigh

Kilkenny County Council

NOTICE PURSUANT TO: SECTION 177AE OF THE PLANNING AND DEVELOPMENT ACT 2000 (AS AMENDED) AND THE PLANNING AND DEVELOPMENT REGULATIONS 2001 (AS AMENDED).

PROPOSED FÁILTE IRELAND PLATFORMS FOR GROWTH SHARED COMMUNITY FACILITIES at JOHNS STREET LOWER, COLLEGEPARK, KILKENNY CITY, CO. KILKENNY.

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Practical information in respect of the judicial review process can be accessed on the Board's website www.pleanala.ie or on the Citizens Information's website www.citizensinformation.ie.

Signed: ..... Friday, 26th June 2026
Tim Butler,
Director of Services,
Kilkenny County Council, County Hall, John Street, Kilkenny, R95 A39T

Appendix C – Landscaping Report (Cathal O'Meara Landscape Architects)

Design Rational – Landscape Architecture

Project:
Nore River Facilities Kilkenny.

Prepared on behalf of: Kilkenny County Council

Prepared by:
Cathal O'Meara Landscape Architects
2 Mc Sweeney Street
Fermoy
Co. Cork

Issue: Planning

Date of Issue: 31. 05. 2024

Revision: 00

1.0 Introduction

The objective of this report is to describe the proposed landscape and external works as part of the Watersports Centre on the banks of the river Nore within Kilkenny town.

This report should be read in conjunction with all other documents issued and included in this submission by Cathal O'Meara Landscape Architects and all other disciplines, namely:

- Ailtiri Architects;
- Ross Swift Ecology Ltd;
- DRA Sonsulting - Civil and Structural Engineers
- Kilkenny County Council.

Cathal O'Meara Landscape Architects visited the site preceding this application in March 2024 in order to observe conditions on site, such as existing vegetation, context with respect to adjoining sites, boundaries, and other items, which would have a bearing on the design process.

The following documents have been issued by Cathal O'Meara Landscape Architects as part of this submission:

No.	Size	Scale	Title
2413 - LA- P001	A1	1:200	Landscape Layout and Details

2.0 Existing conditions

Overlooking the River Nore the site benefits from convenient links to both the town and the riverfront, presently the area acts as an overflow car park for access to Kilkenny River Court Hotel, Kilkenny County Council offices and for those availing of the Riverfront walkway.
At present the main body of the site is a flat plot surfaced in loose gravel and barren of any vegetation while the marina walkway passes over parkland grass to reach the Riverbank where small trees and scrub vegetate the river boundary.



Existing conditions showing the sites proximity to the River Nore

3.0 Landscape Strategy

The landscape design seeks to create a high quality frontage for the proposed activities center which will coherently link the cluster of buildings to each other and to the proposed jetty walkway.

The Landscape Plans will include:

- A shared surface civic frontage which allows access for vehicles towing and dropping off a range of boats and watersports equipment.
- Access steps and ramp linking the buildings to the Jetty walkway.
- A landscape plaza which allows for easy movement of boats with tracked routes and a designated boat wash down area with central drainage.
- Multi functional public seating in the form of a concrete raised planter with seating edge and backrest and concrete pebble seats which also act as a traffic barrier.
- Planting beds to soften and accentuate the proposed architecture with 1 large central bed acting as a SUDS drainage system.

4.0 Accessibility

Vehicular traffic will access the site via the County hall car park access roads and the entrance on Maudlin Street while pedestrians can also access the area through the grounds of the County Hall.

The entire area has been designed as a shared surface to alleviate trip hazards for both users moving and carrying boats and other watersports equipment and for wheelchair users. In addition all the proposed buildings will have flush access to the public realm allowing ease of access for all users to the new facilities while a ramp has been proposed to allow unobstructed passage to the jetty walkway.

5.0 Planting and Ecology

In order to reduce interference with the sensitive riverbank site a detailed ecological survey and report has been carried out allowing decisions to be made on where the watersports pontoon will be sited, how it is constructed and the site's lighting. This report can be viewed as part of the planning application.

After construction the riverbank will be seeded using native riparian vegetation, namely Reeds - Calamagrostis spp., Sedges - Carex spp., Rushes - Juncus spp and Water Mint - Mentha aquatica, for more information see Ecologist report: EcIA, Doc Ref: ECIA_RSE_30052024

Three mixes of Ornamental planting are proposed at specific locations to introduce some diversity to the landscape and to create specific, individual spaces. A spectrum of hardy, low maintenance perennials and architectural grasses have been chosen and will be planted in mixed species blocks creating drama and texture with the public areas. Plants chosen are either native or are exemplar pollinators with a long flowering season and

highly attractive to native insects, they will provide year round interest with lively pops of seasonal colour and retained winter structure.

The 3 mixes function in different ways so plants have been picked to achieve a certain structure and height:

Mix 1 will add texture and colour to the building face using hardy sun loving varieties.

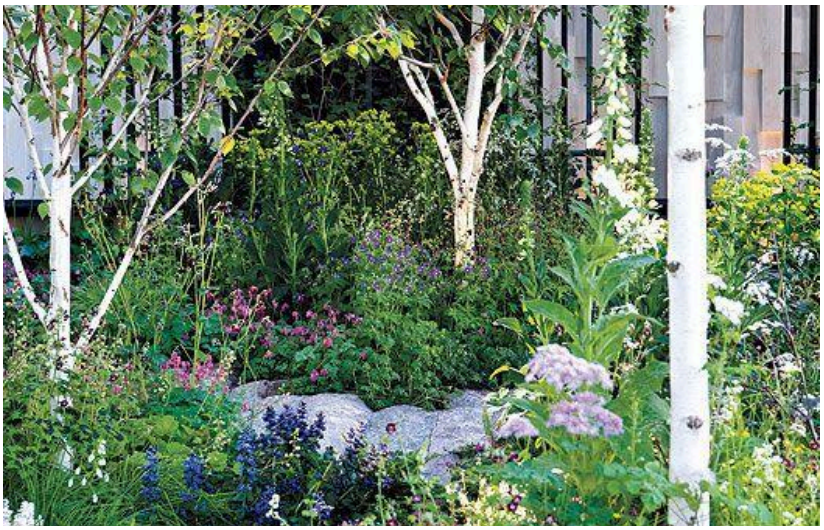
Mix 2 has a SUDS function so plants need to thrive in very wet conditions while living in dry, loamy soil. Here the plants also need to grow in partial shade due to the proposed tree above.

Mix 3 will provide structure acting as a barrier between the street/turning area and the civic space, so are chosen for their upright character and sunny position.



Mixed Planting with Stipa & Perennials similar to Mix 1, Structural Planting Similar to Mix 3

A singular tree, Betula Pendula (Silver Birch) will adorn the central SUDS planter. The Silver Birch, a native to Ireland, is commonly associated with our riverside environment and suited for use within confined spaces such as the proposed raised planter with seating. The birch will be clear stemmed to 1.5M allowing users to comfortably sit under the tree while its hardy nature will ensure it thrives within the planters varying conditions.



Birch trees with mid height mixed underplanting

6.0 Hard Landscape Materials & Furniture

A simple palette of hard materials is proposed to create a robust but considered site. Limestone paving has been selected in keeping with the local Kilkenny Blue Limestone which historically adorns the town.

The texture and size of the Limestone paving will change with location seeing larger 600x300mm, multi textured flags used within the open, civic frontage, this will change to smaller 100x100mm split face cobbles within the boat wash down area and 100x200mm block pavers within the designated parking space. Flush limestone kerbs will be used to delineate the shared surface with raised kerbs used only to create an edge to the linear planters. The carriageway/turning area will be surfaced with a buff coloured resin bound aggregate, this will be lighter than the limestone kerb and paving so will appear pronounced from the civic space while aesthetically still very much in keeping with it. This simple materials pallet will compliment the colours of the built façades, allowing the softer elements of the planted landscape to stand out.



Split face limestone shown here against the same limestone but with a flamed finish

Site furniture will be robust and multi functional with a large geometric raised planter formed from concrete with timber seating (to match the architectural cladding) and three concrete pebble seat which also act as bollards to secure the civic space. The concrete mix used for the furniture will tie in with the engineered step and ramp components and the insitu concrete walls used to bound these.



Concrete pebble seating

7.0 Implementation

It is proposed that the full landscape planting be undertaken to the later stages of the building works to ensure the safety of trees and softer planting materials.

All bare root trees shall be planted from October to March. Potted planting material may be planted year round.

8.0 Maintenance

Scope of work
The maintenance of grass, trees, shrubs and perennials for the period of each contract. During this period the contractor shall keep all roads and pavements clear of weeds, grass mowing's, mulch and rubbish from site at the conclusion of each days work.

Trees and Shrubs
Tree stakes shall be checked at least once a month to make sure they are still performing correctly. Any loosened tree stakes shall be re-firmed and any damaged or broken stakes shall be replaced immediately and the ties adjusted to hold the tree firm.

Shrubs and trees loosened by wind, frost or any maintenance operations shall be firmed up. This shall be carried out at least four times a year. If any plants have been completely lifted out of the ground they shall not be replanted but replaced.
A 500 mm diameter circle shall be kept free of grass around the base of each tree to facilitate grass cutting and root development of the tree.

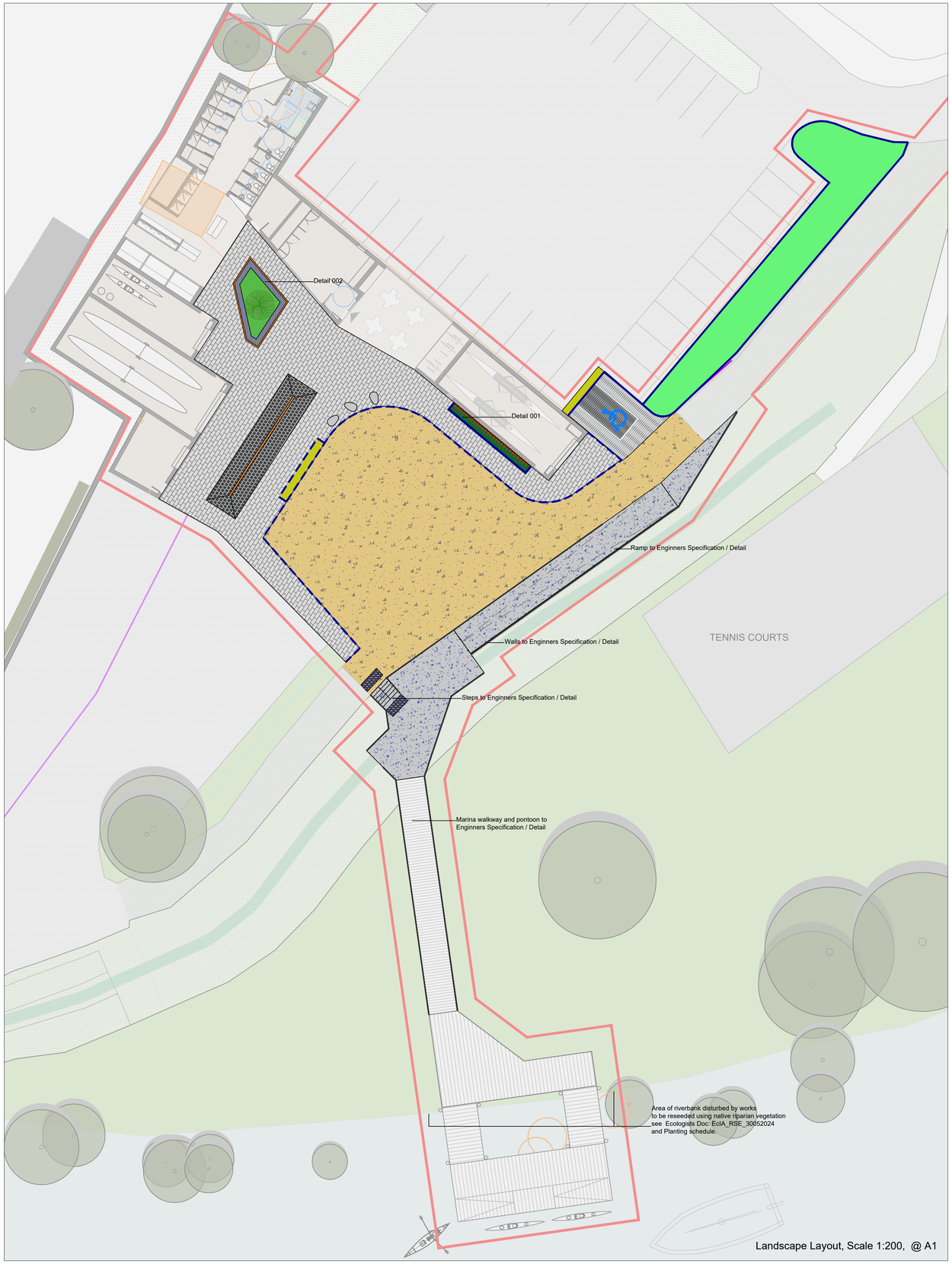
Weed Control (excluding riverbank riparian planting)
Any weed growth occurring during the maintenance period shall be spot treated with a glyphosate free herbicide – "Basta" or similar approved. All herbicide shall be applied to the manufacturers instructions.

Invasive Plant Control (to the riverbank)
All invasive plants to be removed by hand. For further details see Ecologist report: EcIA, Doc Ref: ECIA_RSE_30052024

Plant deaths
All tree and shrub losses to natural causes after planting shall be replaced by the contractor within the following season with plants equal in size and shape to those lost.

Pests and diseases
Experienced personnel shall inspect all plants at least twice a year for the presence of pests and diseases. If either or both are present the contractor shall report the conditions and implement the appropriate control measures immediately.

Any heavily infested plants may need to be removed and replaced with clean stock.



Landscape Layout, Scale 1:200, @ A1

wet blue honed, stretcher bond laying pattern. Supplied by McKeon Stone or EQA.
All build up layers to engineers detail.

Limestone block: 100mm x 100mm x 80mm, stack bond laying pattern,
100% splitface finish, Supplied by McKeon Stone or EQA.
All build up layers to engineers detail.

Resin Bound Aggregate, 'Cotswold gold' aggregate resin bound system,
Supplied and installed by Keltec ltd Ireland or EQA.
All build up layers to engineers detail.

Concrete surfacing: Insitu poured concrete with natural stone aggregate surface,
Expansion joints and build up layers to engineers detail.

Limestone block: 200mm x 100mm x 80mm, stretcher bond laying pattern,
100% wet blue honed finish, Supplied by McKeon Stone or EQA.
All build up layers to engineers detail.

Limestone block: 200mm x 100mm x 80mm, stretcher bond laying pattern,
100% flamed finish, Supplied by McKeon Stone or EQA.
All build up layers to engineers detail.

400 x 400 x 50mm granite tactile paving slab, dark grey colour, corduroy pattern,
stack bond laying pattern. All build up layers to engineers detail.

Limestone Flush kerb: 900mm long x 200mm wide x 100mm deep (25mm above carriageway),
dark honed finish. Supplied by McKeon Stone or EQA. All build up layers to engineers detail.

Limestone Upstand kerb (as planter edge); 900mm long x 150mm wide x 250mm high (150mm
above ground), dark honed finish. Supplied by McKeon Stone or EQA.
All build up layers to engineers detail.

Insitu-Concrete raised planter with back rest and timber slat seating top, 450mm wide x 450mm
high. All build up layers to engineers detail.

Slot drain: Stainless steel slot drain to engineers specification, all drainage connections and build
up layers to engineers detail.

Ornamental Planting 01: Mixed perennial and grasses in 450mm BS certified topsoil.
See Planting schedule.

Ornamental Planting 02: Mixed perennial and grasses in 550mm BS certified retention soil mix.
See Planting schedule.

Ornamental Planting 03: Mixed perennial and grasses in 450mm BS certified top soil mix.
See Planting schedule.

Grass Verge: Low maintence grass seed mix on 150mm BS certified top soil.

Climbing Plants: Climbers in 450mm BS certified topsoil, supported by stainless steel
wire climbing system.
See Planting schedule.

Cast concrete pebble seat. 3no Petra Xs 110 x 95 x 47 cm- colour CA Grey, by Escofet or EQA,
foundations and fitting to manufactures instructions.

Betula pendula multi stem, 3M high, 1.5M clear stem, 3-5breaks, rootballed.

PLANTING SCHEDULE

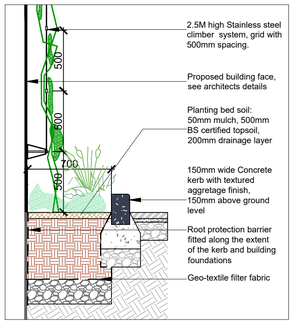
Ornamental Planting 01
20% Stipa tenuissima, 3L pots, 5/mtr2
15% Matteuccia struthiopteris, 3L pots, 5/mtr2
15% Libertia chilensis, 3L pots, 6/mtr2
10% Achillea millefolium, 3L pots, 7/mtr2
10% Geranium Dragon Heart ('Bremdra') 1L pots, 8/mtr2
10% Echinacea purpurea, 1L pots, 8/mtr2
10% Eupatorium cannabinum, 3L pots, 7/mtr2
5% Knautia macedonica, 3L pots, 7/mtr2
5% Astrantia major, 3L pots, 7/mtr2

Ornamental Planting 02
30% Stipa tenuissima, 3L pots, 6/mtr2
10% Matteuccia struthiopteris, 3L pots, 6/mtr2
10% Geranium macrorrhizum 'White-Ness', 3L pots, 6/mtr2
10% Phlomis russelinia, 1L pots, 10/mtr2
10% Achillea millefolium, 3L pots, 7/mtr2
10% Salvia verticillata 'Purple Rain', 1L pots, 10/mtr2
10% Gaura lindheimeri 'Whirling Butterflies', 3L pots, 7/mtr2
10% Astrantia major, 3L pots, 7/mtr2

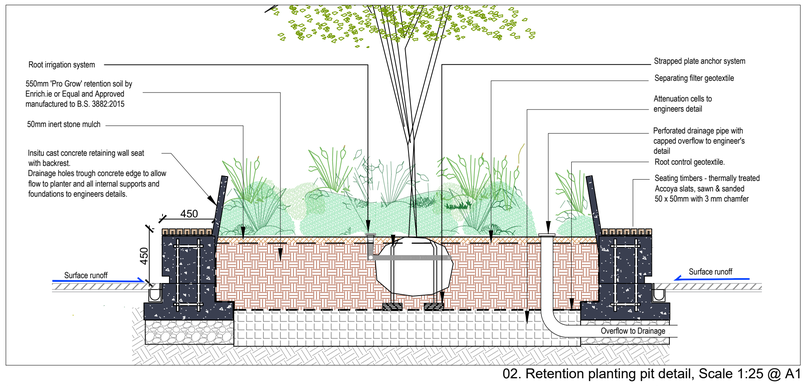
Ornamental Planting 03
40% Calamagrostis x acutiflora 'Karl Foerster',3L pots, 6/mtr2
20% Stipa tenuissima, 3L pots, 6/mtr2
10% Verbena bonariensis, 3L pots, 6/mtr2
10% Echinacea purpurea, 1L pots, 8/mtr2
10% Salvia verticillata 'Purple Rain', 1L pots, 10/mtr2
10% Geranium macrorrhizum 'White-Ness', 3L pots, 6/mtr2

Climbing Plants
50% Trachelospermum jasminoides, 3L pots, 5/mtr
50% Lonicera periclymenum, 3L pots, 5/mtr

Native Riparian Vegetation
As per Ecologists Doc: EcIA_RSE_30052024
25% Calamagrostis spp.
25% Carex spp.
25% Juncus spp.
25% Mentha aquatica



01. Planting pit with kerb edge, Scale1:25@ A1



02. Retention planting pit detail, Scale 1:25 @ A1

PLANTING NOTES
All plant material to be inspected by the Landscape Architect prior to planting.

-All plant material to be supplied and planted following B.S 3936.
-All plant material to be inspected by the Landscape Architect prior to planting.
-All existing vegetation to be removed and cleared of site.
-Linear planting beds to be 450mm good quality topsoil to BS 3882 (Certs required, LA to inspect prior to commencement on site).
-Planting pits shall be excavated not more than 2 days prior to planting.
-Retention planting bed : Infilled with Engineered soil Batch mixed with 70% inert material 10mm size, 20% Green waste compost, 10% Sandy silt loam supplied and mixed by Enrich.ie or Equal and approved.
-Tree pit shall be excavated not more than 2 days prior to planting.
-Tree to be planted upright with collar at finished soil level and back filled with previously prepared planting material.
-Imported Topsoil Imported topsoil shall be to BS 3882: 2007
- All topsoil shall be stacked in heaps, not exceeding 2m high.
Time scale for implementation:
-Deciduous trees and shrubs - Late October to late March
-Herbaceous plants: September/October and March/April
-Container grown plants: At any time if conditions are favorable

HARD SURFACE NOTES
All construction works to be carried out to manufactures recommendations regarding climatic conditions and controls.

-Insitu Concrete Surfacing: Exposed Aggregate Paving Mix Design with 10-14mm pebble aggregate, colour mix to be confirmed.
-Precast Concrete: Bespoke precast stone/concrete seats using Special Visual Concrete Mix with Class F3 (High Class Finish) without Ties.
-All work to BS EN 13670

GENERAL
-Street Lighting as per M&E Engineers drawings/specification
-All cabling, ducting, junction boxes and accessories as per manufactures recommendations/M&E engineers specifications. Contractor to liaise with electricity provider to arrange connection.
-Refer to engineer drawings/specification for all build up and foundations.
-Please refer to engineer drawings/specification for all drainage layout, levels and details.
-Any changes to specified materials to be approved by Contract Administrator and should be of equal quality meeting all relevant BS standards.
-Trial panels for each finish of minimum dimensions 2m x 2m in plan shall be constructed on site, at a suitable location, for inspection by the Landscape Architect.

THIS IS NOT FOR CONSTRUCTION

This drawing is the copyright of the Landscape Architect unless otherwise stated. all dimensions are in millimeters. Where dimensions are not given, drawings must not be scaled and the matter must be referred to the Landscape Architect. If the drawing includes conflicting details/dimensions the matter must be referred to the Landscape Architect. All dimensions must be checked on site. The Landscape Architect must be informed, by the contractor, of any discrepancies before work proceeds.

Cathal O'Meara
Landscape Architects
087 9202549
2 Mc Sweeney St,
Fermoy, Co. Cork

Chartered member of the Irish Landscape Institute

Client: Kilkenny CoCo

Project: KCC-Water Sports Activity Centre

Drawing: Landscape Layout

Date: 17/07/ 2024

Drawn By:
Wendy Kirkpatrick

Checked By:
Cathal O'Meara

Issue: Planning

Dwg No: 2413-LA-P001

Rev	Date	Note

cathal meara landscape architects

N

Scale 1:200, @ A1

Appendix D – Civil Engineering Report (DRA Consulting Engineers)

Civil Engineering Report

Project / Property:

Nore River Facilities Kilkenny
at County Hall,
Johns Street Lower,
Collegepark, Kilkenny,
Co. Kilkenny

Client:

Kilkenny County Council

Date of Report:

13th September 2024

Project Ref. No.:

22175

Limerick
The Park
Lord Edward Street
Limerick
V94 840C
Tel 061 310701

Wexford
14 Crescent Mall
Henrietta Street
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Document Control

Producer:	Date:	Reviewer:	Date:	Approver:	Date:	Revision Status:
S.Torrico Real	13/09/2024	B.Healy	13/09/2024	J. Reidy	13/09/2024	1st

1.0 Introduction

DRA Consulting Engineers have been engaged by Kilkenny County Council to provide consulting civil and structural engineering services for a proposed development at County Hall, Johns Street, City Centre, Co. Kilkenny.

The proposed development will involve the construction of a new water sport activity centre which includes community spaces, boat storage and change facilities. A new pontoon will be constructed to access the River Nore. The works will also involve the demolition of an existing storage building and all associated ancillary site works. Figure 1 below indicates the location of the proposed development site.

This Civil Engineering Report has been prepared to form part of the proposed Planning Application and to inform the Planning Authority on the design approach adopted for the proposed development.

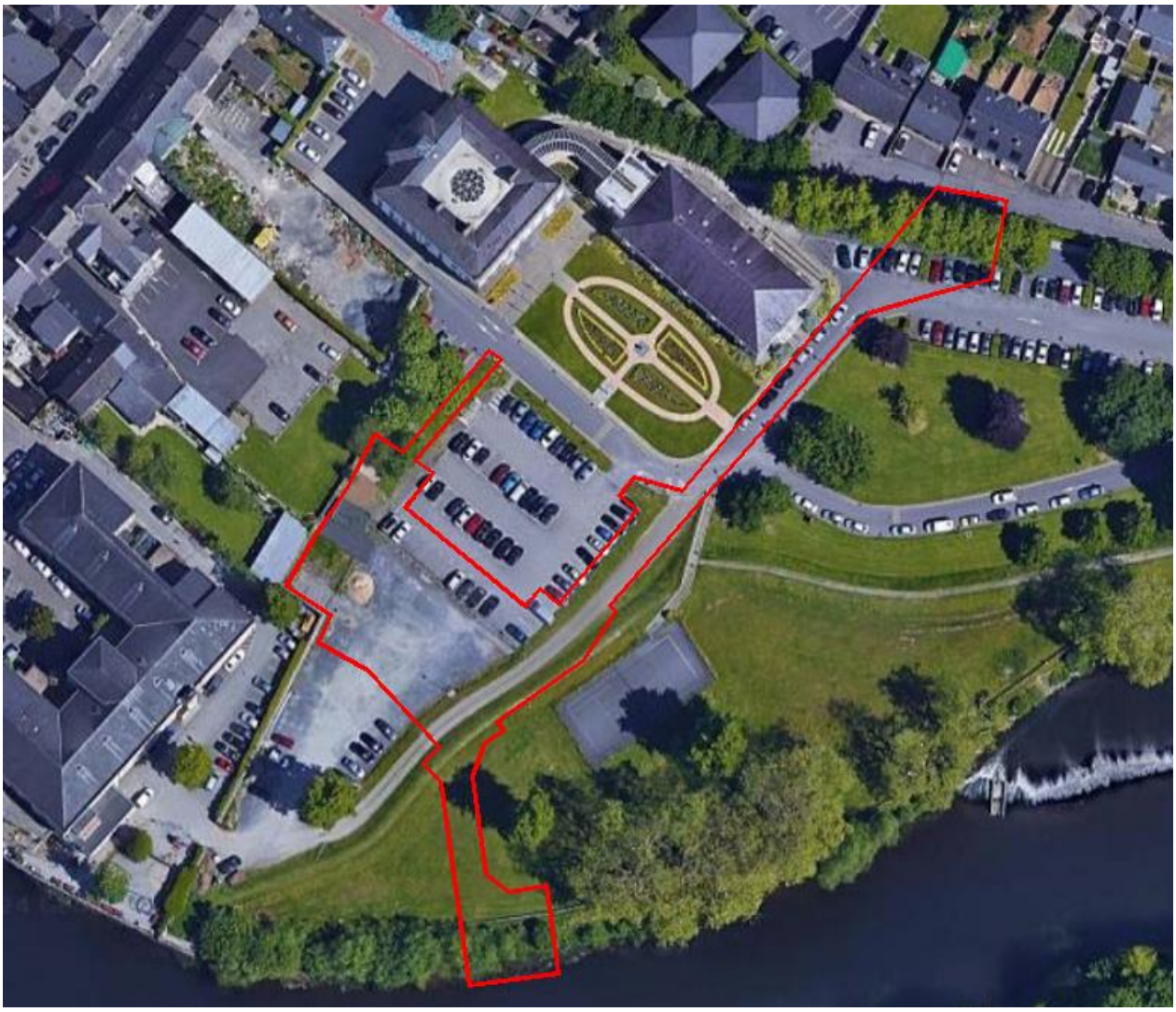


Figure 1 – Development Site (Source: Google Maps)

2.0 Civil Engineering Elements

2.1 Overview

This report should be read in conjunction with the Architectural drawings prepared by Altiri Architects and the DRA Consulting Engineers drawings listed below:

DRA Consulting Engineers Drawings:

- Drawing no. 22175-100: *Existing Site plan & Existing Water Services*
- Drawing no. 22175-150: *Proposed Water Services Layout & Details*
- Drawing no. 22175-170: *Proposed Site Levels*
- Drawing no. 22175-175 OPW Section 9 Application

This report outlines how the proposed development will be serviced in terms of access, potable water supply & surface water disposal and foul water disposal.

A separate Flood Risk Assessment for the proposed development site has been prepared by DRA Consulting.

2.1 Existing Services.

A request was submitted to Kilkenny County Council to provide records of water and drainage services in the area of the proposed development. We were furnished with a set of Uisce Eireann asset maps showing watermain layouts in the vicinity of the proposed development site. A GPR and CCTV survey was also carried out to identify inground services. A copy of the Uisce Eireann maps are contained in Appendix A of this report.

2.2 Proposed Site Access

The site will be accessed via the main entrance to the Kilkenny County Council Buildings off Maudlin Street.

2.3 Surface Water

Our drawing no. 22175-150-1: *Proposed Water Services Layout & Details* has been prepared to show the proposed surface water layout for the proposed development. This drawing includes details for proposed and existing network.

We intend to discharge the surface water run-off from the site into an existing 750 mm Ø surface water sewer located in the car park of the Kilkenny County Hall as indicated on drawing 22175-150. An infiltration test in accordance with BRE Digest 365 was carried out on site (contained in Appendix B), showing a very poor infiltration rate meaning that soakaways cannot be used to infiltrate surface run-off to the ground.

Surface water run-off will be collected from impermeable surfaces (roofs, road and footpaths) via rainwater pipes, green roof, drainage channels and rain gardens.

The surface water runoff from the roof areas will be captured by a combination of green roof system which comprise a multi-layered system that covers the roof of the building with vegetation and a blue roof system with an attenuation cell with 0.95% void to allow for water storage. It is proposed that a Bauder Blue Stormcell sedum green roof or similar be adopted. We propose to install a flow control system on the blue roof areas to limit the discharge rate to 0.7l/s. Any alternative products will be equivalent to the above and have Ce certification or equivalent. Details of the proposed system are shown on drawing 22175-150-1: *Proposed Water Services Layout & Details.*

The collected surface water from the footpaths / courtyard will be directed to the proposed rain garden, that will help to slow down stormwater flows. Rain gardens work by ponding surface water in the planted area, which is then filtered through the soil mix and by plant roots. Furthermore, an attenuation cell system will be provided underneath with 0.95% void to allow storage. The rain garden will be provided with a flow control device set at outflow of 2 litres per second.

The run off from a section of the proposed storage building roof, part of the footpath and the provided disabled parking space will be directed into an impermeable attenuation tank with 95% void (Wavin Aquacell or similar approved) with a control flow control device set at 2 litres per second. The underground tank will have a 5.32m³ storage.

The storm water runoff the remaining roads and roofs will be piped to converge with the runoff generated in the above areas.

This collected surface water will be directed towards a proprietary flow control device fitted to manhole SW MH 02 FCD set at an outflow of 5 litres per second to avoid blockages. This shall allow discharge surface water attenuated previously in attenuation structures discharge without double attenuation. Surcharge surface water upstream from the flow control SW MH 02 FCD device is directed to an impermeable attenuation tank with 70% void (Stormtech attenuation tank or similar approved). This attenuation tank will provide a storage capacity of 16.78 m³ for the 100-year storm event plus a 30% storage allowance for climate change.

Surface water downstream from Flow control device SW MH 02 FCD will finally pass through a proprietary 'class 1' by-pass petrol inceptor before being discharged into an existing storm sewer.

The following specifications and requirements have been followed in respect of the surface water design:

Minimum depth	1.2m cover under roadways 0.9m elsewhere
Minimum sewer size	225mm
Runoff factors for pipe sizing	100% paved and roof surfaces
Rainfall for initial pipe sizing	50mm/hr rainfall intensity
Minimum velocity (pipe full)	1 m/sec
Flooding	Check made for adequate protection. No surcharging in respect of flow for return period less than 30 years No flooding in respect of flow for return period less than 100 years.
Roughness	Ks 0.6mm

Surface water attenuation has been designed in accordance with the requirements of the Greater Dublin Strategic Drainage Study (GDSDS). Included in Appendix C of this report is hydraulic modelling calculations (carried out using Causeway Flow, a specialist software) to demonstrate the following:

- Drainage pipework designed for the 1 in 5 year return period;
- No flooding occurring for the 1 in 30 year return period; and

- Properties protected against flooding for the 1 in 100 year return period.

It is proposed that the measures included in the Greater Dublin Strategic Drainage Study (GDSDS) for surface water management (i.e. SuDS – sustainable urban drainage systems) will be implemented as far as is practicable on this development.

The SuDs measures implemented on site:

- Green roof system - The proposed system will allow to naturally delay and reduce the rainwater runoff from the roof and attenuate large volumes of water at roof level.
- Attenuation tank - collect and store storm water runoff during the periods of high precipitation and then release that water gradually over an extended period, thereby slowing its progress to any watercourse of concern.
- Rain Garden - These systems collect runoff, allowing it to pond temporarily on the surface before filtering through the vegetation and underlying soils.

The proposed Green Infrastructure measures for the subject site will consist primarily of maximising the area of permeable surfacing throughout the site so that the surface water run-off from the site to the public sewer will be kept to an absolute minimum. Permeable surfacing on site will consist of grassed areas and soft landscaped planters where encouraging biodiversity on site.

2.4 Boat Washdown Area

It is proposed to provide a designated area for users to wash down boats and equipment. This will consist of an external contained hard (impermeable) surface area where equipment can be washed down. The wash will be collected by means of a surface channel drain discharging into a precast concrete gravity flow silt chamber. The run-off from the contained wash down area will firstly be treated with a mild proprietary aquatic disinfectant such as Virkon Aquatic (or similar). Virkon Aquatic and other products are approved for use by Fisheries Ireland. The run-off will then be discharged to a silt chamber for further dilution before finally being treated with UV light (tertiary treatment). This will prevent pathogens such as Crayfish plague from entering the River Nore during the operational phase of the development. It is considered that there would be no cumulative water quality impacts which would pose a significant risk to designated sites.

Typically, UV systems are used in wastewater treatment applications as a method of pathogen disinfection. The supplier of the proposed UV sterilization unit has advised that the system produces 30 mJ/cm2. According to “Wastewater Engineering, Treatment and Resource Recovery, 2014” by Metcalf and Eddy a UV system with 30mJ/cm3 treating intermittent sand filter effluent (likely to be a similar strength to the surface water in question) will have an effluent coliform count of 23 MPN/100 ml assuming an initial coliform count of 102-104 MPN/100ml. The proposed configuration of the unit is shown below in figure 1.

The run-off from the wash down facility will finally pass through a Petrol interceptor before being discharged to the existing stormwater network.

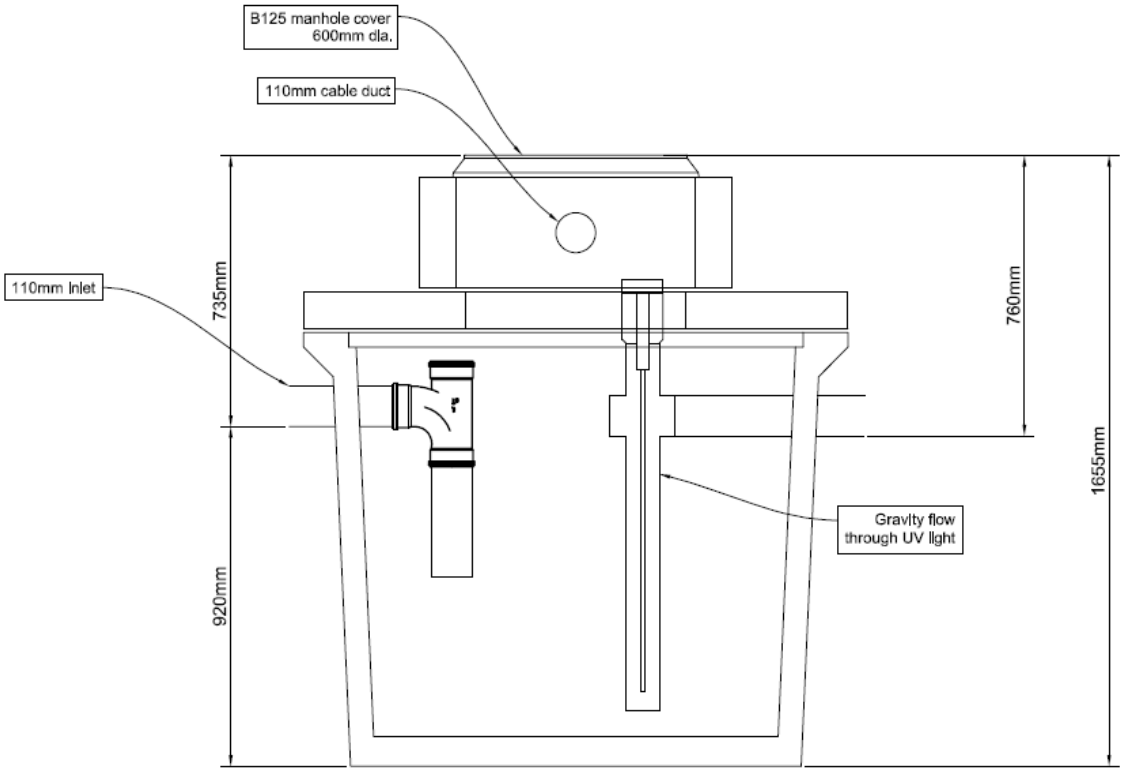


Figure 1 – Proposed Silt chamber with UV Sterilisation Unit

2.5 Foul Water

Our drawing no. 22175-150: *Proposed Water Services Layout & Details* has been prepared to show the foul water layout for the proposed development. This drawing includes details for proposed and existing pipework and manholes.

It is proposed that the foul effluent from the development site will be discharged into the existing 525mm diameter foul sewer located on the footpath beside the car park of the Kilkenny County Hall.

The foul water from the site will be directed to a private pump station via a gravity system where will be pumped to a new discharge manhole located on the vicinity of the existing foul manhole (EX.FMH 48) where the effluent will be discharge.

A separate foul and surface water drainage system will be constructed to serve the proposed development site, with separate outfalls to the respective foul and surface water public systems. Therefore, no foul water will discharge to the public surface water system.

All proposed wastewater services and connections to the existing wastewater network are to be constructed in accordance with details contained within the following documents:

- Irish Water Document IW-CDS-5030-01 – Wastewater Infrastructure Standard Details – Connection and Developer Services – Construction Requirements for Self-Lay Developments.
- Irish Water Document IW-CDS-5030-03 – Code of Practice for Wastewater Infrastructure – Connection and Developer Services – Construction Requirements for Self-Lay Developments.

We confirm that a Pre-connection Enquiry has been submitted to Uisce Éireann for the proposed development. Confirmation of Feasibility is enclosed in Appendix D.

2.6 Watermains

Our drawing no. 22175-150: *Proposed Water Services Layout & Details* has been prepared to show the watermain layout for the proposed development.

All proposed water services and connections to the existing water services are to be constructed in accordance with details contained within the following documents:

- Irish Water Document IW-CDS-5020-01 – Water Infrastructure Standard Details – Connection and Developer Services – Construction Requirements for Self-Lay Developments.
- Irish Water Document IW-CDS-5020-03 – Code of Practice for Water Infrastructure – Connection and Developer Services – Construction Requirements for Self-Lay Developments.

We confirm that a Pre-connection Enquiry has been submitted to Uisce Éireann for the proposed development. Confirmation of Feasibility is enclosed in Appendix D.

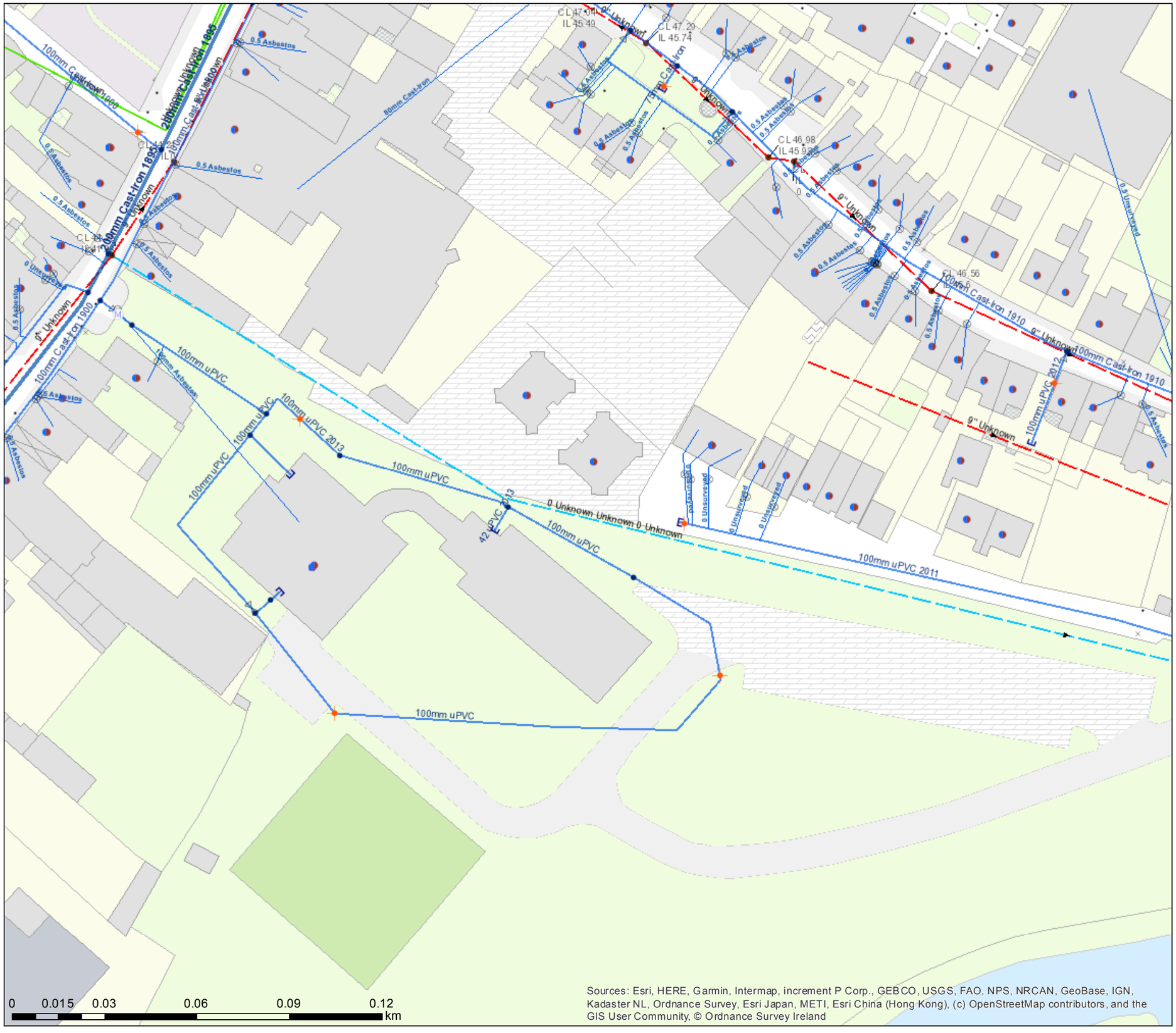
2.7 Construction Traffic Management Plan (CTMP)

Prior to the construction of the works, the appointed Contractor shall prepare a construction traffic management plan (CTMP) which will outline their approach to the project and detail potential impacts on the public road network. Appropriate mitigation measures shall also be identified, including the detailing of specific haul routes, provision of road signage and designated times of access by large construction vehicles.

The minimum requirements for the CTMP are outlined in further detail in the Construction Environmental Management Plan prepared by Ross Swift Ecology Ltd.

Appendix A – Asset Maps, GPR and CCTV Surveys

Irish Water Web Map



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, © Ordnance Survey Ireland

UISCE ÉIREANN : IRISH WATER

Print Date: 15/09/2020

Printed by:Irish Water

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Service connection pipes are not generally shown but their presence should be anticipated.

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(including maps or mapping data).
NOTE: DIAL BEFORE YOU DIG Phone: 1850 427 747 or e-mail dig@gasnetworks.ie - The actual position of the gas/electricity distribution and transmission network must be verified on site before any mechanical excavating takes place. If any mechanical excavation is proposed, hard copy maps must be requested from GNI re gas. All work in the vicinity of gas distribution and transmission network must be completed in accordance with the current edition of the Health & Safety Authority publication,
'Code of Practice For Avoiding Danger From Underground Services' which is available from the Health and Safety Authority (1890 28 93 89) or can be downloaded free of charge at www.hsa.ie."

Water Distribution Network
- Water Treatment Plant
- Water Pump Station
- Storage Cell/Tower
- Dosing Point
- Meter Station
- Abstraction Point
- Telemetry Kiosk

Reservoir
- Potable
- Raw Water

Water Distribution Mains
- Irish Water
- Private

Trunk Water Mains
- Irish Water
- Private

Water Lateral Lines
- Irish Water
- Non IW
- Water Casings
- Water Abandoned Lines
- Boundary Meter
- Bulk/Check Meter
- Group Scheme
- Source Meter
- Waste Meter
- Unknown Meter ; Other Meter
- Non-Return
- PRV
- PSV
- Sluice Line Valve Open/Closed
- Butterfly Line Valve Open/Closed
- Sluice Boundary Valve Open/Closed
- Butterfly Boundary Valve Open/Closed
- Scour Valves
- Single Air Control Valve
- Double Air Control Valve
- Water Stop Valves
- Water Service Connections
- Water Distribution Chambers
- Water Network Junctions
- Pressure Monitoring Point
- Fire Hydrant
- Fire Hydrant/Washout

Water Fittings
- Cap
- Reducer
- Tap
- Other Fittings

Sewer Foul Combined Network
- Waste Water Treatment Plant
- Waste Water Pump station

Sewer Mains Irish Water
- Gravity - Combined
- Gravity - Foul
- Gravity - Unknown
- Pumping - Combined
- Pumping - Foul
- Pumping - Unknown
- Syphon - Combined
- Syphon - Foul
- Overflow

Sewer Mains Private
- Gravity - Combined
- Gravity - Foul
- Gravity - Unknown
- Pumping - Combined
- Pumping - Foul
- Pumping - Unknown
- Syphon - Combined
- Syphon - Foul
- Overflow
- Sewer Lateral Lines
- Sewer Casings

Sewer Manholes
- Standard
- Backdrop
- Cascade
- Catchpit
- Bifurcation
- Hatchbox
- Lamphole
- Hydrobrake
- Other; Unknown

Discharge Type
- Outfall
- Overflow
- Soakaway
- Standard Outlet
- Other; Unknown

Cleanout Type
- Rodding Eye
- Flushing Structure
- Other; Unknown

Sewer Inlets
- Catchpit
- Gully
- Standard
- Other; Unknown

Sewer Fittings
- Vent/Col
- Other; Unknown

Storm Water Network

Surface Water Mains
- Surface Gravity Mains
- Surface Gravity Mains Private
- Surface Water Pressurised Mains
- Surface Water Pressurised Mains Private

Inlet Type
- Gully
- Standard
- Other; Unknown

Storm Manholes
- Standard
- Backdrop
- Cascade
- Catchpit
- Bifurcation
- Hatchbox
- Lamphole
- Hydrobrake
- Other; Unknown
- Storm Culverts
- Storm Clean Outs
- Stormwater Chambers

Discharge Type
- Outfall
- Overflow
- Soakaway
- Other; Unknown

Gas Networks Ireland
- Transmission High Pressure Gasline
- Distribution Medium Pressure Gasline
- Distribution Low Pressure Gasline

ESB Networks

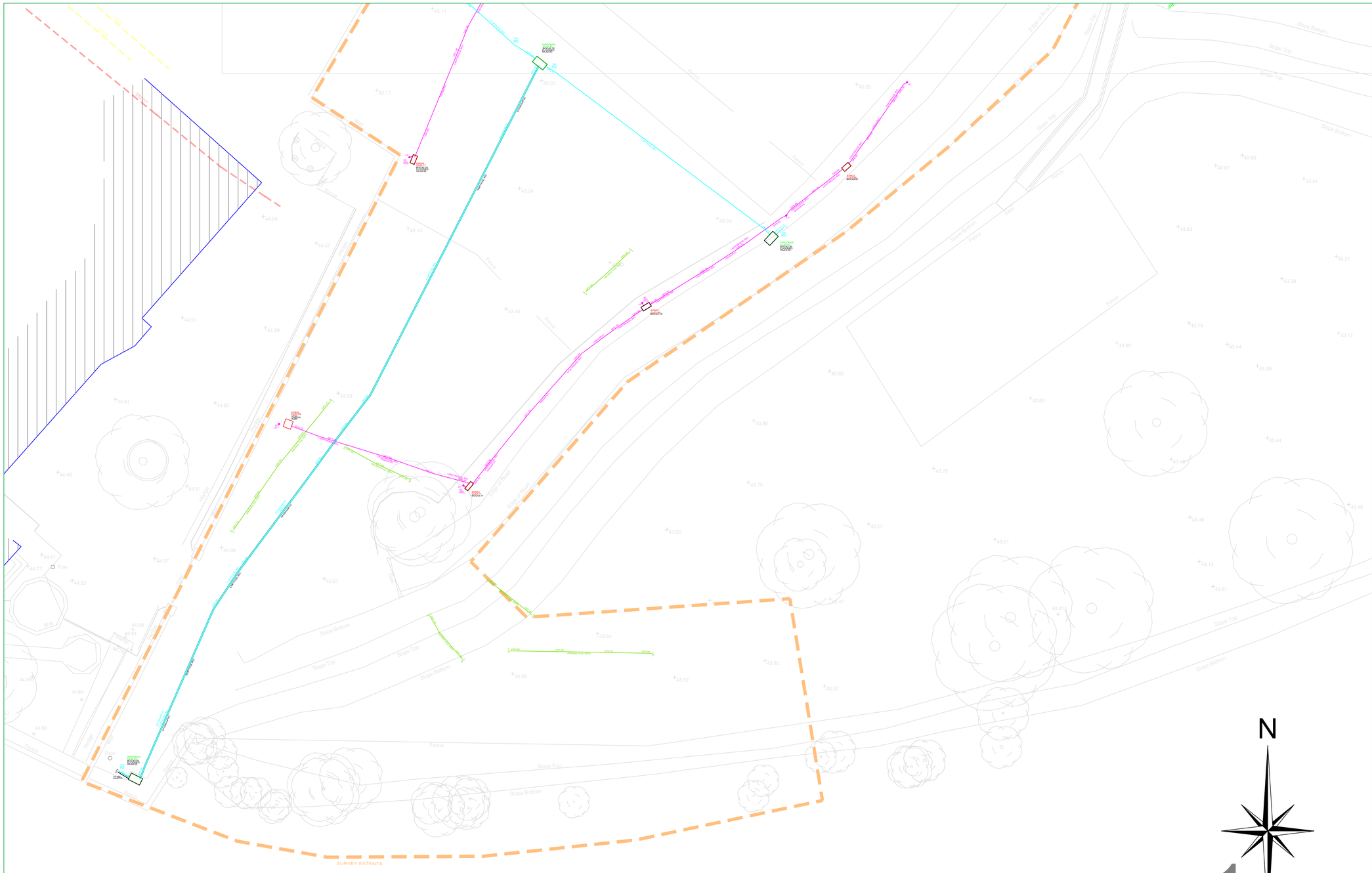
ESB HV Lines
- HV Underground
- HV Overhead
- HV Abandoned

ESB MVLV Lines
- MV Overhead Three Phase
- MV Overhead Single Phase
- LV Overhead Three Phase
- LV Overhead Single Phase
- MVLV Underground
- Abandoned

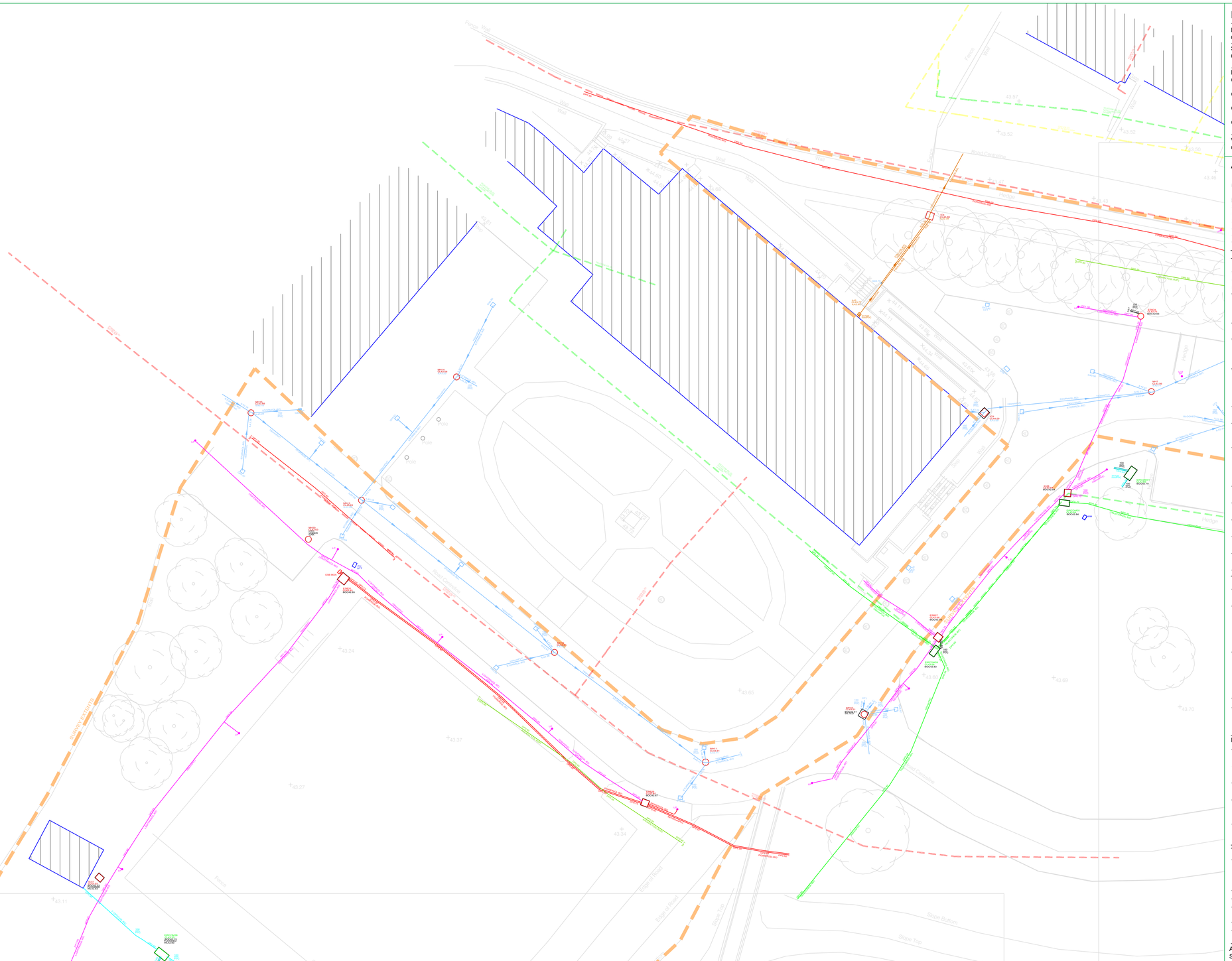
Non Service Categories
- Proposed
- Under Construction
- Out of Service
- Decommissioned

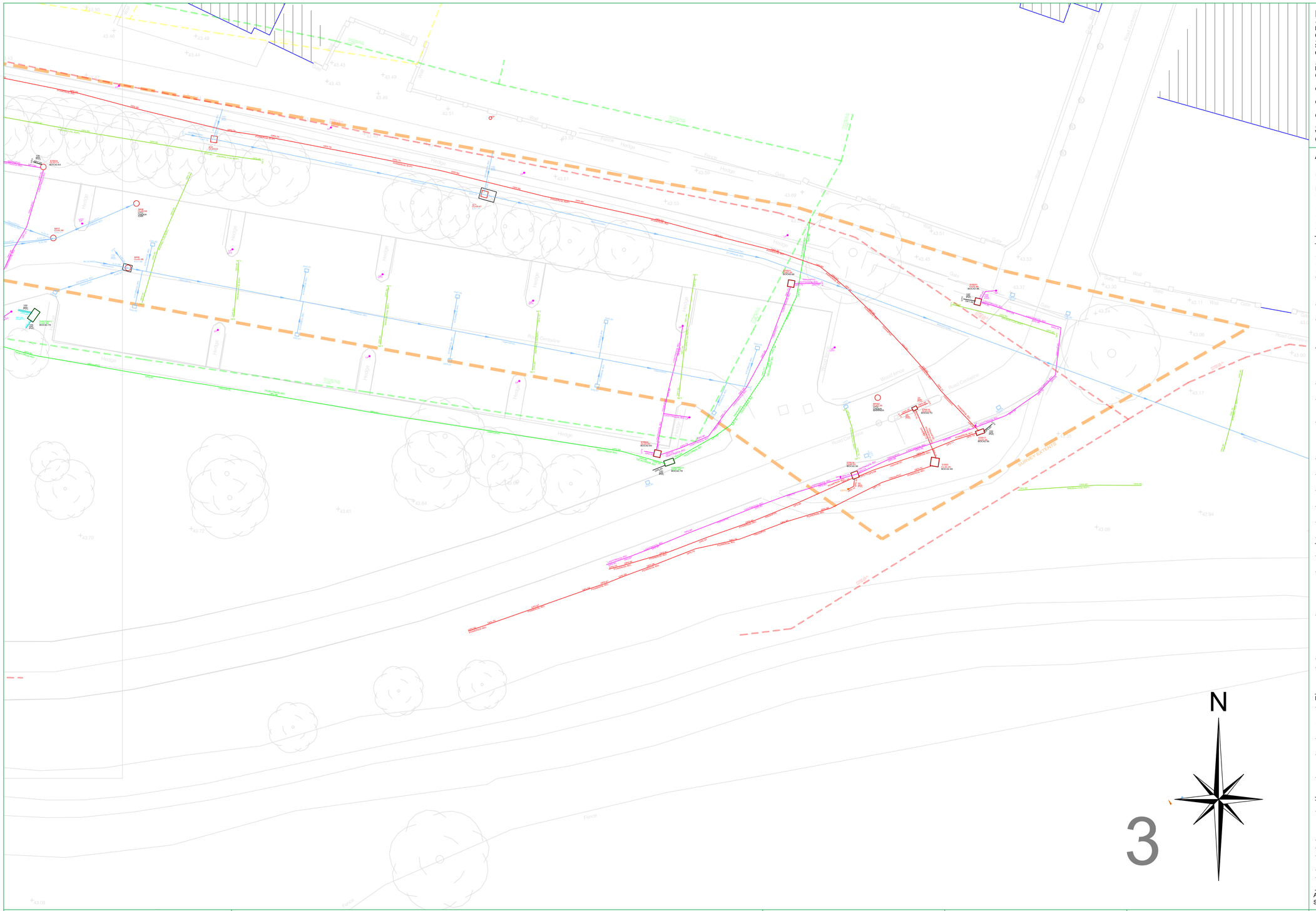
Water Non Service Assets
- Water Point Feature
- Water Pipe
- Water Structure

Waste Non Service Assets
- Waste Point Feature
- Sewer
- Waste Structure


SURVEY EXTENTS
Fence
Hedge
Slope Top
Slope Bottom
Slope Bottom
Slope Top
Slope Bottom
Slope Top
Slope Bottom
Slope Top

N 2


Ferrous Way
Ferrous Way
Ferrous Way



PAS 128: 2014 (Quality of Survey Level Outputs):

DESKTOP UTILITY RECORDS SEARCH	
QL-D	Drafted from utility records
SITE RECONNAISSANCE	
QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars
DETECTION	
QL-B4	A segment of utility suspected to exist but has not been detected by a geophysical technique
QL-B3	Horizontal location only of the utility detected by one of the geophysical techniques used
QL-B2	Horizontal and vertical location of the utility detected by one of the geophysical techniques used
QL-B1	Horizontal and vertical location of the utility detected by multiple geophysical techniques
VERIFICATION	
QL-A	Horizontal and vertical location of the top and/or bottom of the utility

Apex Surveys Ltd. Disclaimer - Utility Survey

The interpretative nature and the non-intrusive, indirect and non-destructive survey methods must be taken into account when considering the results of the surveys. Therefore Apex Surveys, while using appropriate practice to execute, interpret and present the data, gives no guarantees that all underground utilities and underground structures will be located and mapped. Furthermore, Apex Surveys cannot guarantee the accuracy of the utility depths annotated on the survey drawings.
Apex Survey shall not be liable for any omissions or inaccuracies in the survey which arise due to the limitations of the service. No liability shall attach to Apex Surveys, in any circumstances, howsoever arising, in respect of any consequential loss or damages suffered by the Client.

The following is a non-exhaustive list of the limitations of utility surveys:

The Survey aims to map existing utilities subsurface utilities and provide information with respect to pipe size, material type and drainage connectivity. However utility surveying is limited by the following guidelines and it may not be possible to accurately survey, define and locate all services and sub-surface features.

- Depth of Utility: The depth and size of a utility affect the signal response and the degree with which a utility can be located.
  Due to attenuation of the radar signal with depth, resolution is restricted, hence making identification of utilities more difficult with increasing depth.
- Size of Utility: The smaller the diameter of a utility the more difficult it is to locate. This difficulty increases with depth.
- Ground Conditions: The depth penetration and quality of the data depends on the ground conditions of the site. GPR Surveying works best within high resistivity material. Clay overburden can impair GPR Surveying. Poor data may be a result of areas with high conductivity.
- Utility Congestion: Where different utilities converge together into a service corridor or cross paths it becomes difficult to isolate a specific utility and to map its route. The reflected signal will display a single response to multiple utilities. Therefore multiple utilities may appear to be a single utility. Where similar services run on close proximity, separation may be impossible.
- Signal Jumping: Signal from surrounding services may 'jump' to a highly conductive line masking its true identity.
- Shadowing: (of deeper utilities by shallower objects) Shallow utilities will mask the existence of deeper utilities where they are in close proximity. Also, high reflective materials close to the surface i.e rebar may hide deeper anomalies.
- Surface Obstructions: The GPR system relies on a relatively flat and even surface on which to perform radar passes. If ground obstructions such as vehicles, organic material (long grass, scrub) or undulating ground surface are present then the acquired data will be of lower resolution and in some cases not viable.
- Loss of signal: It is not always possible to trace the entire length of each underground service.
- Connections between manholes: Connections between manhole chambers are assumed to be straight.
- Non-metallic objects: Nonmetallic objects are amongst the most difficult to trace therefore successful tracing of non-metallic pipes/ utilities may be limited.
- Fiber Optic Cables: Fiber optic cables may not be possible to locate except where laid with a built in tracer wire or similar conductor system.
- Defective / flooded manholes or pipework: It may not be possible to establish connections between flooded or defective manholes or pipework.
- Acute bends in pipework: It may not be possible to trace a pipe past an acute bend.

Accuracy estimates:

- Locational accuracy is determined by referring to the manufacturers guidelines for the detector used.
- In ideal conditions the spatial accuracies for the underground utilities may be +/- 5% for Radiodetection and +/- 10% of depth for the GPR to 2.5m deep. However variations within the subsurface, depth below the ground, close proximity of other services and local magnetic, atmospheric or ground conditions, bends, lateral service connections and any of the other limitations listed in this disclaimer may alter this estimated accuracy.
- Plan accuracies of + or - 150mm may be achieved but this figure will depend on the depth of service below ground level. However variations within the subsurface subsurface, depth below the ground, close proximity of other services and local magnetic, atmospheric or ground conditions, bends, lateral service connections and any of the other limitations listed in this disclaimer may alter this estimated accuracy.
- DP represents distance from the surface level to the top of the service/ target
- Where technically possible, depth indications will be given. These along with plan positions should be used for guidance only and wherever critical accuracy is required these should be confirmed by the client by undertaking trial excavations or similar.

Record Drawing Information

- Services which have been untraceable are shown from records where possible or available. These lines are annotated as "Taken From Records" or "From Records".
- Existing record information showing underground services is often incomplete and with unknown accuracies therefore it should be regarded as indicative only.
- Where Apex Surveys issue a utility drawing, this should be read in conjunction with all available public or private utility records.
- Apex Surveys endeavor to add relevant Public Utility record information onto the final drawing. However, we would recommend that direct contact is made with the asset owner or statutory undertaker.
- We shall not be held responsible for the accuracy, or otherwise, of the location of a service, as issued by the utility provider and therefore shown as "Taken for Records" on the drawing.

The following have been excluded from the survey:

- Location of individual service feeds to properties or buildings as access would be required into each property to apply direct connections to inlet points and this would significantly increase the scope of works, survey cost and also cause possible disruption to occupants.
- Pot ended or disconnected cables or terminated short lengths of pipe.
- Internal building services.
- Small diameter cables less than 20mm diameter or pipes less than 40mm diameter.
- Above ground services unless specifically requested.
- Lifting manholes which require longer than 10 minutes effort using standard heavy duty apparatus.

All works carried out be Apex Surveys conforms to the guidelines set out by The Survey Association (TSA) and PAS:128 Standard for utility mapping

APEX SURVEYS

www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

STREET FURNITURE :

BOLLARDS	BD •
BUS STOP	BS •
CRASH BARRIER	CB
GATE	
ELECTRICITY POLE	EP •
TELEPHONE POLE	TP •
EARTHING ROD	ER +
LAMP POST	LP •
MARKER POST	MKR +
SIGN POST	SIGN
TRAFFIC LIGHT	TL •
TELEPHONE BOX	TB
POST	POST •
POST BOX	POST BOX
ROADSIGN	RS - RS
BORE HOLE	BH +
TRIAL PIT	TPIT +

SERVICES :

AIR VALVE	AV
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV •

STOPCOCK	ST •
SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT •
WATER METER	WM +

LEVELS :

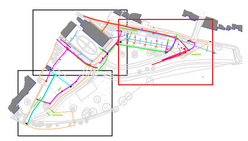
BED LEVEL	+ BED101.50
FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	SC

UNDERGROUND LEGEND :

WATER MAIN	WATER
GAS MAIN	GAS
STORM DRAIN	STORM
FOUL SEWER	FOUL
COMBINED SEWER	COMB
ELECTRIC CABLE	POWER
ELECTRIC LIGHTING	LIGHTING
EIRCOM	EIRCOM
FIBRE OPTIC CABLE	F.OPTIC
BROADBAND	BROADBAND
CABLE TV	TV
TRAFFIC AND SIGNAL CABLE	TRAFFIC
CCTV	CCTV
IRRIGATION PIPE	IRRIGATION
EMPTY DUCT	EMPTY
GPR ANOMALY	ANOMALY
UNKNOWN CABLE	CABLE
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

BOTTOM OF CHAMBER	BOC	DOWNPIPE	DP	START OF RUN	SOR
CAST-IRON	C/I	EARTHENWARE	E/W	UNABLE TO OPEN	UTO
CONCRETE	CONC	NO FURTHER TRACE	NFT	UNABLE TO TRACE	UTT
DIAMETER	DIA	OFFSITE	O/S		

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

Apex Surveys
Unit 78 Dunboyne Business Park
Dunboyne, Co. Meath, Ireland
www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

CLIENT:

Dennany Reidy Assiciates

PROJECT:

Water Sports Activity Centre, Kilkenny City

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	23/10	Original Drawing

SCALE :	1/200 A1
DRG No:	6007
SHEET:	3 of 3
DATE :	23/10/2023
DESCRIPTION :	2D Utilities
SURVEYED BY :	G.F.
PROCESSED BY :	A.S.
CHECKED BY :	A.B.

Manhole Survey Report

Selection

06 December 2023

WRc Standard

Manhole Condition Summary:

Number of Manholes: 7

Condition (Y if attention required)

Manhole Number	Function	Cover	Irons	Shaft	Chamber	Benching	Other	Remarks
SMH3	-	-	-	-	-	-	-	-
SMH2	-	-	-	-	-	-	-	-
FM48	-	-	-	-	-	-	-	-
FM48.1	-	-	-	-	-	-	-	-
FM49.2	-	-	-	-	-	-	-	-
FM49.1	-	-	-	-	-	-	-	-
FM50	-	-	-	-	-	-	-	-

MANHOLE RECORD CARD

Powered by InfoAsset Manager

LOCATION	The Weir Maudlin Street Kilkenney

NODE REFERENCE	SMH3
COORDINATES (m)	251115.49,155888.18
DRAINAGE AREA CODE	-
SURVEY DATE	11 Nov 2023

YEAR LAID	-		STATUS	-	FUNCTION	-	NODE TYPE	M	CONDITION	SIZE (mm)			TOXIC ATMOSPHERE	N
COVER	SHAPE	C	HINGED	N	LOCK	N	DUTY	H	-	645	X	0	GAS TYPE	None
SHAFT	SIDE ENTRY	N	REGULAT COURSES	-	DEPTH (mm)	1100	INFILT RATIO N	N	-	560	X	640	EVIDENCE OF VERMIN	N
CHAMBER	SOFFIT	S	STEPS	0	LADDERS	0	LNDGS	-	-	1500	X	1480	CONSTRUCTION CODE	R

STRUCTURAL CONDITION	-	MAINTENANCE CONDITION	-	DEPTH OF FLOW (mm)	30	DEPTH OF SILT (mm)	0	HEIGHT SURCH (mm)	-	COVER LEVEL (m AD)	-

INCOMING PIPES

	UPSTREAM REFERENCE	PIPE SHAPE	PIPE SIZE (mm)			BACKDROP DIAM (mm)	MATERIAL	LINING	DEPTH FROM COVER (m)	INVERT (m AD)
A	UNKNOWN	C	150	X	0	-	PVC	-	0.850	
B	UNKNOWN	C	150	X	0	-	PVC	-	1.870	
C	UNKNOWN	C	150	X	0	-	PVC	-	1.870	
D	UNKNOWN	C	150	X	0	-	PVC	-	0.870	
E	SMH2	C	750	X	0	-	CO	-	1.975	
F	-	-	-	X	-	-	-	-	-	

OUTGOING PIPES

	DOWNSTREAM REFERENCE					COND	CRITY			
X	UNKNOWN	C	750	X	0	-	-	CO	-	1.990
Y				X						

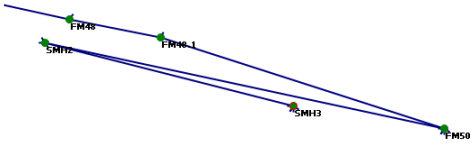
CONDITION (Y if action required)											
COVER	N	IRONS / LADDERS	N	SHAFT	N	CHAMBER	N	BENCHING	N	OTHER	N

REMARKS

-
B,D pipes in shaft. holes around them.A and c pipes come into large 750 pipe.

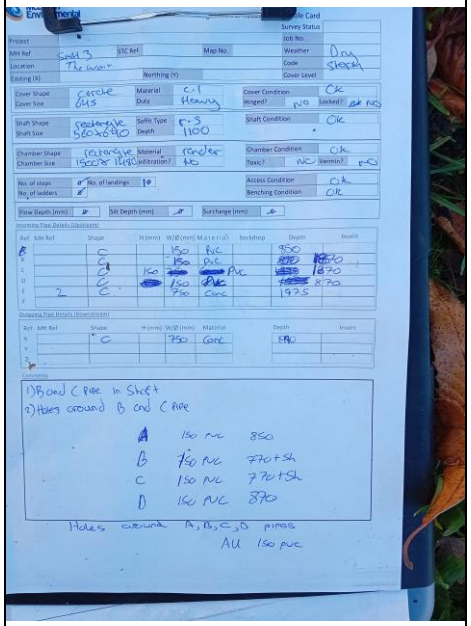
Attachments









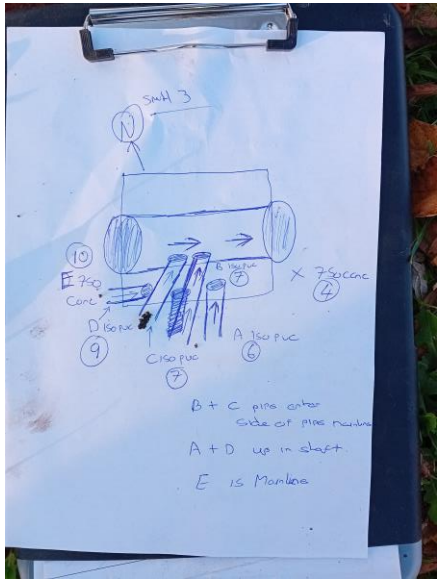

Survey Status
Job No.
Weather
Code
Cover Level
Cover Condition
Hinged?
Locked?
Shaft Condition
Chamber Condition
Toxic?
Vermin?
Access Condition
Benching Condition
Surcharge (mm)
Ref
Inlet Ref
Shape
H (mm)
W/D (mm)
Material
Backdrop
Depth
Invert
Outgoing Pipe Details (downstream)
1) B and C Pipe in Shaft
2) Holes ground B and C Pipe
A 150 PVC 850
B 750 PVC 770+Sh
C 150 PVC 770+Sh
D 150 PVC 870
Holes around A, B, C, D pipes
All 150 pvc










SMH 3
N
10
E 750 Conc
D 150 PVC
9
B 150 PVC
7
C 150 PVC
7
A 150 PVC
6
X 750 Conc
4
B + C pipes enter either end of pipe run
A + D up in shaft
E is Manhole

MANHOLE RECORD CARD

Powered by InfoAsset Manager

LOCATION	The Weir Maudlin Street Kilkenney

NODE REFERENCE	SMH2
COORDINATES (m)	251038.16,155907.79
DRAINAGE AREA CODE	-
SURVEY DATE	11 Nov 2023

YEAR LAID	-		STATUS	-	FUNCTION	-	NODE TYPE	M	CONDITION	SIZE (mm)				TOXIC ATMOSPHERE	N
COVER	SHAPE	C	HINGED	N	LOCK	N	DUTY	H	-	650	X	0		GAS TYPE	None
SHAFT	SIDE ENTRY	N	REGULAT COURSES	-	DEPTH (mm)	1140	INFILT RATIO N	N	-	580	X	530		EVIDENCE OF VERMIN	N
CHAMBER	SOFFIT	-	STEPS	0	LADDERS	0	LNDGS	-	-	1170	X	1370		CONSTRUCTION CODE	R

STRUCTURAL CONDITION	-	MAINTENANCE CONDITION	-	DEPTH OF FLOW (mm)	0	DEPTH OF SILT (mm)	0	HEIGHT SURCH (mm)	-	COVER LEVEL (m AD)	-

		UPSTREAM REFERENCE	PIPE SHAPE	PIPE SIZE (mm)			BACKDROP DIAM (mm)	MATERIAL	LINING	DEPTH FROM COVER (m)	INVERT (m AD)
INCOMING PIPES	A	UNKNOWN	C	150	X	0	-	PVC	-	0.975	
	B	1	C	750	X	0	-	CO	-	1.855	
	C				X						
	D				X						
	E				X						
	F				X						

		DOWNSTREAM REFERENCE					COND	CRITY			
OUTGOING PIPES	X	SMHH3	C	750	X	0	-	-	CO	-	1.860
	Y				X						

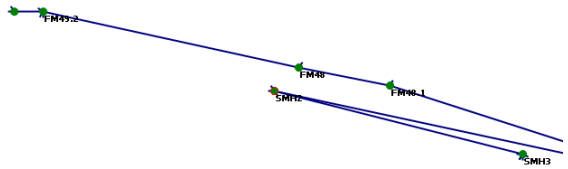
CONDITION (Y if action required)											
COVER	N	IRONS / LADDERS	N	SHAFT	N	CHAMBER	N	BENCHING	N	OTHER	N

REMARKS

-
Hole in shaft around A pipe

Attachments





MANHOLE RECORD CARD

Powered by InfoAsset Manager

LOCATION	The Weir Maudlin Street Kilkenney

NODE REFERENCE	FM48
COORDINATES (m)	251045.87,155915.19
DRAINAGE AREA CODE	-
SURVEY DATE	11 Nov 2023

YEAR LAID	-		STATUS	-	FUNCTION	-	NODE TYPE	M	CONDITION	SIZE (mm)			TOXIC ATMOSPHERE	N
COVER	SHAPE	S	HINGED	N	LOCK	N	DUTY	H	-	650	X	650	GAS TYPE	None
SHAFT	SIDE ENTRY	N	REGULAT COURSES	-	DEPTH (mm)	285	INFILT RATIO N	N	-	500	X	0	EVIDENCE OF VERMIN	N
CHAMBER	SOFFIT	-	STEPS	0	LADDERS	0	LNDGS	-	-	450	X	0	CONSTRUCTION CODE	P

STRUCTURAL CONDITION	-	MAINTENANCE CONDITION	-	DEPTH OF FLOW (mm)	100	DEPTH OF SILT (mm)	0	HEIGHT SURCH (mm)	-	COVER LEVEL (m AD)	-

INCOMING PIPES

	UPSTREAM REFERENCE	PIPE SHAPE	PIPE SIZE (mm)			BACKDROP DIAM (mm)	MATERIAL	LINING	DEPTH FROM COVER (m)	INVERT (m AD)
A	FM49.2	C	525	X	0	-	CO	-	1.750	
B	UNKNOWN	C	150	X	0	150	PVC	-	0.555	
C				X						
D				X						
E				X						
F				X						

OUTGOING PIPES

	DOWNSTREAM REFERENCE					COND	CRITY			
X	FM48.1	C	525	X	0	-	-	CO	-	1.750
Y				X						

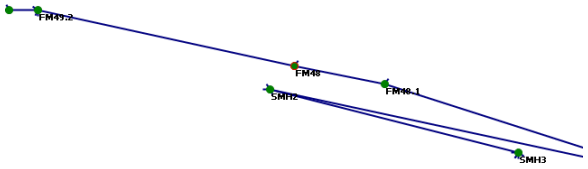
CONDITION (Y if action required)											
COVER	N	IRONS / LADDERS	N	SHAFT	N	CHAMBER	N	BENCHING	N	OTHER	N

REMARKS

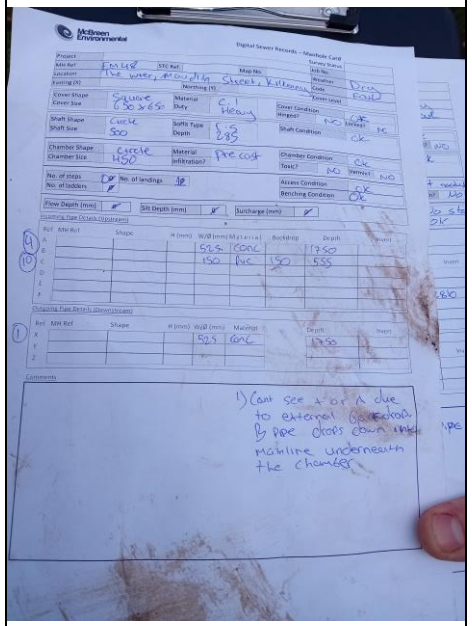
-
Cantsee X or A pipe underneath chamber. B pipe backdrop drops into chamber

Attachments



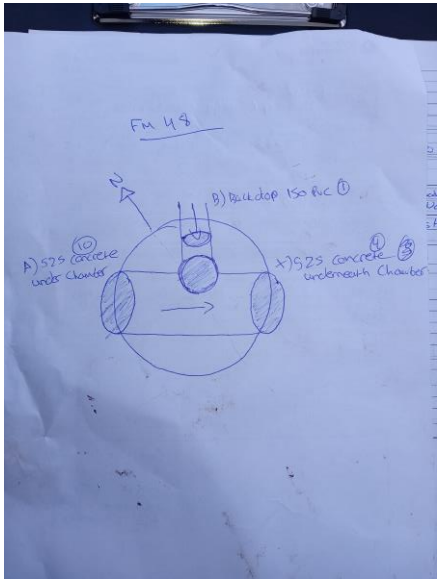





McGreen Environmental
Digital Sewer Records – Manhole Card
FM48
The Water Mouth Sheet, Kilkenny
Square 650x650
Circle 500
Circle 450
Pre cast
Heavy
525
150
525
1350
550
1) Cant see x or A due to external factors
B pipe goes down into mainline underneath the chamber






FM 48
N
B) Backdrop 150 PVC
A) 525 concrete under Chamber
x) 525 concrete underneath Chamber

MANHOLE RECORD CARD

Powered by InfoAsset Manager

LOCATION	The Weir Maudlin Street Kilkenney

NODE REFERENCE	FM48.1
COORDINATES (m)	251074.11,155909.50
DRAINAGE AREA CODE	-
SURVEY DATE	11 Nov 2023

YEAR LAID	-		STATUS	-	FUNCTION	-	NODE TYPE	M	CONDITION	SIZE (mm)			TOXIC ATMOSPHERE	N
COVER	SHAPE	S	HINGED	N	LOCK	N	DUTY	H	-	650	X	650	GAS TYPE	None
SHAFT	SIDE ENTRY	N	REGULAT COURSES	-	DEPTH (mm)	825	INFILT RATIO N	N	-	610	X	0	EVIDENCE OF VERMIN	N
CHAMBER	SOFFIT	-	STEPS	0	LADDERS	0	LNDGS	-	-	1070	X	1920	CONSTRUCTION CODE	BL

STRUCTURAL CONDITION	-	MAINTENANCE CONDITION	-	DEPTH OF FLOW (mm)	100	DEPTH OF SILT (mm)	0	HEIGHT SURCH (mm)	-	COVER LEVEL (m AD)	-

		UPSTREAM REFERENCE	PIPE SHAPE	PIPE SIZE (mm)			BACKDROP DIAM (mm)	MATERIAL	LINING	DEPTH FROM COVER (m)	INVERT (m AD)
INCOMING PIPES	A	FM48	C	525	X	0	-	CO	-	1.815	
	B	UNKNOWN	C	150	X	0	-	PVC	-	1.215	
	C				X						
	D				X						
	E				X						
	F				X						

		DOWNSTREAM REFERENCE					COND	CRITY			
OUTGOING PIPES	X	FM50	C	525	X	0	-	-	CO	-	1.815
	Y				X						

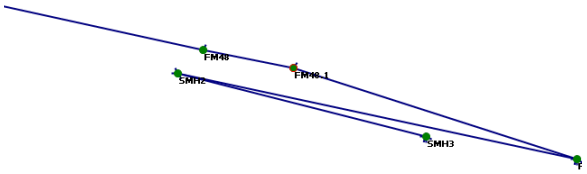
CONDITION (Y if action required)											
COVER	N	IRONS / LADDERS	N	SHAFT	N	CHAMBER	N	BENCHING	N	OTHER	N

REMARKS

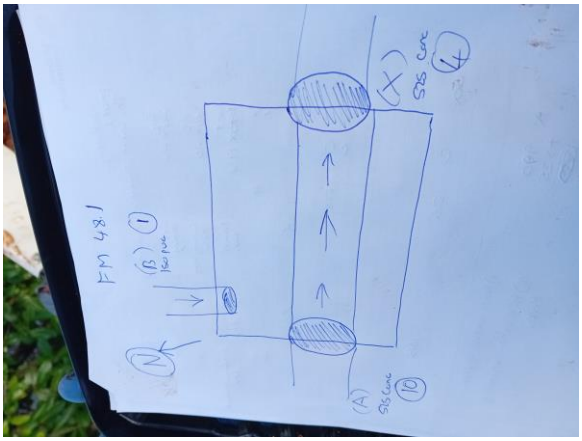
-
Hole and Roots around B pipe

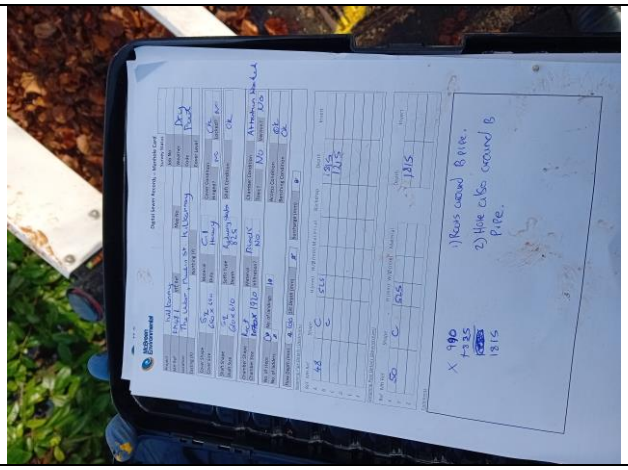
Attachments








SAB Cone
(A)
SAB Cone
(B)
Inlet Pipe
EM 481


1) Rods cleared B Pipe.
2) Hole cut in ground B Pipe.











Appendix B – Infiltration Test

PercolationTests.ie
Cillron Limited
PercolationTests@gmail.com
Tel: 087 6636757

BRE digest 365 test

		Revision	
Job No:	North SP2	Page:	C/01
Section: Kilkenny Coco - Watersports Activity Centre	Prepared By:	DR	Date: 29/11/2023

ALTERNATIVE SOAKAWAY SIZES

	trench soakaways		
width of trench *[mm]* :	450	600	900
required trench length *[m]* :	302.49	N/A	N/A
	ring soakaways		
diameter of ring *[mm]* :	1050	1350	1500
required pit diameter *[m]* :	N/A	N/A	N/A

** Based on effective depth and number of pits as in Soakaway Data table*

SUMMARY OF CALCULATIONS

critical design rainfall duration 't_{crit}' =	1440	*min*
required storage volume 'V_{req}' =	77.17	m^3
provided storage volume 'V_{prov}' =	79.80	m^3
utilisation factor =	**0.97**	***.OK***
required time to discharge 50% 't_{50}' =	355.43	*hours*
utilisation factor =	**14.81**	***.NOT OK***

** Discharge time is assessed per soakaway rather than a group*

GENERAL DATA

site location: [redacted] **Ireland**
soakaway type: **geocellular units** (?)

impermeable area drained to soakaway 'A' *[m^2]* = **1000**
60 min rainfall depth of 5 year return period 'R' *[mm]* = **16** (?)
M5-60 to M5-2d rainfall ratio 'r' = **0.28**
allowance for climate change: **20%**

SOAKAWAY DATA

soakaway width 'W' [m] = **14.00**
soakaway length 'L' [m] = **15.00**

total depth from ground level 'D_b' *[m]* = **0.70**
depth to drain invert level 'D_d' *[m]* = **0.30**
soakaway effective depth 'D_{eff}' *[m]* = 0.40
free volume in infill aggregate *[%]* = **95** (?)

SOIL INFILTRATION DATA

allowance for infiltration through soakaway base: **No** (?)
available on-site infiltration test results: (●) Yes ( ) No (?)
use soakage trial pit table below
internal surface area of trial pit 'a_{p50}' [m^2] = 1.44
storage volume between 75-25% 'V_p' [m^3] = 0.14
time for water to fall from 75-25% 't_p' [min] = 620.00
soil infiltration rate 'f' [m/s] = 2.69E-06

SOAKAGE TRIAL PIT DATA (?)

soakage trial pit width 'W_t' *[m]* = **0.60**
soakage trial pit length 'L_t' *[m]* = **1.20**
total depth from ground level 'D_{tb}' *[m]* = **0.90**
depth to pipe invert level 'D_{tp}' *[m]* = **0.50**
soakage trial pit effective depth 'D_{teff}' *[m]* = 0.40
free volume in infill aggregate *[%]* = **100** (?)
NOTE: faces of excavation assumed to be vertical

Infiltration rate: Poor – Watertable noted @ 1.2m below ground level

REQUIRED STORAGE CAPACITY PER RAINFALL DURATION (?)

rainfall duration *[min]*	rainfall factor Z1	M5-D rainfalls *[mm]*	M30-D Z2	M30-D rainfalls *[mm]*	M30-D inflow *[m^3]*	ignore Z2	ignore rainfalls *[mm]*	ignore inflow *[m^3]*	ignore Z2	ignore rainfalls *[mm]*	ignore inflow *[m^3]*	outflow from soakaway *[m^3]*	required storage *[m^3]*
5	0.33	5.33	1.44	9.24	9.24							0.01	9.23
10	0.48	7.73	1.47	13.62	13.62							0.02	13.60
15	0.58	9.33	1.48	16.61	16.61							0.03	16.59
30	0.76	12.21	1.49	21.86	21.86							0.06	21.80
60	1.00	16.00	1.49	28.60	28.60							0.11	28.48
120	1.26	20.21	1.47	35.72	35.72							0.22	35.50
240	1.62	25.87	1.46	45.23	45.23							0.45	44.78
360	1.85	29.55	1.44	51.23	51.23							0.67	50.55
600	2.20	35.20	1.43	60.31	60.31							1.12	59.18
1440	3.01	48.21	1.38	79.87	79.87							2.69	**77.17**

** Z2 is growth factor from M5 rainfalls*

SOAKAGE TRIAL PIT INFILTRATION TEST RESULTS (?)

	water level measurement N°:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Soakage Trial 1	time *[min]* =	0	290	620																
	depth to water *[m]* =	0.60	0.70	0.80																

PercolationTests.ie
Cillron Limited
PercolationTests@gmail.com
Tel: 087 6636757

BRE digest 365 test

		Revision	
Job No:	South SP1	Page:	C/01
Section:	Kilkenny Coco - Watersports Activity Centre	Prepared By:	DR
		Date:	29/11/2023

ALTERNATIVE SOAKAWAY SIZES

	trench soakaways		
width of trench *[mm]* :	450	600	900
required trench length *[m]* :	307.49	N/A	N/A
	ring soakaways		
diameter of ring *[mm]* :	1050	1350	1500
required pit diameter *[m]* :	N/A	N/A	N/A

** Based on effective depth and number of pits as in Soakaway Data table*

SUMMARY OF CALCULATIONS

critical design rainfall duration 't_{crit}' =	1440	*min*
required storage volume 'V_{req}' =	77.30	m^3
provided storage volume 'V_{prov}' =	79.80	m^3
utilisation factor =	**0.97**	***.OK***
required time to discharge 50% 't_{50}' =	372.63	*hours*
utilisation factor =	**15.53**	***.NOT OK***

** Discharge time is assessed per soakaway rather than a group*

GENERAL DATA

site location: [redacted] **Ireland**
soakaway type: **geocellular units** (?)

impermeable area drained to soakaway 'A' *[m^2]* = **1000**
60 min rainfall depth of 5 year return period 'R' *[mm]* = **16** (?)
M5-60 to M5-2d rainfall ratio 'r' = **0.28**
allowance for climate change: **20%**

SOAKAWAY DATA

soakaway width 'W' [m] = **14.00**
soakaway length 'L' [m] = **15.00**

total depth from ground level 'D_b' *[m]* = **0.70**
depth to drain invert level 'D_d' *[m]* = **0.30**
soakaway effective depth 'D_{eff}' *[m]* = 0.40
free volume in infill aggregate *[%]* = **95** (?)

SOIL INFILTRATION DATA

allowance for infiltration through soakaway base: **No** (?)
available on-site infiltration test results: (●) Yes ( ) No (?)
use soakage trial pit table below
internal surface area of trial pit 'a_{p50}' [m^2] = 1.44
storage volume between 75-25% 'V_p' [m^3] = 0.14
time for water to fall from 75-25% 't_p' [min] = 650.00
soil infiltration rate 'f' [m/s] = 2.56E-06

SOAKAGE TRIAL PIT DATA (?)

soakage trial pit width 'W_t' *[m]* = **0.60**
soakage trial pit length 'L_t' *[m]* = **1.20**
total depth from ground level 'D_{tb}' *[m]* = **0.90**
depth to pipe invert level 'D_{tp}' *[m]* = **0.50**
soakage trial pit effective depth 'D_{teff}' *[m]* = 0.40
free volume in infill aggregate *[%]* = **100** (?)
NOTE: faces of excavation assumed to be vertical

Infiltration rate: Poor – Watertable noted @ 1.2m below ground level

REQUIRED STORAGE CAPACITY PER RAINFALL DURATION (?)

rainfall duration *[min]*	rainfall factor Z1	M5-D rainfalls *[mm]*	M30-D Z2	M30-D rainfalls *[mm]*	M30-D inflow *[m^3]*	ignore Z2	ignore rainfalls *[mm]*	ignore inflow *[m^3]*	ignore Z2	ignore rainfalls *[mm]*	ignore inflow *[m^3]*	outflow from soakaway *[m^3]*	required storage *[m^3]*
5	0.33	5.33	1.44	9.24	9.24							0.01	9.23
10	0.48	7.73	1.47	13.62	13.62							0.02	13.60
15	0.58	9.33	1.48	16.61	16.61							0.03	16.59
30	0.76	12.21	1.49	21.86	21.86							0.05	21.81
60	1.00	16.00	1.49	28.60	28.60							0.11	28.49
120	1.26	20.21	1.47	35.72	35.72							0.21	35.51
240	1.62	25.87	1.46	45.23	45.23							0.43	44.80
360	1.85	29.55	1.44	51.23	51.23							0.64	50.59
600	2.20	35.20	1.43	60.31	60.31							1.07	59.24
1440	3.01	48.21	1.38	79.87	79.87							2.57	**77.30**

** Z2 is growth factor from M5 rainfalls*

SOAKAGE TRIAL PIT INFILTRATION TEST RESULTS (?)

	water level measurement N°:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Soakage Trial 1	time *[min]* =	0	310	650																
	depth to water *[m]* =	0.60	0.70	0.80																

Appendix C – Storm Water Calculations (Causeway Flow)

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	5	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	17.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.300	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	x
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)
AJ1		43.690	300	650867.702	655900.252
IC2		43.690	450	650871.043	655896.097
IC2.1		43.660	450	650868.961	655895.781
IC3		43.680	450	650874.401	655891.932
IC4		43.690	450	650882.784	655886.564
AJ5	0.012	43.690	300	650860.391	655876.831
AJ6		43.690	300	650864.288	655882.765
IC7	0.000	43.640	450	650871.060	655878.458
IC8		43.640	450	650875.224	655884.643
SW MH 01	0.081	43.480	1200	650880.809	655882.251
SW MH 02 FCD	0.000	43.710	1200	650894.913	655873.479
SW MH 03	0.000	43.640	1200	650901.301	655878.660
SW MH 04	0.000	43.580	1200	650926.947	655906.988
SW MH 05		43.600	1200	650958.251	655943.552
SW MH 06		43.450	1200	650978.748	655949.593
CONNECTION		43.530	1200	650983.415	655958.721
RAIN GARDEN	0.006	43.650		650868.365	655894.861
GREEN ROOF 1	0.024	46.700		650867.159	655901.469
GREEN ROOF 2	0.010	46.700		650883.935	655887.324

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)
1.000	AJ1	IC2	5.332	0.600	43.140	42.860	0.280	19.0	150
1.001	IC2	IC3	5.350	0.600	42.860	42.800	0.060	89.2	150
1.002	IC3	IC4	9.954	0.600	42.800	42.700	0.100	99.5	150
1.003	IC4	SW MH 01	4.744	0.600	42.700	42.620	0.080	59.3	150

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Add Inflow (l/s)
1.000	2.319	41.0	3.3	0.400	0.680	0.0
1.001	1.065	18.8	4.1	0.680	0.730	0.0
1.002	1.007	17.8	4.1	0.730	0.840	0.0
1.003	1.308	23.1	5.4	0.840	0.710	0.0

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Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)
2.000	AJ5	AJ6	7.099	0.600	43.140	43.069	0.071	100.0	150
2.001	AJ6	IC7	8.026	0.600	43.069	42.750	0.319	25.2	150
2.002	IC7	IC8	7.456	0.600	42.750	42.680	0.070	106.5	150
2.003	IC8	SW MH 01	6.076	0.600	42.680	42.620	0.060	101.3	150
3.000	SW MH 01	SW MH 02 FCD	16.609	0.600	42.620	42.520	0.100	166.1	225
3.001	SW MH 02 FCD	SW MH 03	8.225	0.600	42.520	42.470	0.050	164.5	225
3.002	SW MH 03	SW MH 04	38.212	0.600	42.470	42.250	0.220	173.7	225
3.003	SW MH 04	SW MH 05	48.134	0.600	42.250	41.970	0.280	171.9	225
3.004	SW MH 05	SW MH 06	21.369	0.600	41.970	41.840	0.130	164.4	225
3.005	SW MH 06	CONNECTION	10.252	0.600	41.840	41.780	0.060	170.9	225
5.000	GREEN ROOF 1	AJ1	1.333	0.600	46.200	43.146	3.054	0.4	100
6.000	RAIN GARDEN	IC2.1	1.096	0.600	42.900	42.880	0.020	54.8	150
4.000	IC2.1	IC2	2.106	0.600	42.880	42.860	0.020	105.3	150
7.000	GREEN ROOF 2	IC4	1.379	0.600	46.200	42.933	3.267	0.4	100

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Add Inflow (l/s)
2.000	1.005	17.8	1.6	0.400	0.471	0.0
2.001	2.015	35.6	1.6	0.471	0.740	0.0
2.002	0.973	17.2	1.6	0.740	0.810	0.0
2.003	0.998	17.6	1.6	0.810	0.710	0.0
3.000	1.011	40.2	18.0	0.635	0.965	0.0
3.001	1.016	40.4	18.0	0.965	0.945	0.0
3.002	0.989	39.3	18.0	0.945	1.105	0.0
3.003	0.994	39.5	18.0	1.105	1.405	0.0
3.004	1.017	40.4	18.0	1.405	1.385	0.0
3.005	0.997	39.6	18.0	1.385	1.525	0.0
5.000	11.817	92.8	3.3	0.400	0.444	0.0
6.000	1.361	24.1	0.8	0.600	0.630	0.0
4.000	0.979	17.3	0.8	0.630	0.680	0.0
7.000	12.014	94.4	1.4	0.400	0.657	0.0

Node GREEN ROOF 1 Online Orifice Control

Flap Valve	x	Design Depth (m)	0.200	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.7		
Invert Level (m)	46.200	Diameter (m)	0.027		

Node GREEN ROOF 2 Online Orifice Control

Flap Valve	x	Design Depth (m)	0.200	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.7		
Invert Level (m)	46.200	Diameter (m)	0.027		

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Node IC2.1 Online Orifice Control

Flap Valve	x	Design Depth (m)	0.400	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	2.0		
Invert Level (m)	42.880	Diameter (m)	0.039		

Node IC8 Online Orifice Control

Flap Valve	x	Design Depth (m)	0.500	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	2.0		
Invert Level (m)	42.680	Diameter (m)	0.037		

Node SW MH 02 FCD Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	42.520	Product Number	CTL-SHE-0104-5000-1100-5000
Design Depth (m)	1.100	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	5.0	Min Node Diameter (mm)	1200

Node GREEN ROOF 1 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	46.200	Depth (m)	0.100
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	288	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	10.000	Number Required	1
Porosity	0.95	Pit Length (m)	15.000		

Node GREEN ROOF 2 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	46.200	Depth (m)	0.100
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	100	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	4.800	Number Required	1
Porosity	0.95	Pit Length (m)	10.000		

Node IC8 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	42.680	Depth (m)	0.400
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	86	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	2.000	Number Required	1
Porosity	0.95	Pit Length (m)	7.000		

Node SW MH 02 FCD Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	42.520	Depth (m)	0.705
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	52	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	2.000	Number Required	1
Porosity	0.70	Pit Length (m)	17.000		

Node RAIN GARDEN Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	42.900	Depth (m)	0.300
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	18	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	3.000	Number Required	1
Porosity	0.95	Pit Length (m)	3.000		

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Results for 5 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	AJ1	420	43.148	0.008	0.2	0.0006	0.0000	OK
30 minute winter	IC2	23	42.879	0.019	0.6	0.0030	0.0000	OK
30 minute summer	IC2.1	21	42.934	0.054	1.2	0.0085	0.0000	OK
30 minute winter	IC3	24	42.819	0.019	0.6	0.0031	0.0000	OK
60 minute winter	IC4	43	42.719	0.019	0.7	0.0030	0.0000	OK
15 minute winter	AJ5	10	43.178	0.038	2.2	0.0193	0.0000	OK
15 minute winter	AJ6	10	43.094	0.025	2.2	0.0018	0.0000	OK
15 minute winter	IC7	10	42.788	0.038	2.2	0.0060	0.0000	OK
60 minute winter	IC8	45	42.746	0.066	1.2	0.8903	0.0000	OK
60 minute winter	SW MH 01	43	42.719	0.099	9.1	0.2986	0.0000	OK
60 minute winter	SW MH 02 FCD	43	42.718	0.198	9.1	4.9475	0.0000	OK
60 minute winter	SW MH 03	44	42.523	0.053	4.8	0.0603	0.0000	OK
60 minute winter	SW MH 04	44	42.303	0.053	4.8	0.0600	0.0000	OK
60 minute winter	SW MH 05	45	42.023	0.053	4.8	0.0599	0.0000	OK
60 minute winter	SW MH 06	46	41.895	0.055	4.8	0.0620	0.0000	OK
60 minute winter	CONNECTION	46	41.832	0.052	4.8	0.0000	0.0000	OK
15 minute winter	RAIN GARDEN	13	42.927	0.027	1.1	0.2329	0.0000	OK
600 minute winter	GREEN ROOF 1	420	46.233	0.033	0.5	4.7109	0.0000	OK
180 minute winter	GREEN ROOF 2	132	46.229	0.029	0.5	1.3409	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	AJ1	1.000	IC2	0.2	0.442	0.005	0.0030	
30 minute winter	IC2	1.001	IC3	0.6	0.470	0.033	0.0070	
30 minute summer	IC2.1	Orifice	IC2	0.6				
30 minute winter	IC3	1.002	IC4	0.6	0.478	0.034	0.0126	
60 minute winter	IC4	1.003	SW MH 01	0.8	0.337	0.034	0.0323	
15 minute winter	AJ5	2.000	AJ6	2.2	0.809	0.123	0.0193	
15 minute winter	AJ6	2.001	IC7	2.2	0.809	0.061	0.0218	
15 minute winter	IC7	2.002	IC8	2.2	0.867	0.127	0.0307	
60 minute winter	IC8	Orifice	SW MH 01	0.6				
60 minute winter	SW MH 01	3.000	SW MH 02 FCD	9.1	0.780	0.226	0.4477	
60 minute winter	SW MH 02 FCD	Hydro-Brake®	SW MH 03	4.8				
60 minute winter	SW MH 03	3.002	SW MH 04	4.8	0.669	0.122	0.2732	
60 minute winter	SW MH 04	3.003	SW MH 05	4.8	0.672	0.121	0.3423	
60 minute winter	SW MH 05	3.004	SW MH 06	4.8	0.656	0.118	0.1556	
60 minute winter	SW MH 06	3.005	CONNECTION	4.8	0.661	0.121	0.0741	16.8
15 minute winter	RAIN GARDEN	6.000	IC2.1	1.2	0.417	0.051	0.0042	
600 minute winter	GREEN ROOF 1	Orifice	AJ1	0.2				
180 minute winter	GREEN ROOF 2	Orifice	IC4	0.2				

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Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	AJ1	352	43.149	0.009	0.3	0.0006	0.0000	OK
30 minute winter	IC2	23	42.882	0.022	0.9	0.0035	0.0000	OK
30 minute winter	IC2.1	24	42.951	0.071	2.1	0.0112	0.0000	OK
60 minute winter	IC3	45	42.834	0.034	0.8	0.0054	0.0000	OK
60 minute winter	IC4	45	42.834	0.134	1.0	0.0214	0.0000	OK
15 minute winter	AJ5	10	43.186	0.046	3.2	0.0234	0.0000	OK
15 minute winter	AJ6	10	43.099	0.030	3.2	0.0021	0.0000	OK
60 minute winter	IC7	52	42.836	0.086	1.8	0.0136	0.0000	OK
60 minute winter	IC8	52	42.835	0.155	2.0	2.0925	0.0000	SURCHARGED
60 minute winter	SW MH 01	45	42.834	0.214	13.0	0.6459	0.0000	OK
60 minute winter	SW MH 02 FCD	45	42.833	0.313	12.3	7.7930	0.0000	SURCHARGED
60 minute winter	SW MH 03	45	42.525	0.055	5.0	0.0617	0.0000	OK
60 minute winter	SW MH 04	46	42.304	0.054	5.0	0.0613	0.0000	OK
60 minute winter	SW MH 05	47	42.024	0.054	5.0	0.0612	0.0000	OK
60 minute winter	SW MH 06	48	41.896	0.056	5.0	0.0634	0.0000	OK
60 minute winter	CONNECTION	48	41.834	0.054	5.0	0.0000	0.0000	OK
30 minute winter	RAIN GARDEN	22	42.943	0.043	1.3	0.3750	0.0000	OK
480 minute winter	GREEN ROOF 1	352	46.247	0.047	0.9	6.7483	0.0000	OK
240 minute winter	GREEN ROOF 2	168	46.243	0.043	0.6	1.9764	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	AJ1	1.000	IC2	0.3	0.480	0.007	0.0039	
30 minute winter	IC2	1.001	IC3	0.8	0.514	0.043	0.0085	
30 minute winter	IC2.1	Orifice	IC2	0.7				
60 minute winter	IC3	1.002	IC4	0.8	0.467	0.045	0.0979	
60 minute winter	IC4	1.003	SW MH 01	1.1	0.377	0.048	0.0812	
15 minute winter	AJ5	2.000	AJ6	3.2	0.899	0.178	0.0252	
15 minute winter	AJ6	2.001	IC7	3.1	0.905	0.088	0.0280	
60 minute winter	IC7	2.002	IC8	1.8	0.627	0.105	0.1044	
60 minute winter	IC8	Orifice	SW MH 01	0.9				
60 minute winter	SW MH 01	3.000	SW MH 02 FCD	12.3	0.848	0.305	0.6546	
60 minute winter	SW MH 02 FCD	Hydro-Brake®	SW MH 03	5.0				
60 minute winter	SW MH 03	3.002	SW MH 04	5.0	0.677	0.127	0.2817	
60 minute winter	SW MH 04	3.003	SW MH 05	5.0	0.680	0.126	0.3531	
60 minute winter	SW MH 05	3.004	SW MH 06	5.0	0.664	0.123	0.1607	
60 minute winter	SW MH 06	3.005	CONNECTION	5.0	0.669	0.126	0.0765	25.6
30 minute winter	RAIN GARDEN	6.000	IC2.1	2.1	0.384	0.089	0.0067	
480 minute winter	GREEN ROOF 1	Orifice	AJ1	0.3				
240 minute winter	GREEN ROOF 2	Orifice	IC4	0.3				

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Results for 100 year +30% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	AJ1	368	43.151	0.011	0.4	0.0007	0.0000	OK
60 minute winter	IC2	47	43.106	0.246	1.1	0.0391	0.0000	SURCHARGED
60 minute winter	IC2.1	57	43.103	0.223	1.7	0.0355	0.0000	SURCHARGED
60 minute winter	IC3	47	43.106	0.306	1.2	0.0486	0.0000	SURCHARGED
60 minute winter	IC4	47	43.106	0.406	1.7	0.0645	0.0000	SURCHARGED
15 minute winter	AJ5	10	43.200	0.060	5.3	0.0306	0.0000	OK
15 minute winter	AJ6	10	43.108	0.039	5.3	0.0028	0.0000	OK
120 minute winter	IC7	100	43.107	0.357	2.0	0.0568	0.0000	SURCHARGED
120 minute winter	IC8	100	43.108	0.428	2.5	5.3946	0.0000	SURCHARGED
60 minute winter	SW MH 01	47	43.106	0.486	20.6	1.4643	0.0000	SURCHARGED
60 minute winter	SW MH 02 FCD	48	43.104	0.584	17.7	14.5653	0.0000	SURCHARGED
30 minute summer	SW MH 03	19	42.525	0.055	5.0	0.0617	0.0000	OK
15 minute summer	SW MH 04	13	42.304	0.054	5.0	0.0614	0.0000	OK
360 minute winter	SW MH 05	200	42.024	0.054	5.0	0.0612	0.0000	OK
360 minute winter	SW MH 06	200	41.896	0.056	5.0	0.0634	0.0000	OK
360 minute winter	CONNECTION	200	41.834	0.054	5.0	0.0000	0.0000	OK
60 minute winter	RAIN GARDEN	57	43.103	0.203	2.3	1.7642	0.0000	SURCHARGED
480 minute winter	GREEN ROOF 1	368	46.281	0.081	1.5	11.6115	0.0000	OK
240 minute winter	GREEN ROOF 2	172	46.275	0.075	1.0	3.4611	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	AJ1	1.000	IC2	0.4	0.525	0.010	0.0052	
60 minute winter	IC2	1.001	IC3	1.2	0.510	0.065	0.0942	
60 minute winter	IC2.1	Orifice	IC2	0.8				
60 minute winter	IC3	1.002	IC4	1.4	0.468	0.079	0.1752	
60 minute winter	IC4	1.003	SW MH 01	1.8	0.409	0.078	0.0835	
15 minute winter	AJ5	2.000	AJ6	5.3	1.035	0.296	0.0363	
15 minute winter	AJ6	2.001	IC7	5.2	1.067	0.146	0.0694	
120 minute winter	IC7	2.002	IC8	1.7	0.586	0.100	0.1313	
120 minute winter	IC8	Orifice	SW MH 01	1.1				
60 minute winter	SW MH 01	3.000	SW MH 02 FCD	17.7	0.944	0.441	0.6606	
60 minute winter	SW MH 02 FCD	Hydro-Brake®	SW MH 03	5.0				
30 minute summer	SW MH 03	3.002	SW MH 04	5.0	0.678	0.127	0.2818	
15 minute summer	SW MH 04	3.003	SW MH 05	5.0	0.709	0.126	0.3532	
360 minute winter	SW MH 05	3.004	SW MH 06	5.0	0.664	0.123	0.1607	
360 minute winter	SW MH 06	3.005	CONNECTION	5.0	0.669	0.126	0.0765	80.5
60 minute winter	RAIN GARDEN	6.000	IC2.1	1.7	0.385	0.071	0.0193	
480 minute winter	GREEN ROOF 1	Orifice	AJ1	0.4				
240 minute winter	GREEN ROOF 2	Orifice	IC4	0.4				

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Appendix D – Confirmation of Feasibility

CONFIRMATION OF FEASIBILITY

Uisce Éireann
Bosca OP 448
Oifig Sheachadta na
Cathrach Theas
Cathair Chorcaí

Uisce Éireann
PO Box 448
South City
Delivery Office
Cork City

www.water.ie

Petra Nemeckova

14 Crescent Mall,
Henrietta Street,
Co. Wexford.
Y35XD1K

27 February 2024

Our Ref: CDS23009404 Pre-Connection Enquiry
Kilkenny City, Co. Kilkenny

Dear Applicant/Agent,

We have completed the review of the Pre-Connection Enquiry.

Uisce Éireann has reviewed the pre-connection enquiry in relation to a Water & Wastewater connection for a Business Connection of 1 unit(s) at Kilkenny City, Co. Kilkenny, (the **Development)**.

Based upon the details provided we can advise the following regarding connecting to the networks;

- **Water Connection**
  - Feasible subject to upgrades
  - In order to complete the proposed connection at the Premises, the Uisce Éireann water network will have to be extended by approximately 50m. Uisce Éireann currently does not have any plans to extend its network in this area. Should you wish to consider extending the water network infrastructure to a point to connect to the Uisce Éireann network, please contact Uice Éireann to discuss further.
  - Where it is proposed to connect to infrastructure which is private and not taken in charge, the applicant shall be

Stiúrthóirí / Directors: Tony Keohane (Cathaoirleach / Chairman), Niall Gleeson (POF / CEO), Christopher Banks, Fred Barry, Gerard Britchfield, Liz Joyce, Patricia King, Eileen Maher, Cathy Mannion, Michael Walsh.
Oifig Chláraithe / Registered Office: Teach Colvill, 24-26 Sráid Thalbóid, Baile Átha Cliath 1, D01 NP86 / Colvill House, 24-26 Talbot Street, Dublin, Ireland D01NP86
Is cuideachta ghníomhaíochta ainmnithe atá faoi theorainn scaireanna é Uisce Éireann / Uisce Éireann is a design activity company, limited by shares. Cláraithe in Éirinn Uimh.: 530363 / Registered in Ireland No.: 530363.

required to receive consent to connect from the asset owner.

- **Wastewater Connection**
  - Feasible subject to upgrades
  - In order to complete the proposed connection at the Premises, the Uisce Éireann wastewater network will have to be extended by approximately 175m. Uisce Éireann currently does not have any plans to extend its network in this area. Should you wish to consider extending the wastewater network infrastructure to a point to connect to the Uisce Éireann network, please contact Uice Éireann to discuss further.
  - Where it is proposed to connect to infrastructure which is private and not taken in charge, the applicant shall be required to receive consent to connect from the asset owner.

This letter does not constitute an offer, in whole or in part, to provide a connection to any Uisce Éireann infrastructure. Before the Development can be connected to our network(s) you must submit a connection application and be granted and sign a connection agreement with Uisce Éireann.

As the network capacity changes constantly, this review is only valid at the time of its completion. As soon as planning permission has been granted for the Development, a completed connection application should be submitted. The connection application is available at www.water.ie/connections/get-connected/

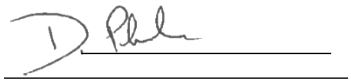
Where can you find more information?

- **Section A -** What is important to know?
- **Section B -** Details of Uisce Éireann's Network(s)

This letter is issued to provide information about the current feasibility of the proposed connection(s) to Uisce Éireann's network(s). This is not a connection offer and capacity in Uisce Éireann's network(s) may only be secured by entering into a connection agreement with Uisce Éireann.

For any further information, visit **www.water.ie/connections**, **email** **newconnections@water.ie** or contact 1800 278 278**.**

Yours sincerely,



Dermot Phelan
Connections Delivery Manager

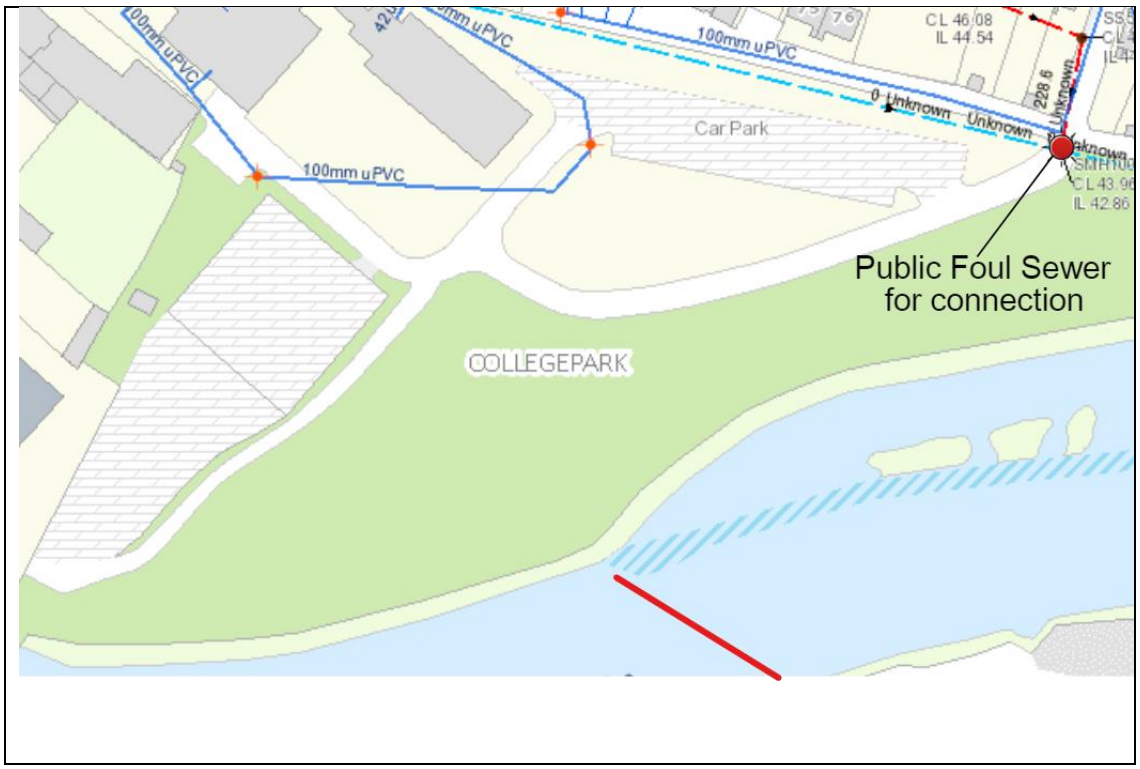
Section A - What is important to know?

What is important to know?	Why is this important?
Do you need a contract to connect?	• Yes, a contract is required to connect. This letter does not constitute a contract or an offer in whole or in part to provide a connection to Uisce Éireann's network(s). • Before the Development can connect to Uisce Éireann's network(s), you must submit a connection application and be granted and sign a connection agreement with Uisce Éireann.
When should I submit a Connection Application?	• A connection application should only be submitted after planning permission has been granted.
Where can I find information on connection charges?	• Uisce Éireann connection charges can be found at: https://www.water.ie/connections/information/charges/
Who will carry out the connection work?	• All works to Uisce Éireann's network(s), including works in the public space, must be carried out by Uisce Éireann*. *Where a Developer has been granted specific permission and has been issued a connection offer for Self-Lay in the Public Road/Area, they may complete the relevant connection works
Fire flow Requirements	• The Confirmation of Feasibility does not extend to fire flow requirements for the Development. Fire flow requirements are a matter for the Developer to determine. • **What to do?** - Contact the relevant Local Fire Authority
Plan for disposal of storm water	• The Confirmation of Feasibility does not extend to the management or disposal of storm water or ground waters. • **What to do?** - Contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges.
Where do I find details of Uisce Éireann's network(s)?	• Requests for maps showing Uisce Éireann's network(s) can be submitted to: datarequests@water.ie

What are the design requirements for the connection(s)?	• The design and construction of the Water & Wastewater pipes and related infrastructure to be installed in this Development shall comply with ***the Uisce Éireann Connections and Developer Services Standard Details and Codes of Practice,*** available at www.water.ie/connections
Trade Effluent Licensing	• Any person discharging trade effluent** to a sewer, must have a Trade Effluent Licence issued pursuant to section 16 of the Local Government (Water Pollution) Act, 1977 (as amended). • More information and an application form for a Trade Effluent License can be found at the following link: https://www.water.ie/business/trade-effluent/about/ **trade effluent is defined in the Local Government (Water Pollution) Act, 1977 (as amended)

Section B – Details of Uisce Éireann's Network(s)

The map included below outlines the current Uisce Éireann infrastructure adjacent the Development: To access Uisce Éireann Maps email datarequests@water.ie



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Note: The information provided on the included maps as to the position of Uisce Éireann's underground network(s) is provided as a general guide only. The information is based on the best available information provided by each Local Authority in Ireland to Uisce Éireann.

Whilst every care has been taken in respect of the information on Uisce Éireann's network(s), Uisce Éireann assumes no responsibility for and gives no guarantees, undertakings or warranties concerning the accuracy, completeness or up to date nature of the information provided, nor does it accept any liability whatsoever arising from or out of any errors or omissions. This information should not be solely relied upon in the event of excavations or any other works being carried out in the vicinity of Uisce Éireann's underground network(s). The onus is on the parties carrying out excavations or any other works to ensure the exact location of Uisce Éireann's underground network(s) is identified prior to excavations or any other works being carried out. Service connection pipes are not generally shown but their presence should be anticipated.

Appendix E – Site Specific Flood Risk Assessment (DRA Consulting Engineers)

Flood Risk Assessment

Project / Property:

Nore River Facilities Kilkenny
at County Hall,
Johns Street Lower,
Collegepark, Kilkenny,
Co. Kilkenny

Client:

Kilkenny County Council

Date of Report:

13th September 2024

Project Ref. No.:

22175

Limerick
The Park
Lord Edward Street
Limerick
V94 840C
Tel 061 310701

Wexford
14 Crescent Mall
Henrietta Street
Wexford
Y35 XD1K
Tel 053 9152814

Dublin
20 Harcourt Street
Dublin 2
D02 H364
Tel 01 4007515

W: www.draconsulting.ie **E:** info@draconsulting.ie

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Document Control

Producer:	Date:	Reviewer:	Date:	Approver:	Date:	Revision Status:
B.Healy	13/09/2024	K. Dunne	13/09/2024	J. Reidy	13/09/2024	1st

1.0 Introduction & Background

DRA Consulting Engineers have been engaged by Kilkenny County Council to provide structural and civil engineering services for the proposed Nore River Facilities Kilkenny at County Hall, John Street Lower, Collegepark, Kilkenny, Co. Kilkenny. The proposed development site is located to the south west of the existing Kilkenny County Hall car park behind an existing flood defence embankment.

The proposed development will consist of a new water sport activity centre, a new pontoon to access the River Nore and all associated ancillary site works. Figure 1 and Figure 2 below shows the location of the proposed development site and the existing flood defence embankment. It is also proposed that a new ramp and walkway structure be constructed adjacent to and over the existing flood defence embankment to allow boats to access the River Nore from the new activity centre. This new ramp structure will slightly encroach on the existing flood embankment and a Section 9 Consent has been obtained from the Office of Public Works. Further details of this Consent are included in Section 9 of this Report.

A site-specific flood risk assessment was carried out with this resulting report being prepared to form part of the proposed Planning Application and to inform the Planning Authority on any flood risk associated with the proposed development.

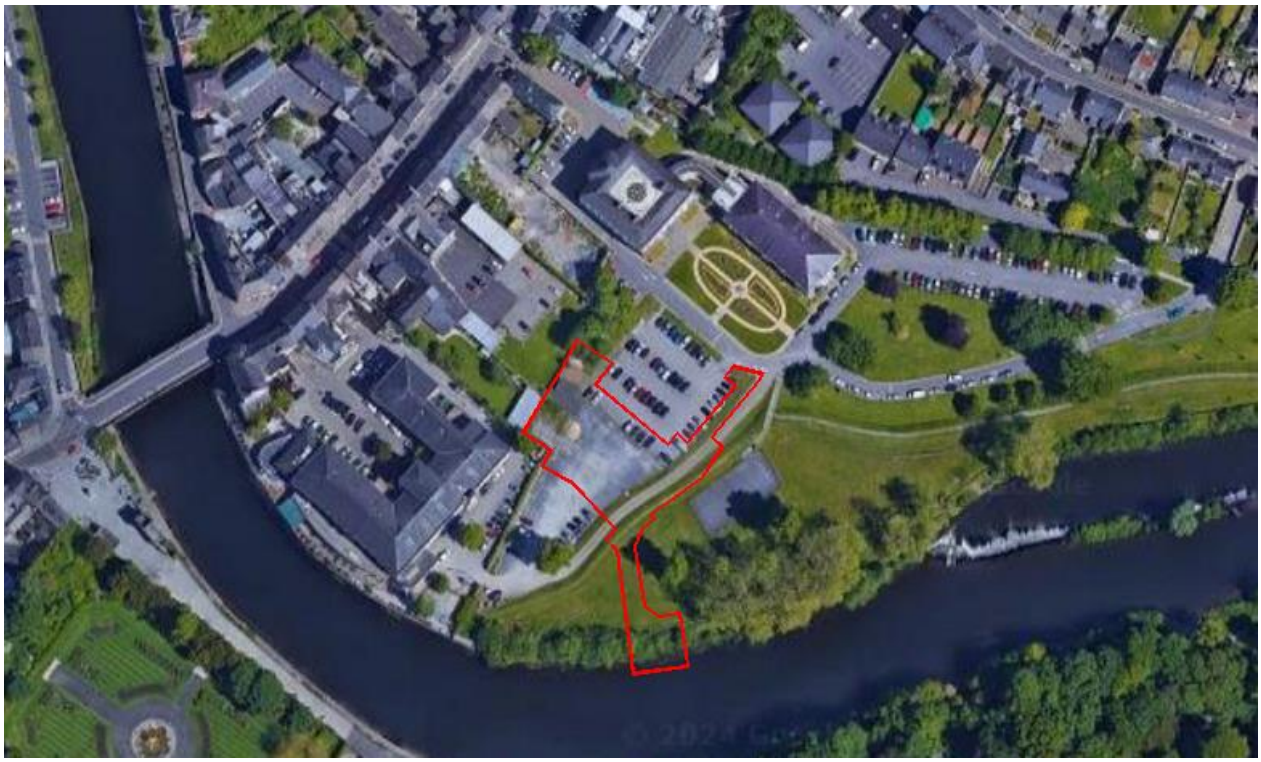


Figure 1 - Proposed Development location



Figure 2 - Existing Flood Defence Embankment

2.0 The Site

The proposed development is located adjacent the Kilkenny County Hall close to the River Nore. The site is protected by an existing flood defence embankment. The top of this embankment is set at approximately +44.7m OD and as such, the site is flood protected to +44.7m OD.

The topographic survey shows the finished ground levels on the site vary between approximately +43.11m and +43.69m OD. The proposed finished floor level of the new building is +43.70m OD.

3.0 Principles of Flood Risk Assessment

Flood Risk is related to the probability of flooding and the magnitude of the consequences. Flood Risk Assessments aim to identify, quantify and communicate to decision makers and other stakeholders the risk of flooding to land, property & people. This assessment is a site-specific flood risk assessment pertaining to the proposed works at Nore River Facilities Kilkenny.

This Flood Risk Assessment & report have been prepared in accordance with the principles of flood risk assessment as scheduled in the Department of Environment, Heritage & Local Government / Office of Public Works (OPW) publications:

- *The Planning System and Flood Risk Management* - Nov 2009; and
- *The Planning System and Flood Risk Management Guidelines for Planning Authorities: Technical Appendices*: - Nov 2009

The flood risk assessment requires an understanding of the sources of flood water, the people and assets (known as receptors) affected by the flooding and the pathways by which the flood water reaches those receptors. This is known

as the Source-Pathway-Receptor (S-P-R) Model. Flood Risk Assessments require identification and assessment of all three components including:

- The probability and magnitude of the sources (e.g. high river levels, sea levels).
- The performance and response of pathways and barriers to pathways.
- The consequences to receptors such as people, properties and the environment.

Normally, site-specific flood risk assessments include hydraulic modelling of the river or coastal cell across a wide enough area to appreciate the catchment wide impacts and hydrological processes involved. The Flood Risk Assessment should however be proportionate to the risk, scale, nature and location of the proposed development. This particular development will be shown to be at a low risk of flooding and it is held that hydraulic modelling of the river catchment is not necessary for this Flood Risk Assessment given the extent of information available, as detailed later in this report, and the size & nature of the proposed development.

4.0 Methodology

The Flood Risk Management Guidelines document outlines three stages in the assessment of flood risk as follows:

Stage 1 Flood risk identification – to identify whether there may be any flooding or surface water management issues related to a plan area or proposed development site that may warrant further investigation;

Stage 2 Initial flood risk assessment – to confirm sources of flooding that may affect a plan area or proposed development site, to appraise the adequacy of existing information and to determine what surveys and modelling approach is appropriate to match the spatial resolution required and complexity of the flood risk issues.

Stage 3 Detailed risk assessment – to assess flood risk issues in sufficient detail and to provide a quantitative appraisal of potential flood risk to a proposed or existing development, of its potential impact on flood risk elsewhere and of the effectiveness of any proposed mitigation measures.

This report has been prepared generally in accordance with these stages.

5.0 Flood Zones

The Planning System and Flood Risk Management, Guidelines for Planning Authorities document defines three flood zone types as follows:

Flood Zone A – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);

Flood Zone B - where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and

Flood Zone C - where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all areas of the plan which are not in zones A or B.

The flood zone type is determined based on current water surface levels without allowance for climate change.

The Guidelines divide developments into three vulnerability classes as follows:

- Highly vulnerable developments
- Less vulnerable developments
- Water compatible developments

The Guidelines include a matrix that determines the appropriateness of different types of development based on their vulnerability classification and the Flood Zones in which they are located. The matrix is reproduced in Table 1.

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water-compatible development	Appropriate	Appropriate	Appropriate

Table 1 - Vulnerability Matrix

Where the matrix indicates that a development is not appropriate it may still be justified based on a procedure described as a Justification Test.

The proposed development is for accommodation that is classified as both water-compatible and less vulnerable development. Also, as will be seen in section 7 of this report, the proposed development is located within Flood Zone C. For these reasons the proposed development is deemed appropriate and as such, a Justification Test is not required.

6.0 Report Inputs

This report has been prepared based on information obtained from the following sources:

- Consolidated Strategic Flood Risk Assessment – Kilkenny City & County Development Plan 2021-2027
- National Flood Hazard Mapping by the OPW – www.floodinfo.ie
- Catchment Flood Risk Assessment and Management (CFRAM) studies – South Eastern CFRAM Study
- Author's inspection of the relevant premises on 31st August 2023

7.0 Flood Risk Assessment

The proposed development site is located at County Hall, John Street Lower, Collegepark, Kilkenny. The main channel of the River Nore is located circa 55 metres from the proposed building on the site. A site location map is included in Appendix A of this report for reference.

A desktop study was carried out under the following headings and we have established that the relevant site is located in an area which is susceptible to flooding. Details of the desktop study are listed below:

7.1 Stage 1: Flood Risk Identification

The purpose of this stage is to identify whether there may be any flooding issues relating to the subject site.

Source / Pathway	Significant	Comment / Reason
Tidal / Coastal	No	Subject site is located 132km inland from the Irish Sea.
Fluvial	Yes	The subject sites are bounded by the River Nore along the eastern boundary.
Pluvial (Urban Drainage)	Possible	There is urban drainage and water supply infrastructure located in the vicinity of the site.
Pluvial (Overland Flow)	No	The site is not surrounded by significantly elevated lands and does not provide an important surface water discharge point to adjacent lands.
Blockage	No	There are two bridges (St. John's Bridge and Lady Desart Footbridge) located on the River Nore in the general vicinity of the sites.
Groundwater	No	There are no significant springs or groundwater discharges mapped or recorded in the immediate vicinity of the site.

Table 2 – Possible Types of Flooding at Subject Site

The primary potential flood risk to the subject site can be attributed to an extreme fluvial flood event in the River Nore located along the eastern boundary. Secondary flood risk can be attributed to a potential surcharge of the urban drainage infrastructure within the vicinity of both sites.

In accordance with 'The Planning System and Flood Risk Management – Guidelines for Planning Authority – DOEHLG 2009', these potential flood risks are analysed in the subsequent 'Stage 2: Initial Flood Risk Assessment' and 'Stage 3: Detailed Flood Risk Assessment' sections of this study report.

7.2 Stage 2: Initial Flood Risk Assessment

The purpose of this stage of the assessment is to establish the level of flooding risk that may affect the subject and to appraise the adequacy of the existing or historical information and data which may indicate the level or extent of any flood risk.

The following information and data was collated as part of the Initial Flood Risk Assessment for the proposed development site.

7.2.1 Consolidated SFRA – Kilkenny City & County Development Plan 2021-2027

The Consolidated Strategic Flood Risk Assessment – Kilkenny City & County Development Plan 2021-2027confirms that Kilkenny City has flooded frequently from the River Nore. Enclosed in Appendix B is the Kilkenny City Flooding map. A flood alleviation scheme has been carried out on the River Nore in Kilkenny.

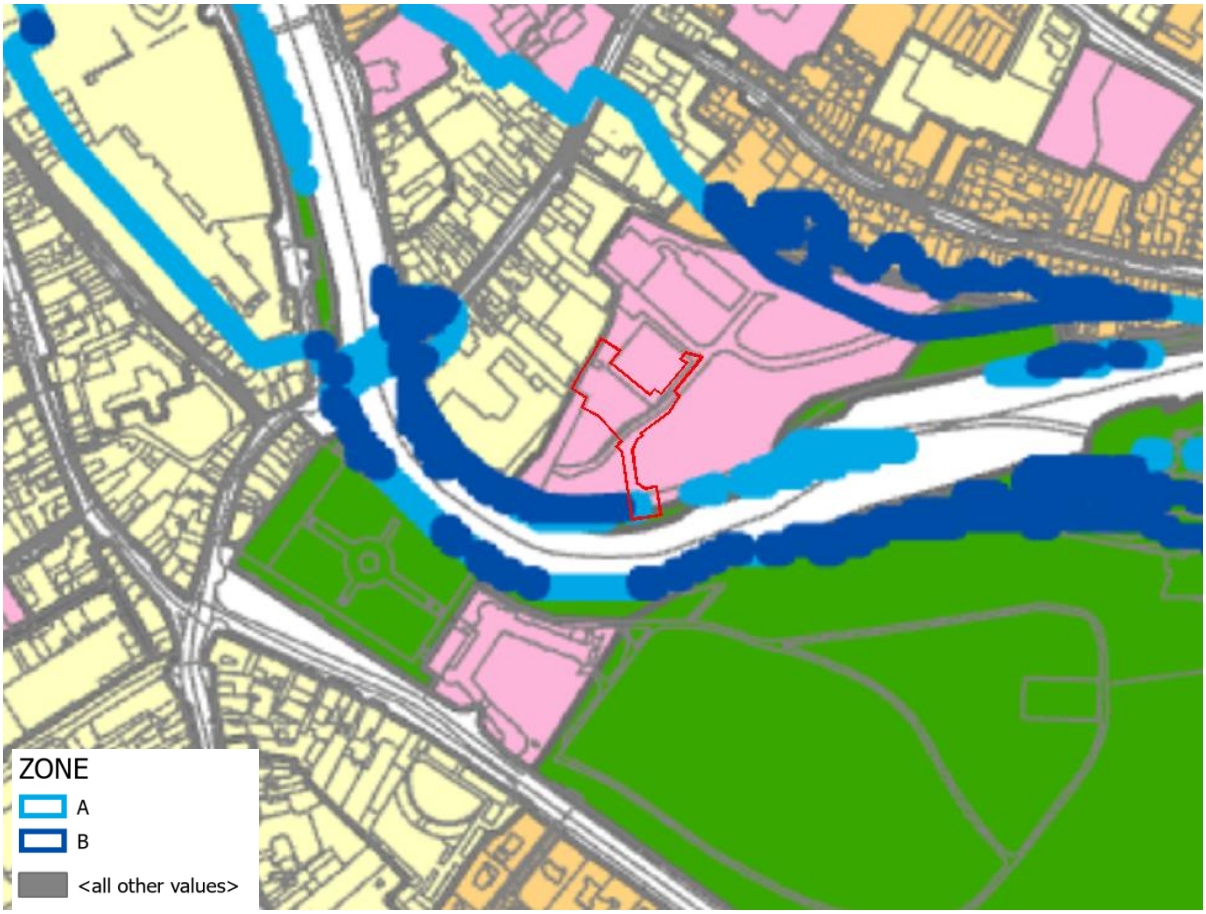


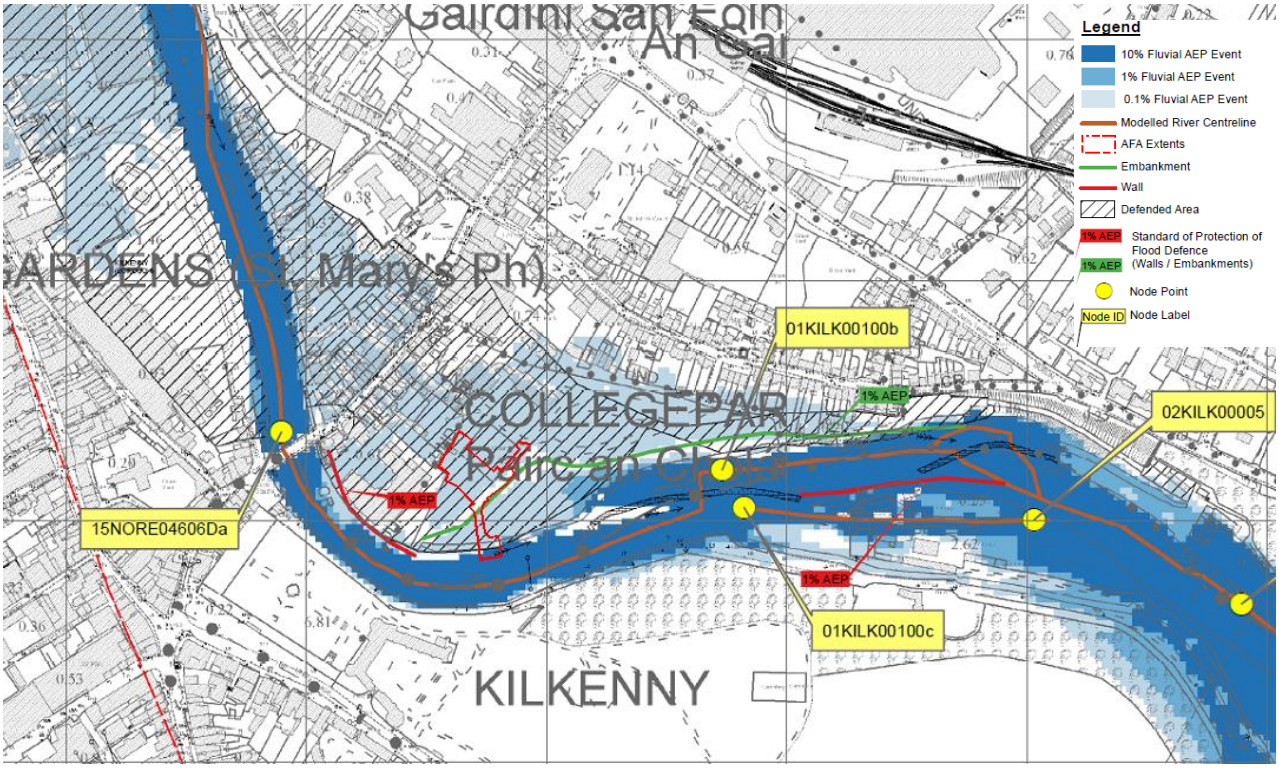
Figure 3 – Kilkenny City Flooding map (Kilkenny City & County Development Plan 2021-2027)

7.2.2 South Eastern CFRAM Study

The South Eastern CFRAM Study outlines that there were a large number of historic flooding events which have occurred within the Kilkenny AFA. However, all of these events occurred before the Kilkenny Flood Relief Scheme was completed.

7.2.3 OPW – Flood Maps

The OPW maintain a national flood mapping resource which is available for review via their website; www.floodinfo.ie. On review of the Kilkenny Fluvial Flood Map on this resource, it was found that the proposed development is located in an area susceptible to flooding however the development area is located behind existing flood defence (Embankment) which defends the site to the 1% AEP.



Node Label	Water Level (OD) 10% AEP	Flow (m³/s) 10% AEP	Water Level (OD) 1% AEP	Flow (m³/s) 1% AEP	Water Level (OD) 0.1% AEP	Flow (m³/s) 0.1% AEP
01KILK00217Da	44.38	277.16	45.07	388.35	45.85	530.93
01KILK00200	43.82	289.33	44.55	408.96	45.38	568.09
15NORE04606Da	43.36	289.60	43.94	409.30	44.65	566.56
01KILK00100b	42.28	N/A	42.82	N/A	43.44	N/A
01KILK00050	41.82	N/A	42.40	N/A	43.04	N/A
01KILK00100c	42.66	N/A	42.94	N/A	43.49	N/A
02KILK00005	41.90	N/A	42.49	N/A	43.12	N/A

Figure 4 - Extract Kilkenny Fluvial Flood Map

The nearest upstream flood model node to the proposed development (15NORE04606Da), located adjacent to St. John's Bridge and is about 160m from the site. The nearest downstream flood model node to the proposed development (01KILK00100b and 01KILK00100c), located closed to Kilkenny County Hall and is about 180m from the site. The flood model nodes indicated the following flood levels;

Node 15NORE04606Da	**10% AEP**	**1.0% AEP**	**0.1% AEP**
Water Level m OD	43.36	43.94	44.65

Node 01KILK00100b	**10% AEP**	**1.0% AEP**	**0.1% AEP**
Water Level m OD	42.28	42.82	43.44

Node 01KILK00100c	**10% AEP**	**1.0% AEP**	**0.1% AEP**
Water Level m OD	42.66	42.94	43.49

Subject site lies between Node 15NORE04606Da and 01KILK00100b- 01KILK00100c. By interpolating between these nodes (worst case of Node 01KILK00100), we have estimated the 10% AEP, 1.0% AEP and 0.1 AEP% flood event at the development site. The results are presented below.

Site by Interpolation	10% AEP	1.0% AEP	0.1% AEP
Water Level m OD	43.01	43.44	44.07

As described in section 2 above, the proposed floor level of the proposed Site buildings is +43.70m OD and the site is protected by existing embankment defence to +44.7m OD. By interpolation, the buildings based on their proposed finished floor levels are located in flood zone C.

If the flood model levels were translated, the proposed buildings would be protected up to the 0.1% AEP event having a freeboard of 630mm with the existing flood defence embankment and 1% AEP event having a freeboard of 260mm, even if there was localised failure of the existing flood defence.

Copies of the OPW Flood Maps are contained in Appendix C of this report.

7.2.4 Past Flooding Events

The OPW maintain flood hazard maps which contain information on previous flood events in a particular location. This information is available on their website www.floodmaps.ie. A Local Area Report was generated which showed a number of past events, most recently in October 2006 and in August 2008. A copy of this Summary Local Area Report is contained in Appendix D of this report.

7.3 Stage 3: Detailed Flood Risk Assessment

The purpose of this stage is to identify possible flood risks and to implement the necessary level of appraisal to assess these possible risks in order to ensure that these can be adequately addressed in the Flood Risk Assessment, to address the potential impact on flood risk elsewhere and the effectiveness of any proposed mitigation measures.

In consideration of the information collated as part of this assessment, and the availability of other information and data specific to the subject site, it is considered that sufficient quantitative information to complete an appropriate flood risk assessment can be derived from the information collated. In particular, the final flood extent maps for the area produced as part of the Eastern CFRAM Study are based on the results of detailed hydraulic modelling undertaken along the River Nore, and, therefore provide a reasonably accurate delineation of flood zones and prediction of flood depths in the general vicinity of the subject site.

The assessment indicates that the primary risk to the subject site can be attributed to potential fluvial flooding from the adjacent River Nore. A secondary flood risk can be attributed to a surcharge due to a potential surcharge of the urban drainage infrastructure within the vicinity of the site.

The intial Flood Risk Assessment undertaken as part of this Site Specific Flood Risk Assessement has determined that the site is not at risk of coastal/tidal, pluvial (overland flow) or groundwater flooding. Therefore, coastal/tidal, pluvial (overland flow) and groundwater flooding risk to the subject site will not be assessed futher as part of this Site Specific Flood Risk Assessment.

The above assessment indicates that the subject site may be susceptible to pluvial flooding (urban drainage) and fluval flooding (River Nore).

7.3.1 Site Inspection – 31st August 2023

The author visited the relevant sites on this date to assess the potential flood sources, pathways and assess the consequences on receptors. It was apparent prior to the property visit that the area was at risk from flooding (fluvial) and pluvial flooding (urban drainage) based on our desktop study.

a) The findings of our site inspection in terms of primary Flood Risk are as follows:

Source:
The flood risk source is fluvial and pertains to the River Nore located close to the proposed development site.

Pathways:
For a flood event to occur on the site, an overbank breach of the River Nore would need to occur followed by a breach of the existing flood defences resulting in surface water affecting the relevant property.

Receptors:
The receptors relevant to the subject site are the proposed new structures, its occupants and the associated site works, including foul & surface water drainage.

As described in section 2 above, the proposed floor level of the proposed buildings is +43.70m OD and the site is protected by existing embankment defence to +44.7m OD. If the flood model levels were translated, the proposed buildings would be protected up to the 0.1% AEP the existing flood defence embankment and 1% AEP event (plus a freeboard of 260mm) even if there was localised failure of the existing flood defence.

The following table summarises our flood risk assessment outcomes pertaining to the proposed development sites.

Source	Pathway	Receptor	Likelihood	Consequence	Risk
Fluvial	Flood Defence Overtopping	New Premises	Low	Medium	Low

b) The findings of our Site inspection in terms of secondary Flood Risk are as follows:

Source:
The flood risk source is pluvial and due to a potential surcharge of the urban drainage infrastructure within the vicinity of the subject site.

Pathways:
For a flood event to occur on the site, an overflow breach of the existing foul and/or stormwater systems would need to occur followed by a breach of the existing flood defences resulting in surface/waste water affecting the relevant property.

Receptors:
The receptors relevant to our site are the proposed new structures, its occupants and the associated site works.

The likelihood of a potential surcharge of the site from the existing sewer systems on the vicinity of the Kilkenny County Hall is deemed moderate given the number of services present in the vicinity of the site.

Overall, the pluvial flood risk to the proposed development is considered to be medium and it is recommended that all wastewater and surface water drains / sewers servicing the proposed development should be fitted with non-return valves to mitigate flood waters from rising up drains during extreme flood events.

The following table summarises our flood risk assessment outcomes pertaining to the proposed development site.

Source	Pathway	Receptor	Likelihood	Consequence	Risk
Pluvial	Urban Drainage Surcharge	New Premises	Medium	Medium	Medium

8.0 Justification Test

As stated above, in accordance with Table 3.2 of the Planning System & Flood Risk Management - Guidelines for Planning Authorities (2009), a 'less vulnerable' accommodation or water compatible development in Flood Zone 'B' or 'C' does not require a Justification Test to be carried. Therefore, the proposed development is considered appropriate and does not require a Justification test.

9.0 Section 9 Consent

As described above, it is proposed that a new ramp and walkway structure be constructed adjacent to and over the existing flood defence embankment to allow boats to access the River Nore from the new activity centre. To maintain the access roadway to the rear of the Kilkenny River Court Hotel, it is proposed that the new ramp structure encroaches into the defended side of the embankment. To ensure the integrity of the embankment is maintained, it is proposed that a reinforced concrete retaining structure be constructed within the edge of the embankment as indicated on DRA drawing 22175-175.

Section 9 of the Arterial Drainage Act requires the Commissioners consent for alterations to existing flood defence structures or embankments. A meeting was held with Noel Fitzpatrick of the Kilkenny Regional Office of the Office of Public Works (OPW) on 13/09/23 to discussed the proposed works and proposed localised modification of the existing embankment.

A Section 9 application was submitted to the OPW on 20/12/23 and Section 9 Consent was confirmed on 01/05/24 by email. A formal letter dated 01/08/24 was also received. Details of the Section 9 Consent are confirmed in Appendix E.

Detailed method statements and construction drawings will be submitted to the OPW for review and approval prior to the commencement of any works to the embankment.

10.0 Comments / Recommendations

The author is satisfied, based on our desktop study, site inspection and local knowledge that the proposed development is located in an area susceptible to flooding however the proposed building structures and site works is generally set behind flood defence embankment which provides protection from flooding up to and above the 0.1% AEP. The proposed building is protected to the 1% AEP event plus a freeboard of 260mm, even if there was localised failure of the existing flood defence.

The construction of the floating pontoon and elevated walkway on the river side of the flood defence embankment will displace a minimal volume of water which is deemed negligible in the overall context of the River Nore Catchment. We note therefore that the proposed pontoon works would have a negligible impact on flooding in the area in terms of obstructing important flow paths nor would it result in any appreciable increased flood risk elsewhere due to flood water displacement.

A flood risk assessment for the site has been carried out which demonstrates that the flood risk to the proposed development is low and that the proposed works would not have an impact on flooding in the area in terms of obstructing important flow paths. In addition, the proposed development would not impede access to the existing watercourses nor would it result in increased flood risk elsewhere.

The new building structures may be susceptible to flooding in extreme events (beyond the 0.1% AEP) and we believe that the following measure should be incorporated in to the design;

- All wastewater and surface water drains / sewers servicing the proposed development should be fitted with non-return valves to mitigate flood waters from rising up drains during extreme flood events.
- Proposed structures will be constructed using water resilient materials

We trust you find the above to be of use however, should you have any queries or require any further information, please don't hesitate to contact us.

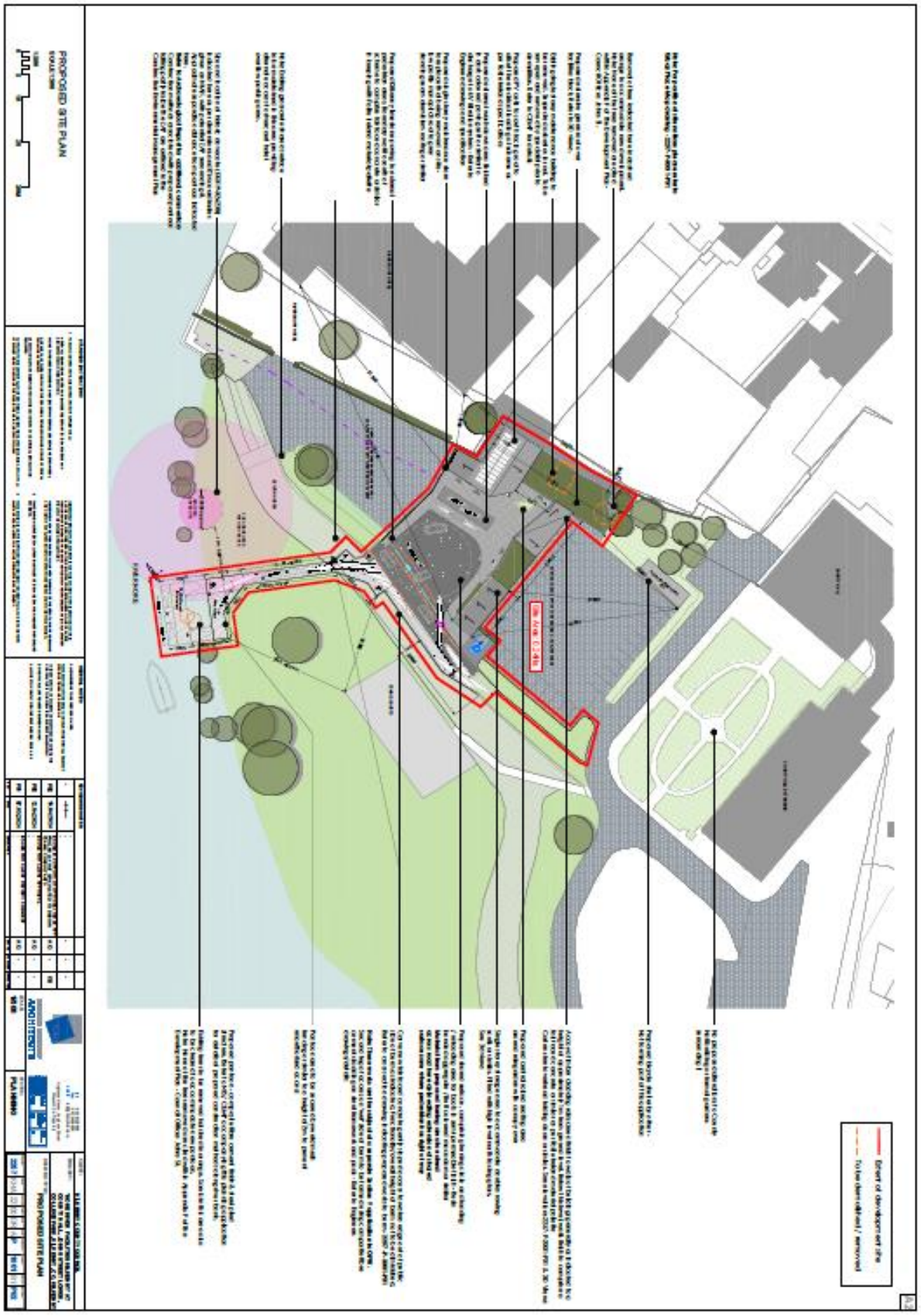
End of Report

Signed: _____ **Date:** 13th September 2024

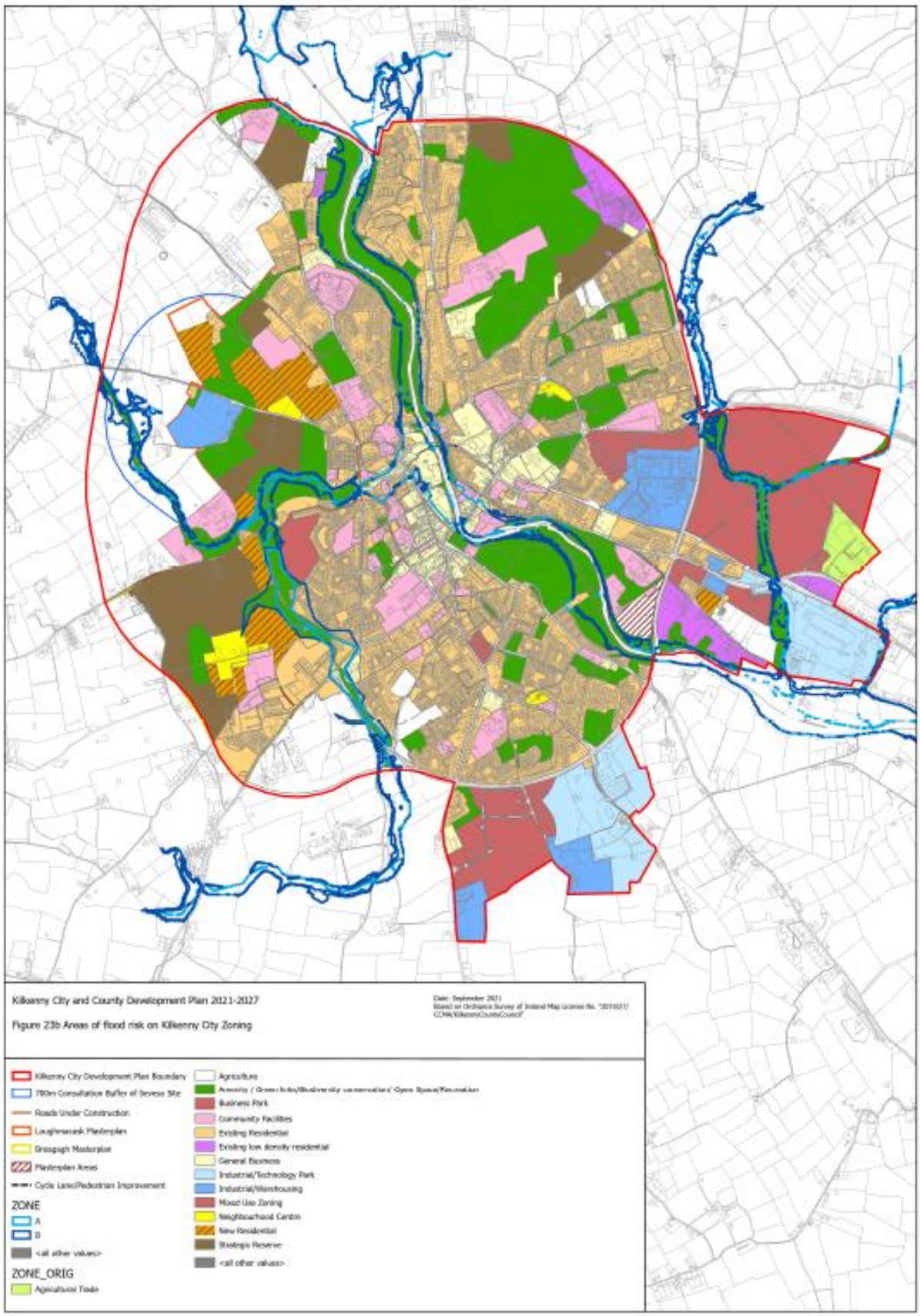
Brian Healy *BE CEng MIEI*
Chartered Engineer

For and on behalf of DRA Consulting Engineers

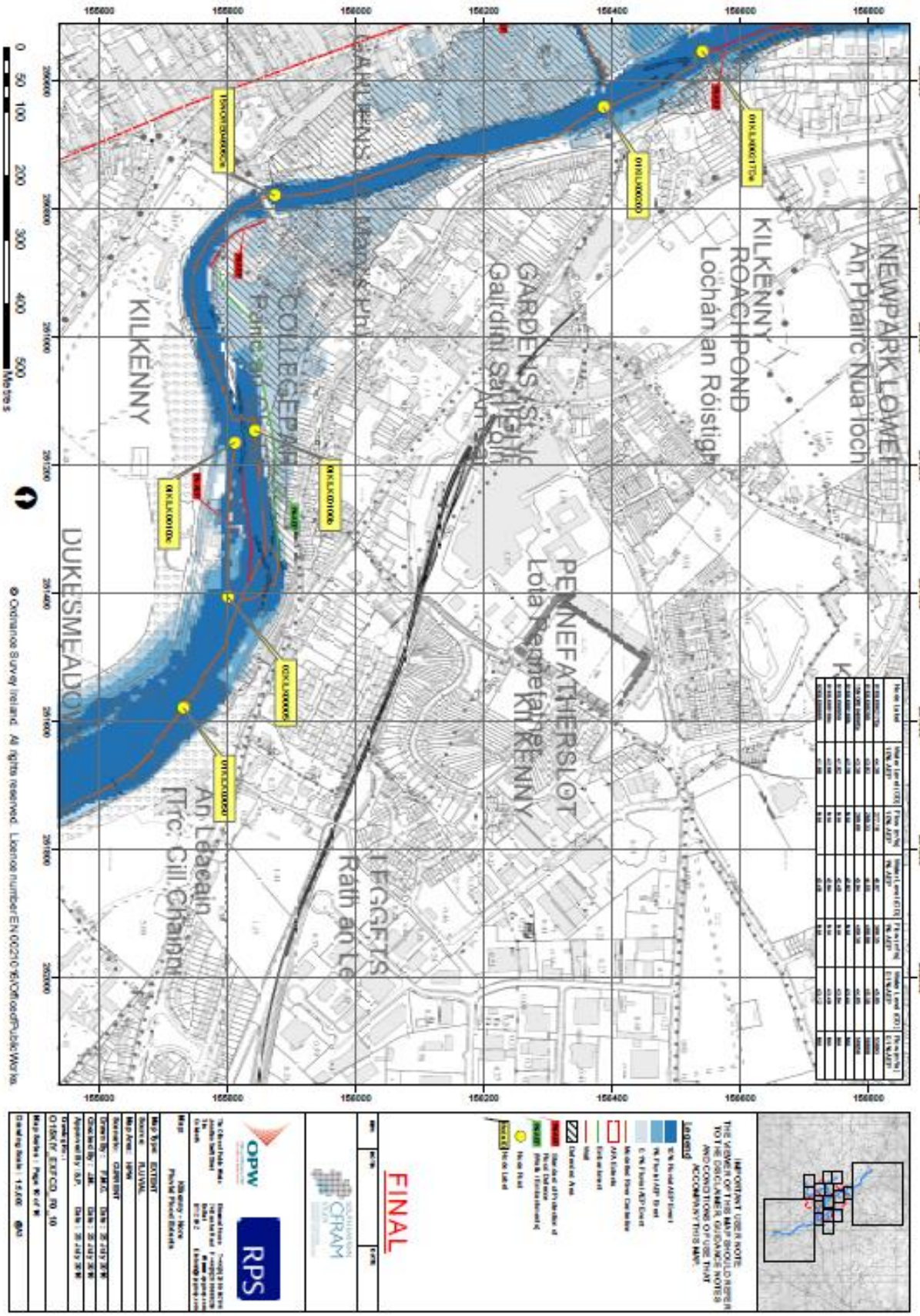
Appendix A – Site Location Plan

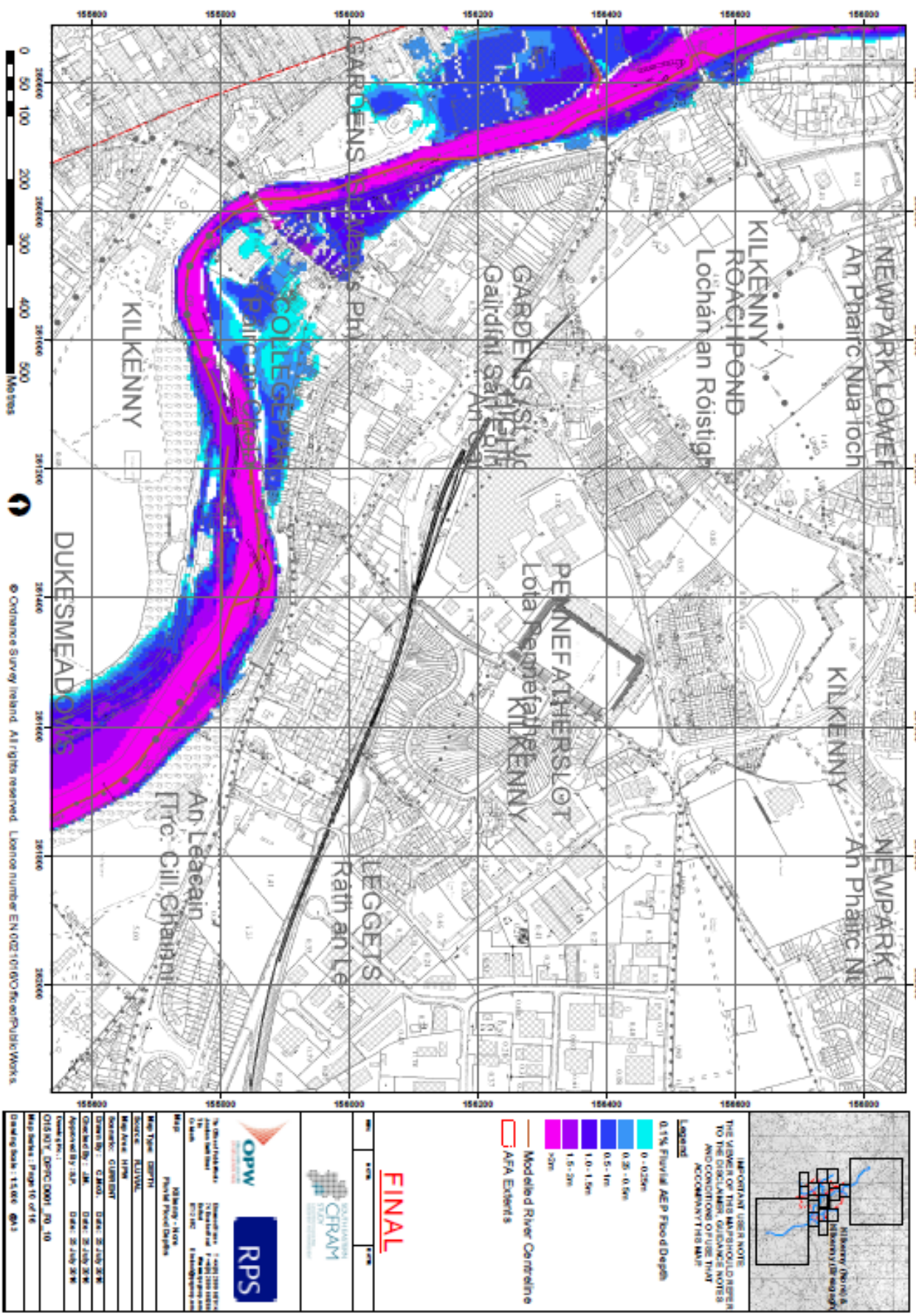


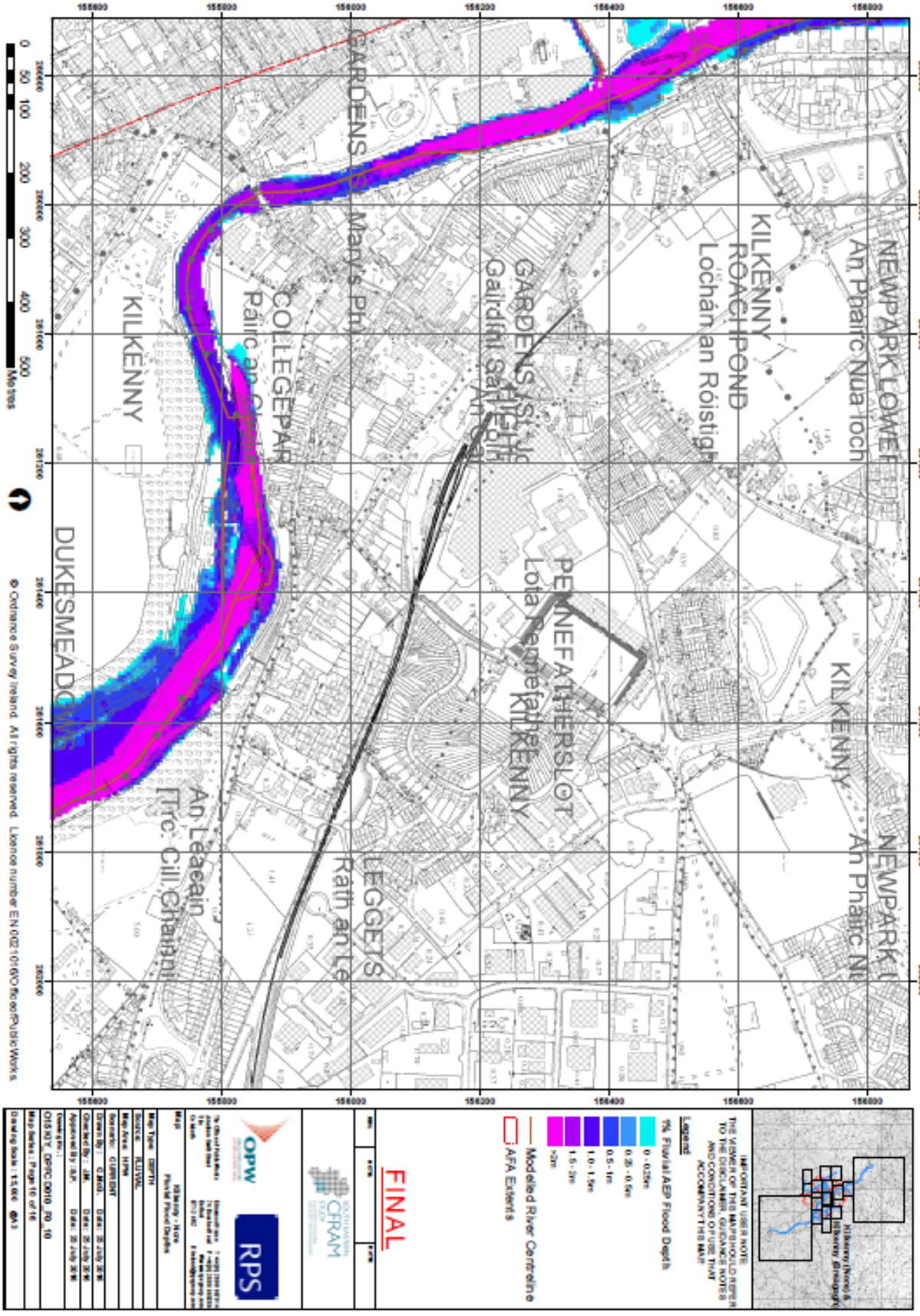
Appendix B - Kilkenny City Flooding map (Development Plan 2021-2027)

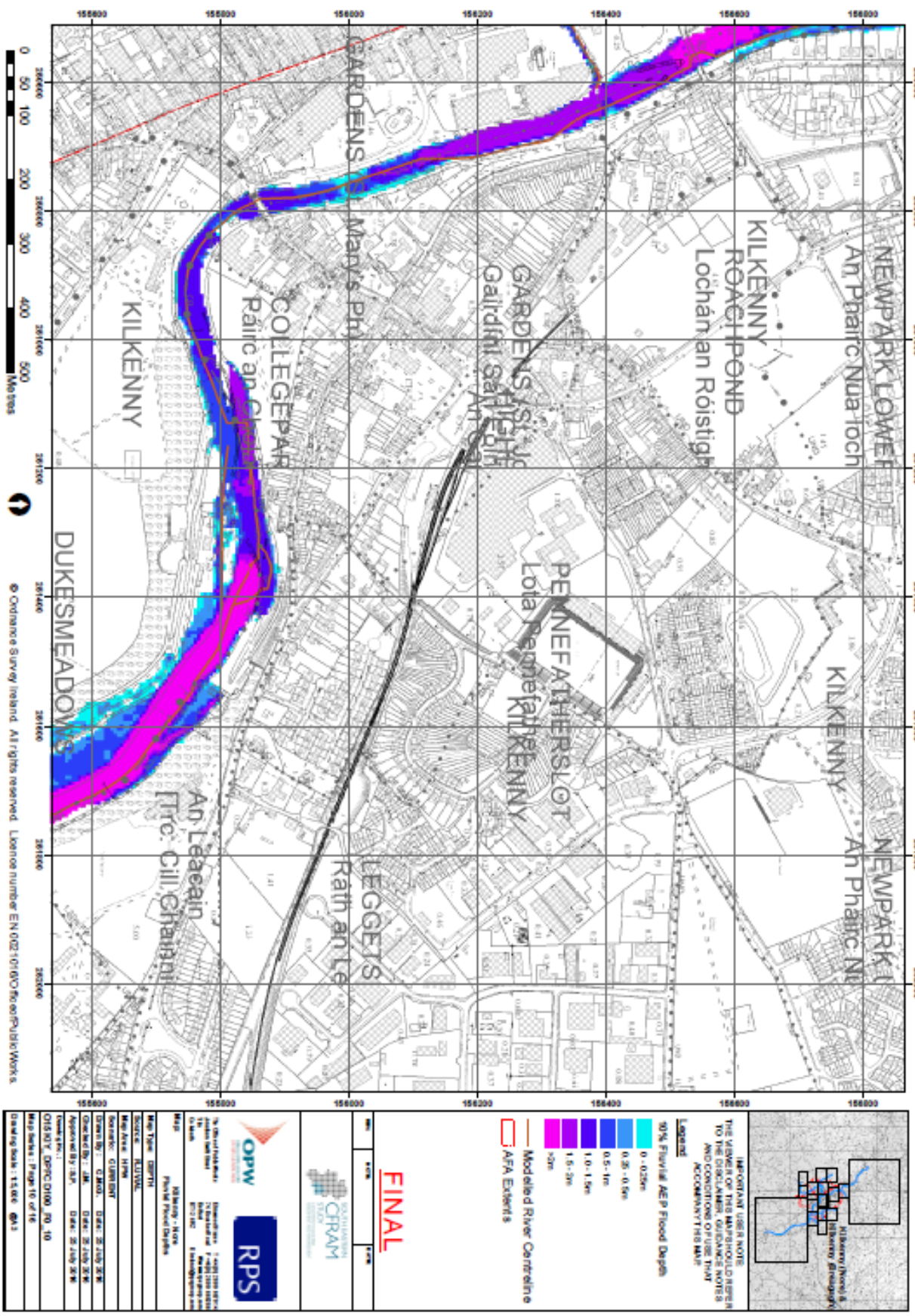


Appendix C - OPW Flood Maps




KILKENNY
ROACHPOND
Lochán an Róistigh
NEWPARK LOWER
An Phairc Nua Íoch
KILKENNY
An Phairc Nua
GARDENS
PENNEFATHERSLOT
Lota Pennefather
KILKENNY
COLLEGEPARK
Páirc an Chóiste
KILKENNY
DUKESMEADOWS
An Leacain
Trc. Cill Chainnigh
LEGGETS
Ráth an Le
0 50 100 200 300 400 500
Metres
© Ordnance Survey Ireland. All rights reserved. Licence number EN 0021016 © Office of Public Works.
IMPORTANT USER NOTE
THE VIEWER OF THIS MAP SHOULD REFER TO THE DISCLAIMER, GUIDANCE NOTES AND CONDITIONS OF USE THAT ACCOMPANY THIS MAP
Legend
0.1% Fluvial AEP Flood Depth
0 - 0.25m
0.25 - 0.5m
0.5 - 1m
1.0 - 1.5m
1.5 - 2m
>2m
Modeled River Centreline
AFA Extents
FINAL
OPW
RPS
CFRAM
Map Type: DEPTH
Source: FLUVIAL
Map Area: HPW
Scenario: CURRENT
Drawn By: C.McG. Date: 25 July 2014
Checked By: J.M. Date: 25 July 2014
Approved By: S.P. Date: 25 July 2014
OS 50 IV, DEPC 0001_R0_10
Map Series: Page 10 of 10
Drawing Scale: 1:5,000 @ A3


NEWPARK LOWER
An Phairc Nua Íoch
KILKENNY
ROACHPOND
Lochán an Róistigh
KILKENNY
NEWPARK
An Phairc Nu
GARDENS
KILKENNY
COLLEGEPAR
Páirc an Ghoirt
PENNEFATHERSLOT
Lota Pennefather
KILKENNY
LEGGETS
Ráth an Le
DUKESMEADOWS
An Leacain
Trc. Cill Chaoin
0 50 100 200 300 400 500
Metres
IMPORTANT USER NOTE
THE VIEWER OF THIS MAP SHOULD REFER TO THE DISCLAIMER, GUIDANCE NOTES AND CONDITIONS OF USE THAT ACCOMPANY THIS MAP
Legend
1% Fluvial AEP Flood Depth
0 - 0.25m
0.25 - 0.5m
0.5 - 1m
1.0 - 1.5m
1.5 - 2m
>2m
Modelled River Centreline
AFA Extents
FINAL
OPW
RPS
CFRAM
Map Type: DEPTH
Source: FLUVIAL
Map Area: HYNI
Scenario: CURRENT
Map: 25 Metre Grid
Fluvial Flood Depths
Drawn By: CMcG
Checked By: JM
Approved By: SP
Date: 25 July 2016
Tender No.:
OS Sheet: OPW_CFRAM_DTM_10
Map Series: Page 16 of 16
Drawing Scale: 1:5,000 @A3
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KILKENNY
ROACHPOND
Lochán an Róistigh
NEWPARK LOWER
An Phairc Nua Íoch
KILKENNY
An Phairc Nua
GARDENS
St Mary's Ph
COLLEGEPAR
Páirc an Chol
KILKENNY
GARDENS
Gairdíní Sailearn
PENNEFATHERSLOT
Lota Pennefather
KILKENNY
DUKESMEADOWS
An Leacain
Trc. Cill Chainni
LEGGETS
Rath an Le
0 50 100 200 300 400 500
Metres
IMPORTANT USER NOTE
THE VIEWER OF THIS MAP SHOULD REFER TO THE DISCLAIMER, GUIDANCE NOTES AND CONDITIONS OF USE THAT ACCOMPANY THIS MAP
Legend
10% Fluvial AEP Flood Depth
0 - 0.25m
0.25 - 0.5m
0.5 - 1m
1.0 - 1.5m
1.5 - 2m
>2m
Modelled River Centreline
AFA Extents
FINAL
OPW
RPS
CFRAM
Map Type: DEPTH
Source: FLUVIAL
Map Area: HYNE
Scenario: CURRENT
Map Name: Hynes - Hore
Fluvial Flood Depths
OS1:5K, DPSCD100_20_10
Map Index / Page 10 of 10
Drawing Scale: 1:5,000 @ A3
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Appendix D - OPW National Flood Hazard Mapping Local Area Report

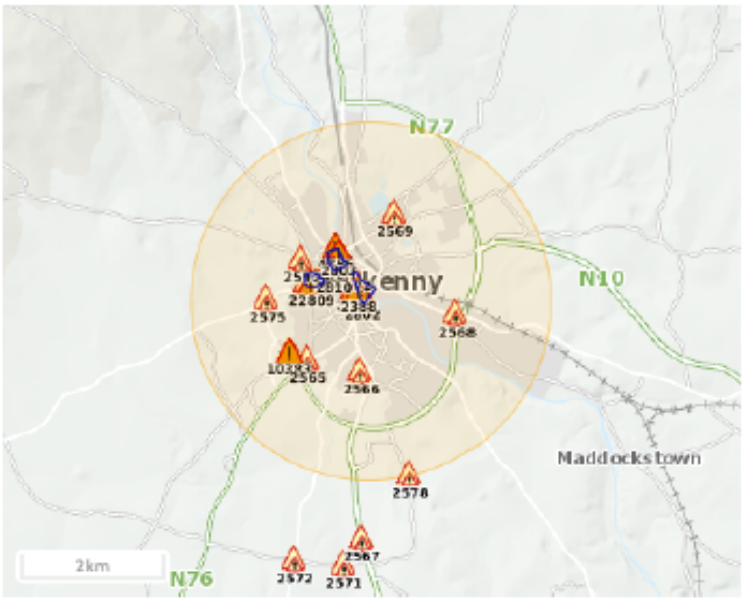
Past Flood Event Local Area Summary Report

OPW

Report Produced: 25/4/2024 10:34

This Past Flood Event Summary Report summarises all past flood events within 2.5 kilometres of the map centre.

This report has been downloaded from www.floodinfo.ie (the "Website"). The users should take account of the restrictions and limitations relating to the content and use of the Website that are explained in the Terms and Conditions. It is a condition of use of the Website that you agree to be bound by the disclaimer and other terms and conditions set out on the Website and to the privacy policy on the Website.



Map Legend

- Single Flood Event
- Recurring Flood Event
- Past Flood Event Extents
- Drainage Districts Benefited Lands*
- Land Commission Benefited Lands*
- Arterial Drainage Schemes Benefited Lands*

* Important: These maps do not indicate flood hazard or flood extent. Their purpose and scope is explained on Floodinfo.ie

47 Results

	Name (Flood_ID)	Start Date	Event Location
1.	Breagagh Black Abbey Blackmill St Dec 1960 (ID-2809)	01/12/1960	Approximate Point
	Additional Information: Reports (2) Press Archive (0)		
2.	Roundabout College Road recurring (ID-2565)	n/a	Approximate Point
	Additional Information: Reports (3) Press Archive (0)		
3.	Nore Kilkenny November 1931 (ID-2388)	23/11/1931	Approximate Point
	Additional Information: Reports (5) Press Archive (0)		
4.	Nore Kilkenny St Johns Quay Nov 1997 (ID-2616)	17/11/1997	Approximate Point
	Additional Information: Reports (2) Press Archive (0)		
5.	Nore John Street Kilkenny Jan 1995 (ID-2802)	25/01/1995	Approximate Point
	Additional Information: Reports (2) Press Archive (0)		
6.	Nore Green Street Kilkenny Jan 1995 (ID-2803)	25/01/1995	Approximate Point
	Additional Information: Reports (2) Press Archive (0)		

	Name (Flood_ID)	Start Date	Event Location
7.	Breagagh Irishtown Dec 1960 (ID-2810) Additional Information: Reports (5) Press Archive (0)	01/12/1960	Approximate Point
8.	Breagagh Blackmill Black Abbey Oct 1954 (ID-2811) Additional Information: Reports (1) Press Archive (0)	29/10/1954	Approximate Point
9.	Nore Kilkenny January 1974 (ID-2392) Additional Information: Reports (2) Press Archive (0)	08/01/1973	Approximate Point
10.	Nore Kilkenny March 1933 (ID-2389) Additional Information: Reports (3) Press Archive (0)	01/03/1933	Approximate Point
11.	Nore Kilkenny August 1946 (ID-2391) Additional Information: Reports (2) Press Archive (0)	11/08/1946	Approximate Point
12.	Nore Kilkenny December 1978 (ID-2393) Additional Information: Reports (2) Press Archive (2)	27/12/1978	Approximate Point
13.	Nore Johns Quay Kilkenny August 1986 (ID-213) Additional Information: Reports (4) Press Archive (1)	24/08/1986	Approximate Point
14.	Nore Breagagh Vicar Street Kilkenny Jan 1995 (ID-2804) Additional Information: Reports (2) Press Archive (0)	25/01/1995	Approximate Point
15.	Breagagh Irishtown Kilkenny Jan 1995 (ID-2805) Additional Information: Reports (2) Press Archive (0)	25/01/1995	Approximate Point
16.	Nore Bateman's Quay Kilkenny Jan 1995 (ID-2807) Additional Information: Reports (1) Press Archive (0)	25/01/1995	Approximate Point
17.	Nore Green St Greens Bridge Kilkenny Dec 1968 (ID-2808) Additional Information: Reports (6) Press Archive (0)	20/12/1968	Approximate Point
18.	Nore Kilkenny Jan 1996 (ID-3538) Additional Information: Reports (2) Press Archive (2)	06/01/1996	Approximate Point
19.	Breagagh Irishtown Water Gate August 1986 (ID-4753) Additional Information: Reports (1) Press Archive (1)	25/08/1986	Approximate Point
20.	Breagagh Vicar Street Kilkenny August 1986 (ID-4755) Additional Information: Reports (1) Press Archive (0)	25/08/1986	Approximate Point
21.	Nore Upstream Green's Bridge August 1986 (ID-4756) Additional Information: Reports (1) Press Archive (0)	25/08/1986	Approximate Point
22.	Nore Green Street August 1986 (ID-4757) Additional Information: Reports (1) Press Archive (0)	25/08/1986	Approximate Point
23.	Breagagh Kilkenny March 1947 (ID-4763) Additional Information: Reports (1) Press Archive (1)	16/03/1947	Approximate Point

	Name (Flood_ID)	Start Date	Event Location
24.	Nore Kilkenny Dec 1979 (ID-394) Additional Information: Reports (4), Press Archive (3),	27/12/1979	Approximate Point
25.	Nore Kilkenny January 1926 (ID-2387) Additional Information: Reports (3), Press Archive (0),	29/01/1926	Approximate Point
26.	Breagagh Circular Rd Kilkenny Nov 06 (ID-10383) Additional Information: Reports (1), Press Archive (0),	15/11/2006	Approximate Point
27.	Nore Kilkenny Oct 1763 (ID-389) Additional Information: Reports (4), Press Archive (0),	02/10/1763	Approximate Point
28.	Nore Kilkenny March 1947 (ID-390) Additional Information: Reports (7), Press Archive (25),	16/03/1947	Approximate Point
29.	Nore Kilkenny Oct 1954 (ID-391) Additional Information: Reports (4), Press Archive (3),	29/10/1954	Approximate Point
30.	Nore Kilkenny John St John Quay Dec 1960 (ID-392) Additional Information: Reports (5), Press Archive (8),	01/12/1960	Approximate Point
31.	Nore John St Johns Quay Kilkenny Dec 1968 (ID-393) Additional Information: Reports (7), Press Archive (0)	20/12/1968	Approximate Point
32.	Nore Kilkenny Jan 1984 (ID-395) Additional Information: Reports (5), Press Archive (0),	16/01/1984	Approximate Point
33.	Nore Kilkenny Feb 1990 (ID-396) Additional Information: Reports (3), Press Archive (8),	06/02/1990	Approximate Point
34.	Nore John's Quay Kilkenny Jan 1995 (ID-397) Additional Information: Reports (6), Press Archive (1)	25/01/1995	Approximate Point
35.	Kilkenny N10/N77 recurring (ID-2568) Additional Information: Reports (4), Press Archive (0),	n/a	Approximate Point
36.	Newpark Lower recurring (ID-2569) Additional Information: Reports (4), Press Archive (0),	n/a	Approximate Point
37.	Nore Kilkenny Green St Irishtown recurring (ID-2614) Additional Information: Reports (14), Press Archive (0),	n/a	Area
38.	Breagagh Kilkenny Blackmills Area recurring (ID-2615) Additional Information: Reports (12), Press Archive (0),	n/a	Area
39.	Cashel Downs Kilkenny recurring (ID-2566) Additional Information: Reports (3), Press Archive (0),	n/a	Approximate Point
40.	Breagagh Circular Road Kilkenny recurring (ID-2575) Additional Information: Reports (8), Press Archive (0),	n/a	Approximate Point
41.	Breagagh Water Barracks Area recurring (ID-2598) Additional Information: Reports (4), Press Archive (0),	n/a	Approximate Point

	Name (Flood_ID)	Start Date	Event Location
42.	Lord Edward Street recurring (ID-2599) Additional Information: Reports (2) Press Archive (0)	n/a	Approximate Point
43.	Nore Johns Quay Johns St area Kilkenny recurring (ID-2603) Additional Information: Reports (15) Press Archive (0)	n/a	Area
44.	Breagagh Water Barracks Sports Pitch Kilkenny Nov 2005 (ID-10420) Additional Information: Reports (1) Press Archive (0)	02/11/2005	Approximate Point
45.	Nore Kilkenny 18th August 2008 (ID-10572) Additional Information: Reports (1) Press Archive (0)	15/08/2008	Approximate Point
46.	Breagagh Water Barracks Sports Pitch Kilkenny October 2006 (ID-10342) Additional Information: Reports (1) Press Archive (0)	24/10/2006	Approximate Point
47.	Breagagh Circular Rd Kilkenny Oct 2006 (ID-10382) Additional Information: Reports (1) Press Archive (0)	25/10/2006	Approximate Point

Appendix E - OPW Section 9 Consent

Brian Healy

From: Noel Fitzpatrick <noel.fitzpatrick@opw.ie>
Sent: 01 May 2024 10:17
To: Brian Healy
Subject: RE: Kilkenny Water Sports Activity Centre - Section 9 Application

Brian,

I can confirm that Section 9 consent will be granted for the Interference with the OPW flood protection embankment as outlined on the drawings provided, subject to
the condition that detailed method statements and construction drawings are provided, to the satisfaction of this office, before construction commences. An official letter
to this effect will be issued in the coming weeks.

Best Regards
Noel

Noel Fitzpatrick
Drainage Maintenance and Construction Services - Mechanical and Engineering Services

Oifig na nOibreacha Poiblí
Office of Public Works

Oifigí Rialtais, Bóthar Hebron, Chill Chainnigh, Co Chill Chainnigh, R95 H4XC
Government Buildings, Hebron Road, Kilkenny, Co Kilkenny, R95 H4XC

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https://gov.ie/opw

To send me files larger than 30MB, please use the link below
https://filetransfer.opw.ie/filedrop/noel.fitzpatrick@opw.ie

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DRA
CONSULTING ENGINEERS

OPW Oifig na nOibreacha Poiblí Office of Public Works

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Co. na Mí
C15 K8V0
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East Region Drainage Maintenance
Newtown
Trim
Co. Meath
C15 K8V0
Telephone: (046) 9431484
(046) 9431352
Fax: (046) 9431451

Ref- 394-2023

Mr. Brian Healy,
DRA Consulting Engineers,
14 Cresent Mall,
Henrietta Street,
Wexford
Y35 XD1K

**Re: Section 9, Kilkenny Water Sports Activity Centre, Kilkenny,
(structure location, Kilkenny F.R.S., Embankment E2, ITM 650882, 655861)**

Dear Mr. Healy,

I refer to the above Section 9 application received by this office.

The documentation submitted has been examined and based on the Engineers assessment on behalf of the Commissioners of Public Works in Ireland, I confirm the consent of the Commissioners of Public Works under Section 9 of the Arterial Drainage Act, 1995 (as amended) is granted to the proposed steps and a ramp as follows:

The consent is based on the following criteria being met:

- All relevant stakeholders and Local Authorities are to be informed of the proposed works and all relevant approvals and permissions are in place.
- The work proposed on the embankment, is constructed in accordance with the information submitted.
- Detailed method statements, temporary works drawings and construction drawings are provided, to the satisfaction of this office, before work commences.

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East Region Drainage Maintenance
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Trim
Co. Meath
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(046) 9431352
Fax: (046) 9431451

It should be noted that consent is granted only for the purpose of Section 9 and does not absolve the recipient of responsibility for any adverse effects caused by this installation to any third party.

The Commissioners of Public Works are not responsible and accept no liability for any loss or damage whatsoever caused as a result of this development. The Commissioners of Public Works must be informed of any amendments/alterations to the approved application before the works are undertaken.

Signed on behalf of the Commissioners of Public Works in Ireland.

Yours sincerely

Nora Carey

August 1st 2024
Flood Project Management

Appendix F – Environmental Impact Assessment Screening (Ross Swift Ecology Ltd)

ROSS SWIFT ECOLOGY LTD.

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING

Nore River Facilities Kilkenny

DOCUMENT CONTROL SHEET	
DOCUMENT REFERENCE	EIA SCREENING_RSE_0626
DOCUMENT TITLE	ENVIRONMENTAL IMPACT ASSESSMENT SCREENING OF NORE RIVER FACILITIES KILKENNY
DATE OF ISSUE	23RD JUNE 2026

DOCUMENT AUTHOR	
AUTHOR	DR ROSS DONNELLY-SWIFT
QUALIFICATIONS	BSC (HONS) BIOLOGY MSC ENVIRONMENTAL SCIENCE PHD BIOSYSTEMS ENGINEERING
ROSS SWIFT ECOLOGY LTD. rse@outlook.ie +353 85 1865905	

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1.0 INTRODUCTION

This Environmental Impact Assessment (EIA) Screening report has been prepared for the proposed development of the Nore River Facilities Kilkenny within the grounds of County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny. The purpose of this report is to undertake a screening of the proposed development to establish whether or not it requires an EIA and as a result, if an Environmental Impact Assessment Report (EIAR) should be prepared in respect of it.

This EIA Screening has been prepared with reference to Schedules 5, 7 and 7A of the Planning and Development Regulations 2001, as amended. The first step in screening is to determine whether a project is listed in either Part 1 or Part 2 of Schedule 5. Part 1 projects require mandatory EIA, while Part 2 projects may require screening to determine whether an EIAR is required. Schedule 7 sets out the criteria for determining whether a development would or would not be likely to have significant effects on the environment. Schedule 7A identifies the information to be provided for the purposes of screening sub-threshold development for EIA.

Relevant guidance for EIA Screening includes *Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development* (DEHLG, 2003), *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment* (DHPLG, 2018), OPR Practice Note PN02 *Environmental Impact Assessment Screening* (Office of the Planning Regulator, 2021), and European Commission guidance, including *Interpretation of definitions of project categories of Annex I and II of the EIA Directive* (European Commission, 2015) and *Environmental Impact Assessment of Projects: Guidance on Screening* (European Commission, 2017). The assessment also has regard to the Planning and Development Act 2000, as amended, the Planning and Development Regulations 2001, as amended, and Directive 2011/92/EU, as amended by Directive 2014/52/EU.

EIA requirements are derived from legislation set by the EU in the form of EIA Directive 2011/92/EU, as amended by Directive 2014/52/EU, collectively titled: '*on the assessment of the effects of certain public and private projects on the environment*'. These directives set out

the principles for the environmental impact assessment of projects by introducing minimum requirements regarding:

- The type of projects subject to assessment.
- The main obligations of developers.
- The content of the assessment.
- The participation of competent authorities.

A preliminary examination is undertaken, based on professional expertise and experience, and having regard to the '**Source – Pathway – Target**' model, where appropriate. The competent authority concludes that, having considered the nature, size and location of the proposed development, there is no real likelihood of significant effects on the environment, this should be recorded with reasons for this conclusion stated, and no EIA required, or formal determination made. The recording of the competent authority's view should be brief and concise, but adequate to inform the public (OPR, 2021).

Mandatory EIAR Review

Table 1.1 provides a review of development classes that require mandatory EIA under Schedule 5 of the Planning and Development Regulations 2001, as amended.

Schedule 5 Mandatory EIAR Development Classes
Crude oil refineries, gasification and liquefaction installations, thermal power stations and other combustion installations, nuclear power stations and nuclear reactors, installations for the reprocessing of irradiated nuclear fuel, installations designed for the production or enrichment of nuclear fuels, integrated chemical installations, installations for the production of basic pharmaceutical products using a chemical or biological process, and installations for the production of pesticides, fertilisers, explosives, and other chemical products.
Installations for the smelting, processing or production of metals, including integrated works for the initial smelting of cast iron and steel, installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials, and installations for surface treatment of metals and plastic materials using an electrolytic or chemical process.

Installations for the extraction, processing or disposal of minerals and waste, including asbestos-related installations, quarries and open-cast mining above relevant thresholds, waste disposal installations for hazardous waste, municipal waste incineration or chemical treatment installations, and wastewater treatment plants above relevant thresholds.
Infrastructure projects including construction of motorways, busways and railways, airports with runways exceeding relevant thresholds, trading ports, inland waterways and port installations, dams and installations for water storage or transfer, pipelines for gas, oil or chemicals, and overhead electrical power lines above relevant thresholds.
Agriculture, forestry and aquaculture projects including intensive livestock installations, initial afforestation or deforestation above relevant thresholds, marine finfish farms above relevant thresholds, and land reclamation from the sea.
Tourism and leisure projects, urban development projects, industrial estate development projects, permanent racing and test tracks, theme parks, holiday villages, hotel complexes outside urban areas, and associated tourism or recreational developments where the relevant Schedule 5 thresholds are met or exceeded.
The proposed Nore River Facilities development is a modest recreational riverside facility and does not fall within any class of development requiring mandatory EIA under Schedule 5. The proposed development is below the relevant thresholds and is therefore considered on a sub-threshold basis having regard to Schedule 7 criteria and Schedule 7A information requirements.

The proposed development does not fall within any class of development listed in Part 1 of Schedule 5 of the Planning and Development Regulations 2001, as amended, and therefore mandatory EIA is not required. The proposal comprises a modest recreational riverside facility with associated access, drainage, landscape and pontoon works. Having regard to Schedule 5, Part 2, including Class 10(b) infrastructure projects and Class 12 tourism and leisure, the proposed development is below the relevant thresholds and is therefore considered on a sub-threshold basis.

The proposed project is located partly within and adjacent to European sites associated with the River Nore and has the potential to interact with surface water receptors during construction and operation. In accordance with Schedule 7 and Schedule 7A of the Planning

and Development Regulations 2001, as amended, this screening assessment considers whether the characteristics, location and potential impacts of the proposed development are likely to give rise to significant effects on the environment. It is therefore appropriate to assess the proposal as sub-threshold development for the purposes of EIA Screening.

The Annex III EIA screening criteria under Directive 2011/92/EU, as amended by Directive 2014/52/EU, are transposed into Irish planning law through Schedule 7 of the Planning and Development Regulations 2001, as amended. Schedule 7 sets out the criteria for determining whether a development would or would not be likely to have significant effects on the environment. Schedule 7A identifies the information to be provided by an applicant or developer for the purposes of screening sub-threshold development for EIA. Article 120 of the 2001 Regulations, as amended, applies these requirements to relevant local authority development.

Table 1.2 Criteria for the Purposes of Sub-Threshold Development
1. Characteristics of proposed development
The characteristics of proposed development, in particular to: (a) the size and design of the whole of the proposed development, (b) cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A) (b) of the Act and/or development the subject of any 118 [296] development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, (c) the nature of any associated demolition works, (d) the use of natural resources, in particular land, soil, water, and biodiversity, (e) the production of waste, (f) pollution and nuisances, (g) the risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge, and (h) the risks to human health
2. Location of proposed development
The environmental sensitivity of geographical areas likely to be affected by proposed development, having regard in particular to; (a) the existing and approved land use,

(b) the relative abundance, availability, quality, and regenerative capacity of natural resources (including soil, land, water, and biodiversity) in the area and its underground,

(c) the absorption capacity of the natural environment, paying particular attention to the following areas:

(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 and;
(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,
(viii) landscapes of historical, cultural, or archaeological significance

3. Types and characteristics of potential impacts

The potential significant effects of projects in relation to criteria set out under paragraphs 1 and 2 above, and having regard in particular to:

(a) the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected).
(b) the nature of the impact.
(c) the transboundary nature of the impact.
(d) the intensity and complexity of the impact.
(e) the probability of the impact.
(f) the expected onset, duration, frequency, and reversibility of the impact.
(g) the cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and
(h) the possibility of effectively reducing the impact.

Ross Swift Ecology (RSE) Ltd. has been appointed by Ailtiri Architects to prepare the relevant Environmental Impact Assessment (EIA) Screening, relative to the proposed development within the grounds of County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny. This EIA Screening report will identify, describe, and assess the direct and indirect significant effects of the project on specified environmental factors to enable the competent authority to assess the environmental impact from the proposed development.

The development site is approximately 0.24 hectares, with centre point coordinates of ITM 650884.8216, 655893.0411. The development falls below the thresholds for mandatory EIA. The proposal is considered to be a recreational facility and, given its individual scale and nature, is not considered likely to present a significant environmental risk. The development would occur largely on previously developed ground. The River Nore is a protected natural habitat; however, the riverbank at this location has been significantly modified as part of the OPW Kilkenny City Flood Relief Scheme completed in 2005. The design of the facility and pontoon would follow standard engineering principles appropriate to a recreational facility of this scale. Potential effects on environmental receptors are considered further in this report; however, the proposed project design is not considered likely to give rise to significant environmental effects. The proposed development includes minor site clearance and demolition of a small outbuilding.

1.1 STATEMENT OF AUTHORITY

This report was undertaken by Dr Ross Donnelly-Swift, who holds a BSc (Hons) in Biology from Maynooth University, an MSc in Environmental Science from Trinity College Dublin, and a PhD in Biosystems Engineering from University College Dublin. Ross has extensive environmental knowledge gained through academic research and the preparation of scientific and environmental reports for a wide range of developments. Ross has prepared EIA Screening reports and EIARs across a range of sectors, including recreational amenities, and has also prepared Construction Environmental Management Plans (CEMPs) for both large- and small-scale developments. In 2025, he completed an Advanced Diploma in Planning and Environmental Law at the Honorable Society of King's Inns and has undertaken recent CPD modules in EIA with the University of Limerick and Trinity College Dublin.

2.0 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

Having regard to the criteria set out **Table 1.2** this section of the report addresses the assessment of sub-threshold development under the Characteristics of Proposed Development.

2.1 DESIGN OF THE PROPOSED DEVELOPMENT

The proposed development consists of the construction of a riverside facilities centre comprising the following;

- **a)** Demolition of an existing single-storey maintenance store,
- **b)** Removal of selected on-site vegetation to facilitate the works,
- **c)** Single-storey facilities block with a flat, intensive green roof build-up, containing toilets, universally accessible bathroom, changing places facility, showering / changing cubicles, cleaner's store, outdoor showers, an external plant area, storage lockers, wash trough, and a drying room,
- **d)** Single-storey adjoining community block with an asymmetrical pitched roof containing a community room, associated kitchenette, and a plant room / central information point,
- **e)** Adjoining external covered terrace area with a flat intensive green roof build-up,
- **f)** A single-storey storage block with an asymmetrical pitched roof containing equipment storage, a dragon-boat / rowing boat storage, and a maintenance store,
- **g)** A single-storey adjoining block with a mono-pitched roof containing a boat / general storage area,
- **h)** Hard landscaped pedestrian central space with raised central planter / seating, planted areas and a boat wash down area,
- **i)** Proposed shared surface including a central set-down / vehicular turning area for boat loading / unloading and pedestrian use generally,
- **j)** Access route to river over berm comprising a sloped access path with associated retaining wall, steps, landings, balustrading, and associated handrails,
- **k)** Raised walkway from top of berm to pontoon with associated balustrading / handrails,
- **l)** Part fixed / part floating access pontoon within the river,
- **m)** Site services connections and drainage works, including connection to existing public foul and stormwater system,
- **n)** Universally accessible parking bay and covered bicycle parking area,
- **o)** Public lighting to all pedestrian / vehicular / parking areas,
- **p)** Associated archaeological investigations, including test excavation and underwater archaeological assessment where required.
- **q)** All necessary landscaping, site boundary and site development works.

There will be bicycle and car parking facilities, together with boat storage and associated water sports equipment storage. Refer to the Site Layout in the Appendix and the accompanying development package prepared by Ailtiri Architects. Surface water runoff from

roof areas will be managed through a combination of green roof systems, comprising multi-layered vegetated roof build-ups, and a blue roof system incorporating attenuation cells with a 95% void ratio to allow for water storage. It is proposed that a Bauder Blue Stormcell sedum green roof, or similar approved system, be adopted. Additional attenuation cells, permeable surfaces and a rain garden are also proposed; refer to the DRA Consulting Engineers Civil Engineering Report (Document Reference: **22175-Civil Eng Report-240418**) for the drainage design. A UV filtration system and biosecurity wash-down area will be provided for operational activities.

The proposed development will take approximately 18 months to complete. The pontoon will take approximately 15 weeks to complete and will be moored off driven steel piles. The piles will be driven from a rig on a floating barge. Concrete shore blocks will be required to support the ramp and will require local sand bagging and/or the construction of a cofferdam on the shore.

The proposed development will be used as a base for activities such as kayaking, dragon boat, cycling, water safety storage, river rescue coordination hub, community meeting space and a meeting space for aquatic clubs. In addition, the facility can potentially cater to local commercial interests such as river boat tours (already in operation from St John's Bridge pontoon) and stand-up paddle boarding. The maximum operational hours for water activities will be from Dawn to Dusk. The main building will be in operational use after dark in the winter months for training facilities, community meetings and recreational use.

During excavation works, excavated soil would be temporarily stored on site before being reused in reinstatement works where appropriate or removed to a licensed facility where reuse is not possible. This material will be inspected by the construction contractor to determine whether it can be reused on site during construction or must be removed to a licensed waste facility. Potential in-combination construction impacts would be minimised through the implementation of appropriate controls and mitigation during the construction phase. A Construction Environmental Management Plan (Document Reference: **CEMP_RSE_0626**) has been prepared for the proposed development. The CEMP is a live document and would be reviewed and updated as necessary throughout the construction phase.

2.2 LOCATION OF THE PROPOSED DEVELOPMENT & LAND USE

As per Kilkenny City and County Development Plan 2021-2027, Kilkenny City is listed as the largest settlement in the County. See **Figures 2.1.1** and **2.1.2** for location. Census 2022 recorded a population of 27,184 for Kilkenny City, an increase from 26,512 in Census 2016. Kilkenny City is a strategically important urban centre that provides commercial, residential, cultural and recreational amenities. In addition, Kilkenny City has a significant number of important heritage buildings. The proposed development site is located in the grounds beside County Hall, and the pontoon will be located on the River Nore approximately 165m from St John's Bridge. The proposed site will be accessible from the Johns Street Lower (pedestrian) and from Maudlin Street for both pedestrian and vehicle. The access from Maudlin Street is via the existing public access road to County Hall and associated car park. The proposed development is listed as Level 1 Description: Artificial Surfaces, Level 2 Description: Urban fabric, Level 3 Description: Continuous urban fabric under the Corine 2018. The dataset is based on interpretation of satellite imagery and national in-situ vector data. The location of the proposed development is zoned as "Community Facilities" as per Kilkenny City and County Development Plan. See Appendix for copy of Kilkenny City Zoning Map.

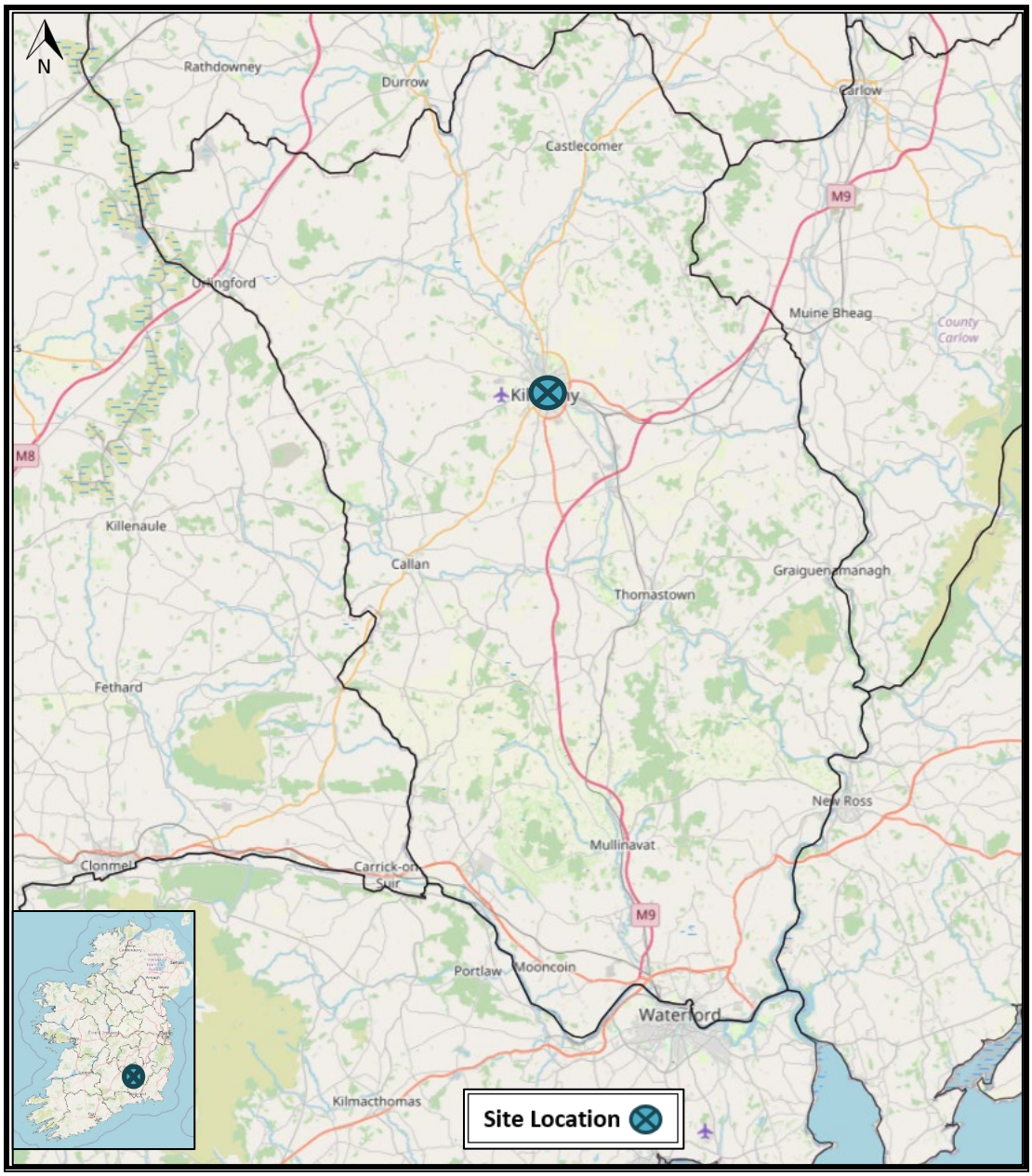


Figure 2.1.1: Location of proposed development site (Open Street Map ©)

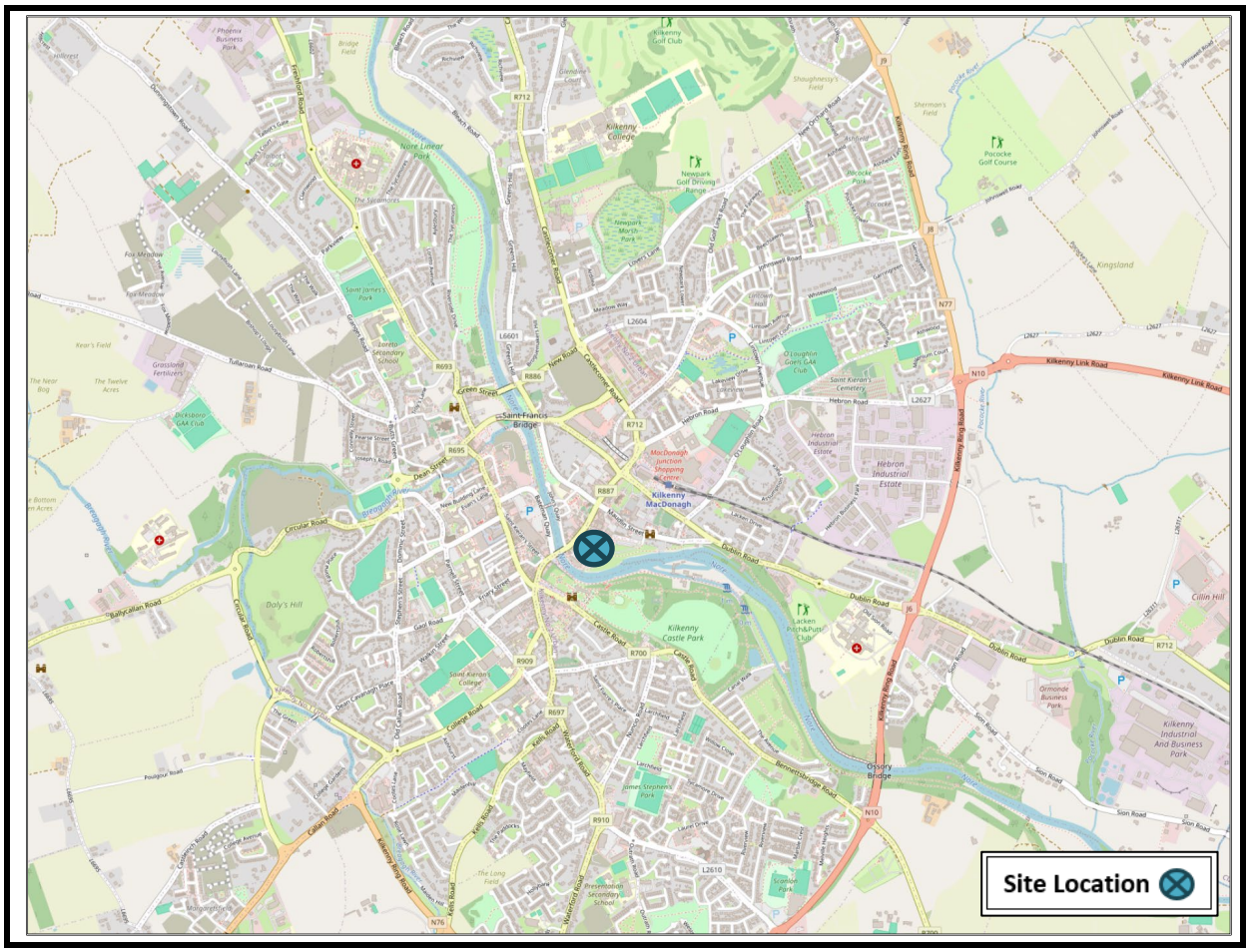


Figure 2.1.2: Location of proposed development site in Kilkenny (Open Street Map ©)

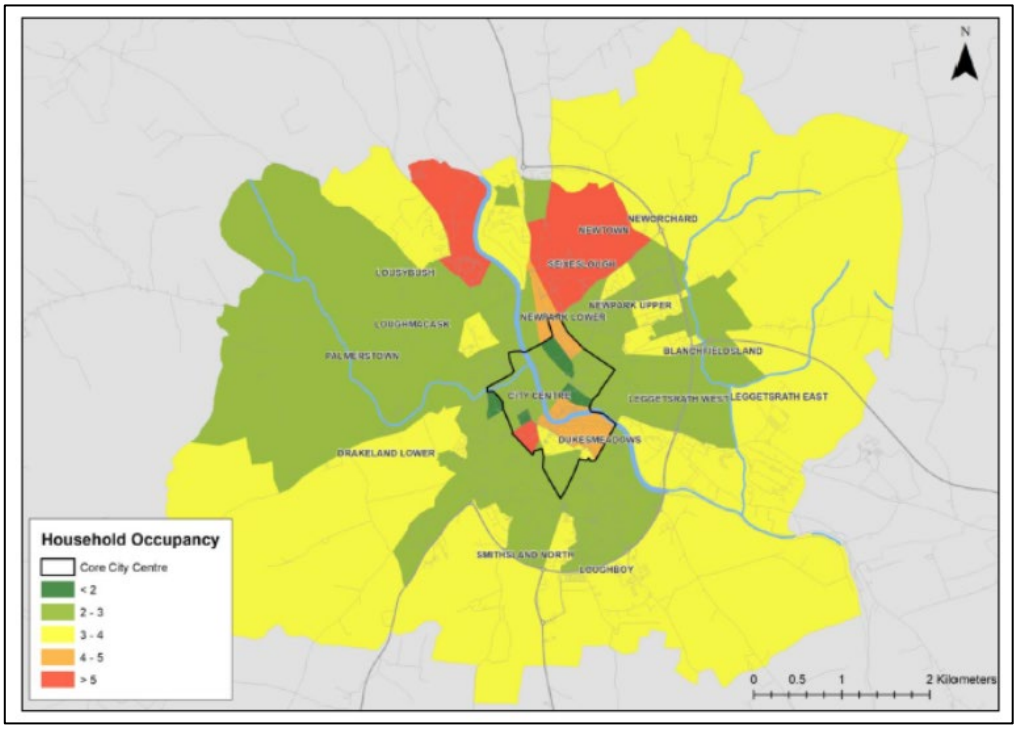


Figure 2.2: Household Occupancy in Kilkenny City (Kilkenny County Council ©)

2.3 CULTURAL HERITAGE

As per Kilkenny City and County Development Plan 2021-2027; Strategic Aim*: To seek the protection and sustainable management of Kilkenny's heritage for the benefit of current and future generations; to encourage the collection of knowledge to inform its protection; and to promote access to, awareness of and enjoyment of heritage. It is the aim of the Council to develop and support programmes which encourage active participation in identifying, recording, protecting, communicating and enjoying Kilkenny's heritage.*

An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape, taking account of building lines and heights, that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or that contributes to the appreciation of a Protected Structure. The objective of the ACA designation is to protect the special character of an area through control and positive management of any changes made to the built environment. Owners and occupiers of non-protected structures in any ACA should be aware that works which in the opinion of the planning authority would materially affect the character of the area as outlined here would require planning permission.

The proposed development is located within John Street ACA;
On the east bank of the River Nore, and linked with the Hightown by John's Bridge, was the suburb of St. John's which occupied a roughly quadrangular area located around the axis of John St. The area was surrounded by the St. John's Circuit of medieval city wall of which some sections remain and was dominated by the Augustinian Priory of St. John the Evangelist, the substantial above ground remains survive as a romantic ruin which contributes significantly to the character of the area. These ruins wrap around the Board of First Fruits Church of St. John (1817) providing a dramatic backdrop to the later church. The Greek Revival detailed cut limestone Evans Almshouses, to a design by William Robertson, adjacent to the Abbey are a significant landmark and, until recently have been concealed in the back lands of the area. Following extensive conservation and refurbishment by the Council, Evans Almshouse now operates as the Butler Gallery.

Any proposed development within John Street ACA must adhere with the following requirements;

JSACA 1: To maintain high standard of presentation of ground and upper floors by controlling the size, number and composition of advertisements on buildings to prevent and reduce visual clutter in the ACA. Plastic or neon signage will not be considered in the ACA.
JSACA 2: Assessment of proposals for the presentation of commercial premises will require retention of genuine early/original shopfronts/pub fronts, the provision of high-quality contemporary design when new shopfronts/commercial fronts are proposed.
JSACA 3: Where windows on upper floors of commercial premises have been replaced with uPVC or aluminium in the past there will be a requirement that these be replaced by appropriate timber windows where planning permission of any sort is being sought for the structure.
JSACA 4: To protect historic plot sizes along John St. Upper and Lower and to avoid amalgamation of sites for new buildings.
JSACA 5: To protect and retain the historic integrity of the city walls, in accordance with the Kilkenny City Walls Conservation Plan.
JSACA 6: To ensure any new developments to the south of Maudlin St. are sensitive in scale to the surrounding buildings and that any future re-development of the former petrol station and adjoining sites on the Dublin Road is sensitive in scale to the surrounding buildings.
JSACA 7: To promote the conservation of the front garden areas and railings to the houses of St. John's Place on the Dublin Road and to ensure that proposals for accommodating residential parking which impact on these will not be permitted.
JSACA 8: To consider the balance of uses on John St. when dealing with change of use applications.
JSACA 9: To ensure there is no large-scale development which interrupts the visual pleasing skyline of the city from Dublin Road looking northwest.
JSACA 10: To ensure there is no large-scale development which interrupts the visual pleasing streetscape of John's Quay

The proposed development meets the requirements for a development within the John Street ACA and will not impact on this Architectural Conservation Area.

A desktop archaeological assessment was prepared by Cultural Resource Management and Planning Ltd., with the archaeological assessment undertaken by John Cronin. The desktop study identified 30 archaeological sites recorded by the Archaeological Survey of Ireland within a 200m study area surrounding the proposed development site. Two recorded monuments are of particular relevance to the proposed development: the projected line of the medieval town defences of Kilkenny (KK019-026001-) and a recorded dovecote (KK019-026238-).

The relevant factual findings of the desktop study are summarised below:

- *Lands within the development site have been subject to moderate modern disturbance and development within the northern portion of the site, which is currently in use as a car park. The southern portion of the site consists of a greenfield area under grass on the eastern bank of the River Nore and extends into the river itself. The riverbank has previously been developed at this location as part of flood alleviation works which were subject to archaeological mitigation.*
- *The northwest portion of the development will encroach on the projected line of the medieval town defences of Kilkenny (KK019-026001-), a National Monument. While this area has been subject to moderate modern disturbance, and the precise location of the wall remains uncertain, there is potential for remains of the town defences to be present within the boundary of the proposed development.*
- *The development will also encroach into the immediate surrounding of a recorded monument, the dovecote (KK019-026238-), which was identified and excavated during the River Nore flood alleviation scheme in 2003. The Historic Environment Viewer records a further 28 archaeological sites within the 200m study area surrounding the site boundary. The wider landscape around the proposed scheme contains a high number of archaeological excavations dating from the late prehistoric period onwards.*

Archaeological Management Solutions Assessment and Mitigation

Archaeological Management Solutions has been appointed to undertake further archaeological assessment of the proposed development, including archaeological test excavation and underwater archaeological assessment where required. This work will inform the detailed mitigation strategy for the construction phase and will be undertaken by suitably qualified archaeologists under the appropriate statutory consents and licences.

The proposed works have the potential to affect previously unknown subsurface archaeological features, deposits or artefacts, particularly where ground disturbance is required for foundations, services, hardstanding, access routes and associated site development works. Riverine works and works close to the River Nore will also require appropriate archaeological consideration, including underwater archaeological assessment and/or archaeological monitoring where required by the relevant statutory authorities.

Subject to statutory consent, archaeological test excavation will be undertaken in advance of construction by a suitably qualified licensed archaeologist. If archaeological features, deposits or objects are encountered, works will cease in the affected area pending agreement of an appropriate mitigation strategy with the National Monuments Service and other relevant

authorities. Mitigation may include preservation in situ, preservation by record, further archaeological excavation, archaeological monitoring or specialist analysis, as appropriate.

2.4 PLANNED DEVELOPMENTS

The developments within close proximity to the proposed development are the following;

- **19604** - Permission for alterations to existing protected structure (RPS Ref: PB 107) comprising (a) modifications to internal layouts including changing bar, restaurant and kitchen areas to bedrooms to provide total of 8 no. bedrooms and 6 no. suites (14 no. bedrooms currently), (b) alterations to existing window openings to rear and sides including widening of windows and lowing of cill levels, (c) forming of new door to the side and (d) erection of new single storey flat roof link extension at first floor level comprising 5 no. new bedrooms and corridor link connecting McCourts Townhouse (Protected Structure Ref: PB 107) to the Rivercourt Hotel at first floor level and all associated site works – **Granted**.
- **2460660** - To retain indefinitely an external bar and associated beer garden containing an outdoor bar/servery area, toilet block, 6 no. pods containing fixed booth seating, covered outdoor seating areas, perimeter fencing and roof covering between pod structures, external signage, car parking area to rear of the site and all associated site development works. **Granted.**
- **22423** - To retain external covered seating, single storey toilets and all associated site development works - **Refused**.
- **2610 -** Extension Of Duration 21522 - **Refused**
- **20158 -** to install a pontoon and access gangplank/platform into the River Nore at the existing splitway down to the rivers edge at the South Western side of John's Bridge – **Granted**
- **20242** - For (a) change of layout to include 9 bedrooms, 2 suites, conference space and breakout space, gymnasium, holding kitchen and storage spaces (b) demolition of 2 storey structure at rear (c) erection of a 2-4 storey extension at rear to include external access steps, toilets, conservatory/breakout space, internal access stairs and lift, and external ramped disabled access (d) covered canopy link to Rivercourt Hotel, building mounted signage to John Street and west elevations (e) internal alterations to original structure consisting of: the forming of 3 door openings in existing walls, widening of existing vehicular entrance and new corbelled arch supports (f) conservation works to structure and fabric including dining room ceiling and historic stairs. Bridge House 88 and 89 John Street is a protected structure (B108) NIAH ref 12000151, 1200052 recorded monument ref KK019-026067 – **Granted**
- **20202** - For development for the construction of a two-storey dwelling to the rear garden of No 73 Maudlin Street, proposed connections to existing services and all associated site works – **Granted**
- **21655** - To erect a new sign on the front of the property (which is a protected structure) – **Granted**
- **2660003** - For (1) a change of use of the ground floor level from shop (previously travel agents) to restaurant/bar use (2) material alterations and construction of a single storey extension to the rear of the property at ground floor level (3) material alterations to existing residential accommodation at first and second floor levels to create a 1 bedroom apartment and (4) all associated site development works at 78 and 78A, John Street Lower, Kilkenny R95 EF84 (No. 78) and R95 Y043 (No. 78A). The proposed development consists of works to a protected structure (Protected Structure Ref: B105 Kilkenny City) and is located within the John Street Architectural Conservation Area – **Further Information**
- **2560700** - For development at this site situated adjacent to the city wall, listed as part of a Recorded Monument subject to a Preservation Order: TPO 2/96. The development will consist of a building, 3

storey's above existing carparking, providing 40 No. additional hotel bedrooms, storage, staircases, lift, entrance hall together with all ancillary works situated in the existing car park, to the rear – **Further Information**

The developments listed above are not considered likely to give rise to significant cumulative effects on the environment when considered in combination with the proposed development.

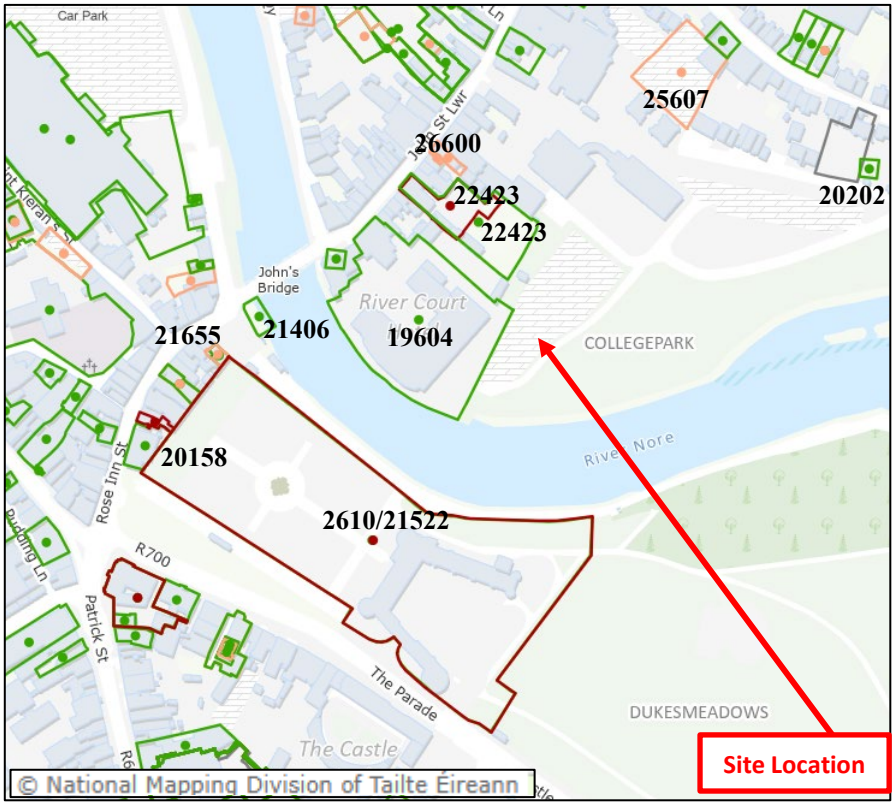


Figure 2.3: Developments within close proximity to project

3.0 WASTE, POLLUTION AND HEALTH

The proposed works comprise the construction of a facility with a floor area of approximately 460 sq. m, including a pontoon, walkway, car and bicycle parking, landscaping, drainage infrastructure with SuDS features, and associated site works. Excavation will be required during construction; however, the majority of works will take place within artificial or previously modified surfaces. Waste generated during the construction phase will be managed in accordance with relevant construction waste management guidance and transported to licensed waste facilities where required. Environmental control measures to

protect the receiving environment during construction will be implemented by the appointed contractor in accordance with the accompanying CEMP. Given the nature and scale of the development, no significant waste, pollution or human health effects are anticipated. The facility does not fall within the scope of the Seveso III Regulations or the European Communities (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015, as no dangerous substances would be used at the site. It is not anticipated that significant volumes of chemicals or fuels would be stored at the site during operation. The operational phase will support healthy recreational activities. General waste generated by visitors will be managed in accordance with site management procedures and relevant sustainable tourism guidance to minimise effects on local biodiversity. The centre will also promote awareness of biosecurity measures to prevent the spread of invasive species along the River Nore.

4.0 SURFACE & GROUNDWATER

The proposed development is located within the Nore_SC_090 sub-catchment, which is part of the Nore Catchment. The closest mapped watercourse to the proposed development site is the River Nore (EPA Code: 15N01 – Order 6) which is located within the site boundary. There are no drainage ditches or other watercourses within the site boundary. The Environmental Protection Agency (EPA) undertakes surface water monitoring along the River Nore. EPA comments on the most recent monitoring results for the River Nore are as follows: *"Only three of the eighteen sites assessed in the main channel of the River Nore were found to be in satisfactory ecological condition in 2025. The other fifteen sites sampled were in unsatisfactory condition including two (0400, 2305) that have further declined from Moderate to Poor condition since 2022 and three which had declined from good to moderate (0080, 0500, 0700). This situation in 2025 compares unfavourably with 2022 when 12 of 19 sites sampled were unsatisfactory and in 2019 when only 4 of 18 sites were deemed unsatisfactory."*

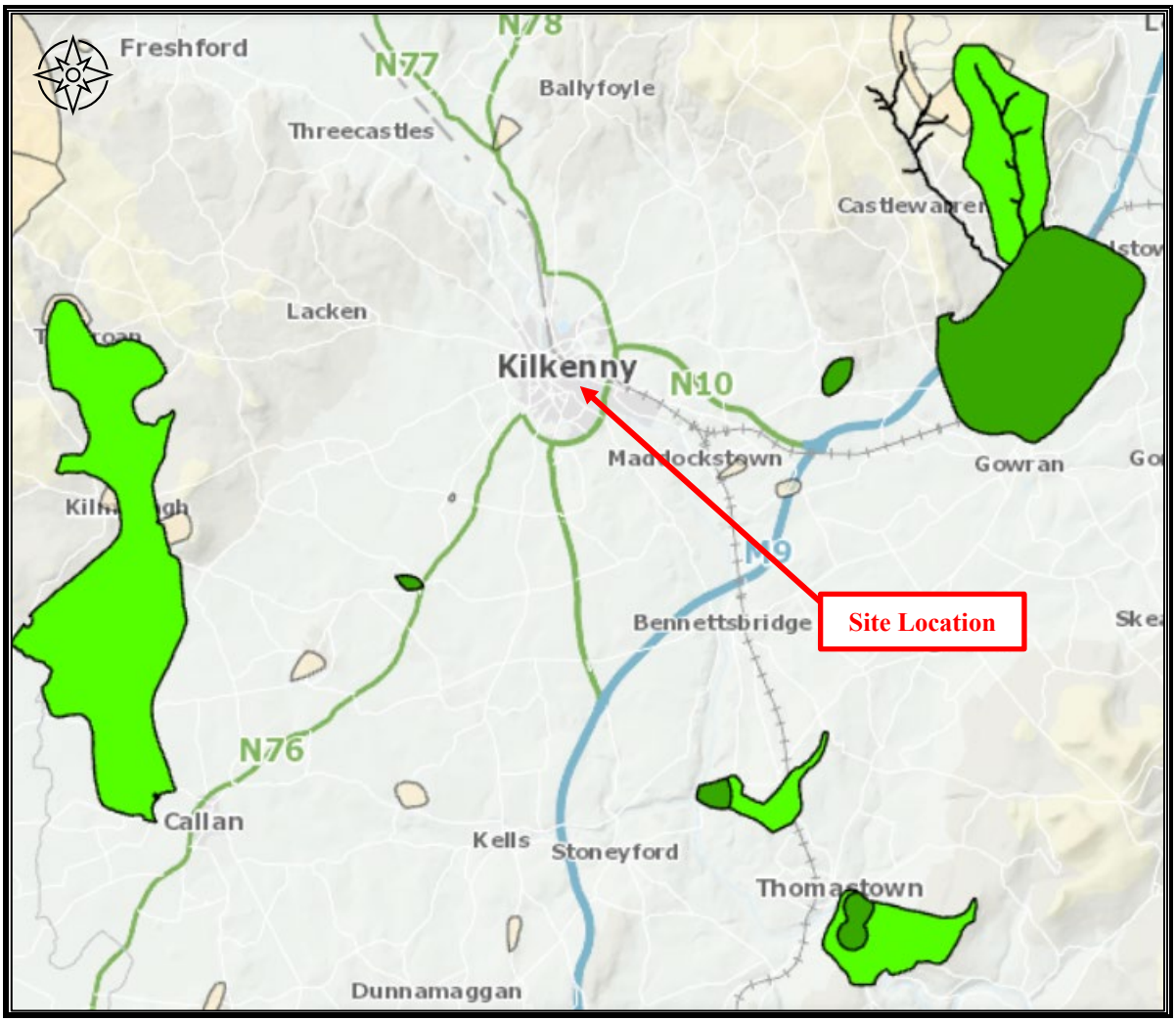


Figure 4.1: Group Scheme and Public Supply Protection Zones (Source: Geological Survey Ireland ©)

There are no groundwater source protection areas within the vicinity of the site. The closest groundwater source protection area to the site is the Clifden Clara Water Supply Scheme which is located approximately 7.22km to the east. The Geological Survey Ireland has no records for groundwater abstractions within the vicinity of the site, however, this is not a complete register. There would be no significant volumes of fuels, oils or other chemicals stored during the construction or operational phases of the project. Potential impacts during the construction phase would be prevented through the implementation of the CEMP. It is not anticipated that there would be a significant risk to groundwater.

A flood relief scheme was completed in Kilkenny city in 2005 to provide defence against the 100 years flood from the Nore. The location of the proposed pontoon is at a Kilkenny Flood Relief Scheme (FRS) embankment (See **Figure 4.2**: E1). The bank at this location is not muddy

but is made of stone with some vegetation overgrowth (See accompanying EcIA). The proposed facility will be protected from flooding by the earth embankment that runs along the parkland adjacent to Kilkenny County Hall. Maintenance of this FRS is undertaken by the Office of Public Works (OPW). The Scheme involves a range of standard maintenance activities, including in-channel vegetation management, silt removal, bridge/weir maintenance and tree works. These are all carried out following detailed environmental procedures (EPs) contained in OPW's Environmental Guidance: Drainage Maintenance and Construction (Brew & Gilligan 2019) which set out the minimum environmental and ecological standards that activities should follow and is subject to Appropriate Assessment (NIS) (Document Reference: JBA Consulting 2023s0205 - Kilkenny City FRS 2023 NIS S3 P03).

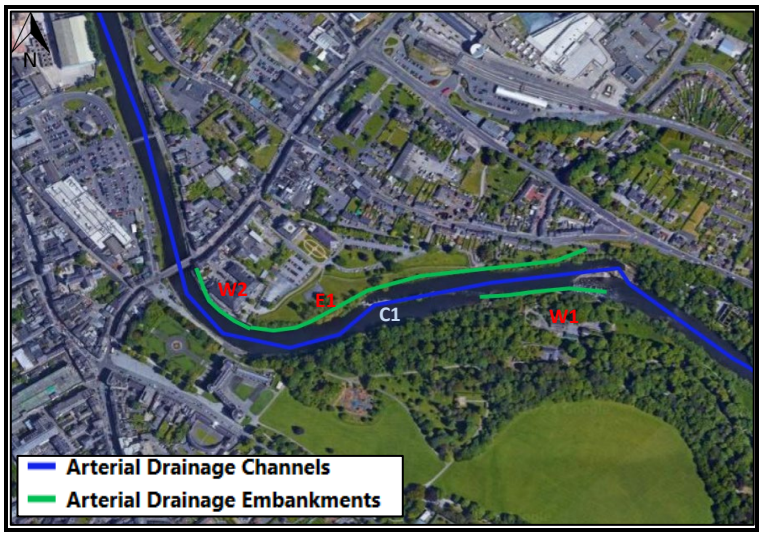


Figure 4.2: OPW Arterial Drainage Scheme (Google Image ©)

During the operational phase, no significant impact on existing surface water quality or the absorption capacity of the Nore catchment is anticipated. During the construction phase, mitigation measures will be implemented to avoid adverse effects on the River Nore. The appointed contractor will have regard to relevant guidance on the protection of water quality during construction and will ensure compliance with the measures set out in the CEMP. No significant operational water quality effects are anticipated, as the recreational development will not generate significant pollutants or hydrocarbon sources.

5.0 BIODIVERSITY

Site characterisation assessments were undertaken in 2024, 2025 and 2026 to examine the ecological context of the development site by systematically walking the proposed site and boundaries and determining the habitats present. The habitat survey was undertaken in accordance with the standard methodology outlined in Fossitt's "*A Guide to Habitats in Ireland*", a hierarchical classification scheme based upon the characteristics of vegetation present. The Fossitt system also indicates when there are potential links with Annex I habitats of the E.U. Habitats Directive (92/43/EEC). Cognisance was also taken of the Heritage Council guidelines, "*Best Practice Guidance for Habitat Survey and Mapping*", (Smith *et al.,* 2011). There was no flora listed under The Flora (Protection) (S.I. No. 235 of 2022), no plant species of conservation significance or Third Schedule invasive plant species found within the site boundary. Giant Hogweed (*Heracleum mantegazzianum*) and Indian Balsam (*Impatiens glandulifera*) were found along the riparian zone of the River Nore downstream of the proposed development. The identified habitats at the proposed development site, as per the Fossitt habitat classification scheme, are summarised in **Table 5.1** below. See Ecological Impact Assessment for a detailed habitat description of the existing development site and boundaries (Document Reference: **EcIA RSE 0626**).

Table 5.1: Summary of Habitats Identified at the Proposed Development Site

HABITAT CLASSIFICATION HIERARCHY		
LEVEL 1	**LEVEL 2**	**LEVEL 3**
F Freshwater	**FW** Watercourses	**FW2** Depositing / lowland rivers
G – Grassland and marsh	**GA** Improved grassland	**GA2** Amenity grassland
W Woodland and scrub	**WN** Semi–natural woodland	**WN5** Riparian woodland
	WD Highly modified / non- native woodland	**WD5** Scattered trees and parkland
B Cultivated and built land	**BC** Cultivated land	**BC4** Flower beds and borders
	BL Built land	**BL3** Buildings and artificial surfaces

A bird survey, otter survey, bat survey and invasive species survey were also undertaken as part of the ecological assessment of proposed development. Given that part of the proposed development will be within River Nore and along its riparian zone the accompanying

Ecological Impact Assessment details the impacts and any measures to prevent a significant impact on species and habitats associated with the River Nore (Document Reference: **EcIA RSE 0626**).

At Appropriate Assessment Screening stage, it could not be excluded, on the basis of objective information, that the proposed development may give rise to likely significant effects on the River Barrow and River Nore SAC (Site Code: 002162) and the River Nore SPA (Site Code: 004233), given their location within the Zone of Influence and the presence of source-pathway-receptor links. A Natura Impact Statement has therefore been prepared to assess the potential for adverse effects on the integrity of these European sites and to identify mitigation measures where required (Document Reference: **NIS_RSE_0626**). No direct connection to any Natural Heritage Area or proposed Natural Heritage Area within the Zone of Influence has been identified (Document Reference: **EcIA RSE 0626**).

6.0 NOISE, DUST & AIR QUALITY

Noise levels from the proposed development would be experienced as part of everyday life in an urban area and would be limited to opening hours of the recreational facility. Noise emanating from the project during the construction phase has the potential to impact off-site receptors. The proposed development will be obliged to comply with BS 5228 “Noise Control on Construction and open sites Part 1”. The appointed contractor would ensure compliance with guidelines to limit construction related noise and follow best practicable means to control noise. All plant and equipment will comply with the noise limits quoted in the relevant European Commission Directive 2000/14/EC. No out of hours work will be undertaken unless permission to do so has been granted. The majority of dust would be generated during site excavation works where topsoil would be cleared and the demolition of the outbuilding. The introduction of class 804 and other gravels, sands and silts on to the site for the creation of hardcore surfaces will also increase the potential for dust to become a nuisance issue. The potential for construction dust dispersion depends on the local meteorological conditions such as rainfall, wind speed and wind direction. The proposed development once in operation will not have a significant effect on air quality. Given the type of development (recreational facility) standard construction environmental control measures would be put in place to prevent any impact on air quality during this phase. During construction, the proposed

scheme can be expected to affect pedestrian, cycle, and vehicular traffic and to cause temporary noise, dust, and visual effects. Odours emanating from the proposed development are not anticipated to cause a nuisance due to the nature of the activities during the operational phase. The accompanying CEMP details measures to prevent an impact from dust and noise during the construction phase (Document Reference: **CEMP_RSE_0626**).

7.0 VISUAL IMPACTS & MATERIAL ASSETS

The proposed development would be anticipated to have no significant negative impact on the visual amenity of the area. As per Kilkenny County Development Plan it would not block views of any heritage building or site. The proposed pontoon would not obstruct views from St John's Bridge. The landscape plan will not significantly alter the riparian zone of the River Nore with replanting with native species upon completion of pontoon construction. No mature trees in the County Hall parkland will be removed (such as Lime, Plane, Oak). A semi mature Ash (west corner) and an immature Willow will be removed. Willow will rejuvenate along the River Nore riparian zone. The area for development is currently in use as a car park and an outbuilding which are both of limited visual amenity value. The operational phase will result in a positive visual impact with the completion of a moderate scale development, adjacent to the public and commercial developments. A visual impression of the scheme is shown in Appendix and accompanying planning pack. It is considered that additional investigation within an EIAR of visual and landscape impacts from the development would not be required.



Figure 7.1: View of development site from River Nore Canal Walk and County Hall Car Park

In terms of existing utilities, the proposed development will require access to the local water supply, wastewater, public roads infrastructure, electricity supply, telecommunications, municipal waste management and gas, all of which are readily available. The additional demand on these services can be facilitated and will not lead to any negative environmental impacts. Equally the construction of the development will not negatively impact on existing services.

In terms of traffic, there will be temporary and localised impacts associated with the construction phase of the development. Once operational, the proposed development is expected to generate limited trips; therefore, the existing road and junction network serving the proposed development site is considered capable of accommodating the likely level and type of traffic generated. Given the central location, public transport links, secure bicycle parking and pedestrian access via John Street, the recreational facility will encourage a range of transport modes. Parking will be controlled through the existing paid parking facilities at County Hall, with vehicular access to and from Maudlin Street.

8.0 POTENTIAL IMPACTS

Potential environmental effects are anticipated to be minor, localised and manageable, having regard to the nature and scale of the proposed development. The proposed works will predominantly be contained within existing modified areas and are not expected to result in significant effects on landscape character or visual amenity. The site is archaeologically sensitive; however, archaeological assessment, test excavation, underwater archaeological assessment where required, and archaeological monitoring will be undertaken to identify and manage potential effects on archaeological heritage. The accompanying NIS identifies mitigation measures to ensure that the proposed development will not adversely affect the integrity of any European site, alone or in combination with other plans or projects. Air quality, lighting, noise and water quality effects associated with the proposed works are not anticipated to be significant, subject to the mitigation measures outlined in the EcIA, NIS and CEMP. In the absence of construction control measures, temporary noise, dust and water quality effects could occur; however, given the scale and duration of the works, and the implementation of standard construction environmental controls, such effects are considered likely to be temporary, localised and not significant.

During the operational phase, there will be an intensification of use on site; however, this will be limited by the scale of the facility, its central urban location, the Community Facilities zoning, existing civic and recreational context, controlled access and existing paid parking arrangements at County Hall. The proposal would improve the existing site and has the potential to provide positive effects in terms of local amenity and the local economy. The development will provide a central base in Kilkenny City for outdoor recreational activities and aquatic clubs.

A Visitor Management Plan will support the operational phase of the proposed development by setting out controls for visitor access, water-based recreation, pontoon use, riverside walking, group visits, events, deliveries, maintenance and incidental public use within the River Nore corridor. The plan will direct recreational activity to approved routes, controlled access areas and designated launch and landing infrastructure, while avoiding sensitive riverbanks, riparian vegetation and wildlife refuge areas. It will include booking and supervision arrangements, group-size controls, visitor briefings, signage, defined no-go areas,

controlled pontoon access, approved waiting areas, event management requirements, litter controls, biosecurity procedures and pollution prevention measures. Water-based activity will be subject to Check-Clean-Dry procedures and use of the approved wash-down area and treatment system, including containment, settlement, UV sterilisation and hydrocarbon interception where required. The plan will also provide monitoring, incident response and adaptive management measures, including activity logs and action thresholds for wildlife disturbance, bank damage, pollution, biosecurity failure, treatment-system failure, unauthorised access, uncontrolled dogs, excessive noise or lighting and repeated non-compliance. These embedded operational controls will assist in avoiding or reducing visitor-related effects on biodiversity, water quality, land and soils, material assets, human use and the interaction between these factors.

Having regard to the inter-relationship between the environmental factors considered above, and to the nature, scale and location of the proposed development, the identified effects are not considered significant either individually, cumulatively or in combination with other plans or projects.

9.0 SUMMARY TO DETERMINE THE REQUIREMENT FOR EIA

1. Characteristics of proposed development		
Description	**Potential pathway / sensitivity present?**	**Likely significant effect? Reason**
The size and design of the whole of the proposed development?	No	No – the proposed development is below the relevant mandatory EIA thresholds and is not likely to result in significant effects due to its scale and design.
Potential for cumulative effects with other existing and/or approved projects?	No	No – significant cumulative effects with other existing or

		approved projects are not anticipated.
The nature of any associated demolition works?	No	No – the existing outbuilding is small in scale, located within a previously modified area, and its demolition is not anticipated to give rise to significant environmental effects.
Use of natural resources in particular land, soil, water, and biodiversity?	Yes	No – the use of land, soil, water and biodiversity resources will be limited in scale and managed through the project design, SuDS, ecological mitigation and construction controls. Significant effects are not anticipated.
The production of waste?	No	No – construction waste will be managed in accordance with relevant construction waste guidance and disposed of at licensed facilities where required.
Pollution and nuisances?	No	No – temporary construction effects will be managed through the CEMP and standard construction controls.
Risk of major accidents and/or disasters relevant to the project including those caused by Climate Change in accordance with scientific knowledge?	No	No – the site is located behind the Kilkenny Flood Relief Scheme defences and is not anticipated to give rise to significant accident, disaster or climate-related risks.

Risks to human health	No	No – the operational use is recreational in nature and is not anticipated to give rise to significant risks to human health.
2. Location of proposed development		
Environmental Sensitivity of project in relation to existing and approved land use?	Yes	No – water-based activities will be limited to dawn-to-dusk operation and managed through operational controls.
Relative abundance, availability, quality, and regenerative capacity of natural resources (including soil, land, water, and biodiversity) in the area and its underground?	Yes	No – the proposed recreational use is localised and will not significantly affect the availability, quality or regenerative capacity of land, soil, water or biodiversity resources.
Absorption capacity of the natural environment including wetlands, riparian areas, river mouths, coastal zones and the marine environment, mountain, and forest area?	Yes	No – effects on the riparian environment will be managed through the EcIA, NIS and CEMP mitigation measures.
Potential of works to impact directly or indirectly on sites designated for nature conservation (NHA/SAC/SPA)?	Yes	No – the accompanying NIS identifies mitigation measures to avoid adverse effects on the integrity of European sites.
Potential for impacts directly or indirectly on Habitats or Species listed on Annex I, II and IV of the Habitats Directive?	Yes	No – the accompanying NIS and EcIA identify measures to avoid or reduce potential effects

		on protected habitats and species.
Potential for impacts on breeding places of any species protected under the Wildlife Act?	Yes	No – the accompanying EcIA identifies measures to avoid or reduce potential effects on protected species and breeding or resting places.
Potential to impact directly or indirectly on any listed ACA in the County Development Plan?	Yes	No – the proposed development is within John Street ACA but is not anticipated to adversely affect the character or setting of the ACA.
Potential to impact directly or indirectly on any protected structure or recorded monuments and places of Archaeological Interest?	Yes	No – the site is archaeologically sensitive; however, archaeological assessment, test excavation, underwater archaeological assessment where required, and archaeological monitoring will be undertaken by suitably qualified archaeologists under appropriate statutory consents.
Potential to impact directly or indirectly on listed or scenic views or protected landscape in the County Development Plan?	No	No – the proposed development will not obstruct protected views, scenic views or views of historical or visual importance.
Potential to impact on areas in which there has already been a failure to meet the environmental quality standards and relevant to the project, or in which it is considered that there is such a failure?	No	No – the design incorporates drainage, ecological and construction controls to avoid significant effects

		on sensitive receiving environments.
Potential to impact on densely populated areas?	No	No – temporary construction effects will be localised and operational use is compatible with the existing urban and recreational context.
3. Types and characteristics of potential impacts		
Human Beings	No	No – any effects on human beings are expected to be temporary, minor and localised during construction.
Flora and Fauna	Yes	No – mitigation measures to prevent significant effects on flora, fauna, habitats and protected species are detailed in the accompanying Ecological Impact Assessment and NIS. Lighting will be designed to be sensitive to nocturnal species.
Soils and Geology	No	No – ground disturbance will be limited and managed through standard construction controls and appropriate reuse or disposal of excavated material.
Hydrology	Yes	No – surface water runoff will be managed through SuDS measures, including green roofs, rain gardens, attenuation,

		permeable surfaces and construction-phase controls set out in the CEMP.
Air and Climate	Yes	No – temporary construction dust and emissions will be managed through standard construction controls and the CEMP. No significant operational air quality or climate effects are anticipated.
Noise and Vibration	Yes	No – construction noise and vibration will be temporary and managed through best practicable means, relevant guidance and the CEMP. No significant operational noise or vibration effects are anticipated.
Material Assets	No	No – the proposed development will not have a significant impact on material assets, including public utilities, transport infrastructure and community assets.
Cultural Heritage	Yes	No - The site is archaeologically sensitive; however, archaeological assessment, test excavation, underwater archaeological assessment are required, and agreed mitigation will be implemented to identify and manage

		potential effects. Significant residual effects are not anticipated.
Interaction of Environmental Factors	No	No – having regard to the inter-relationship between environmental factors, effects are not considered significant individually, cumulatively or in combination with other plans or projects.

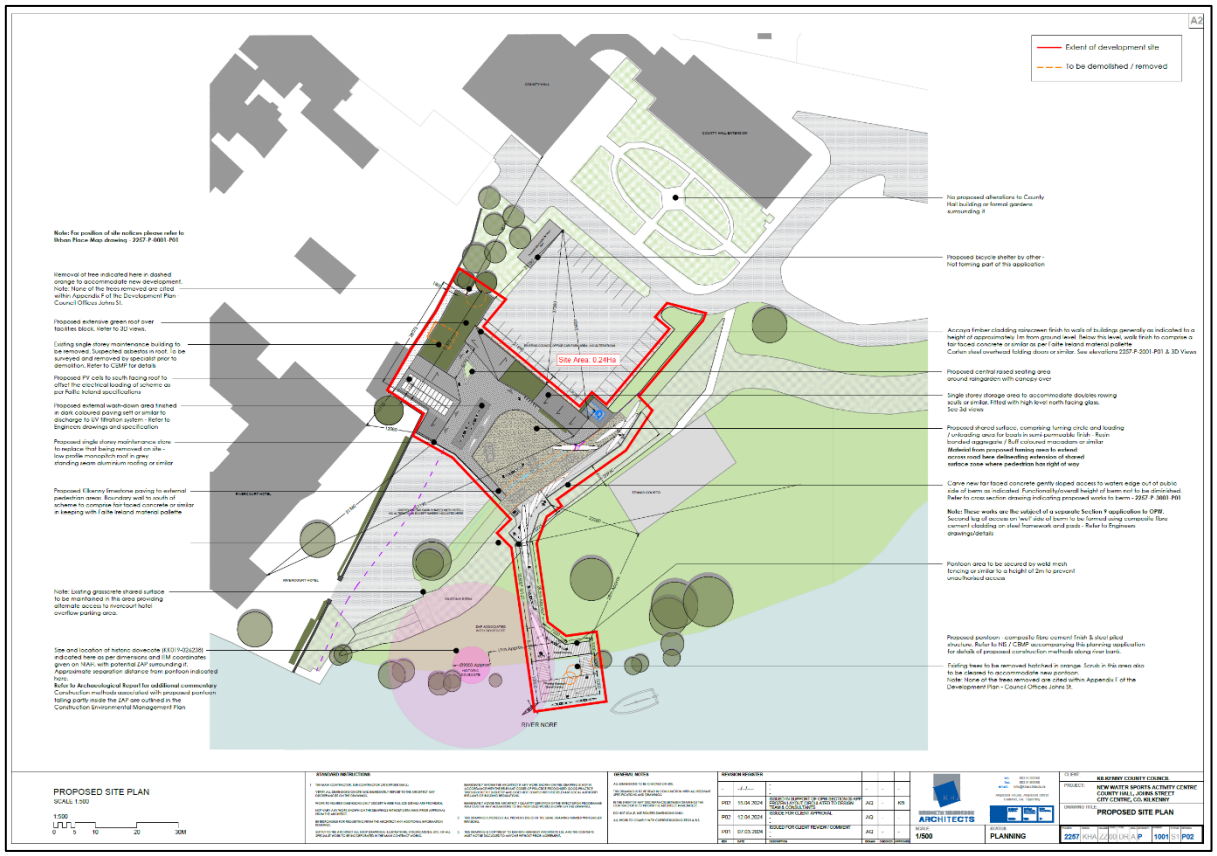
10.0 CONCLUSION

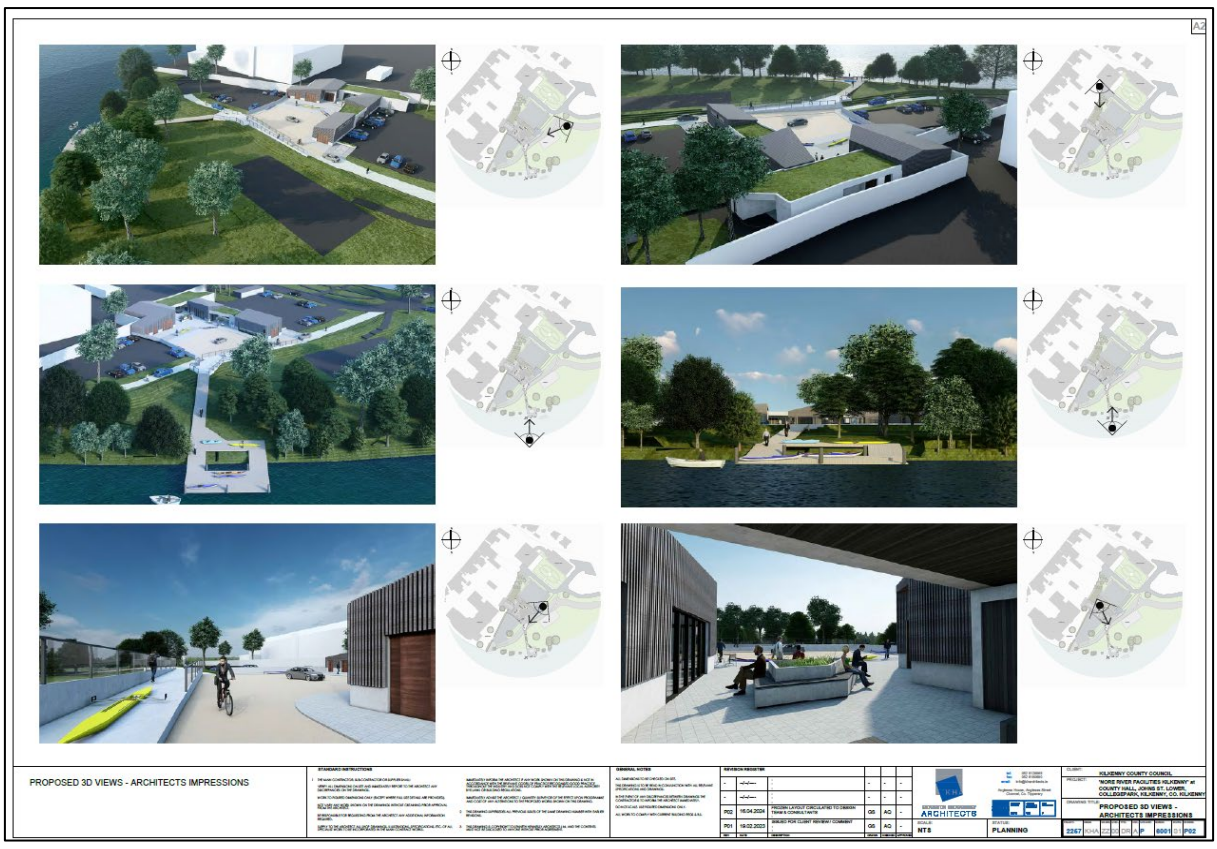
It is considered that the proposal does not fall within the scope of any class of project requiring mandatory EIA under Schedule 5 of the Planning and Development Regulations 2001, as amended. Having regard to the nature, scale and location of the proposed development, the characteristics of the site, and the nature and extent of potential impacts, the project is not considered likely to give rise to significant effects on the environment. The development is below the relevant thresholds for mandatory EIAR. This sub-threshold EIA Screening assessment has been carried out having regard to the criteria listed in Schedule 7 and the information requirements of Schedule 7A of the Planning and Development Regulations 2001, as amended, and in cognisance of the environmental sensitivities of the area.

In conclusion, it is considered that the proposed development is unlikely to have significant effects on the environment. Recommended mitigation measures and standard construction and operational controls will be implemented to protect the quality of the surrounding environment, including the River Nore, associated ecological receptors and archaeological heritage. The Visitor Management Plan will further support the operational phase by controlling visitor access, water-based activity, biosecurity and pollution prevention measures. On this basis, it is concluded that an Environmental Impact Assessment Report is not required for the proposed River Nore Facilities Kilkenny.

11.0 APPENDIX

A1: Site Layout and Visual Site Layout





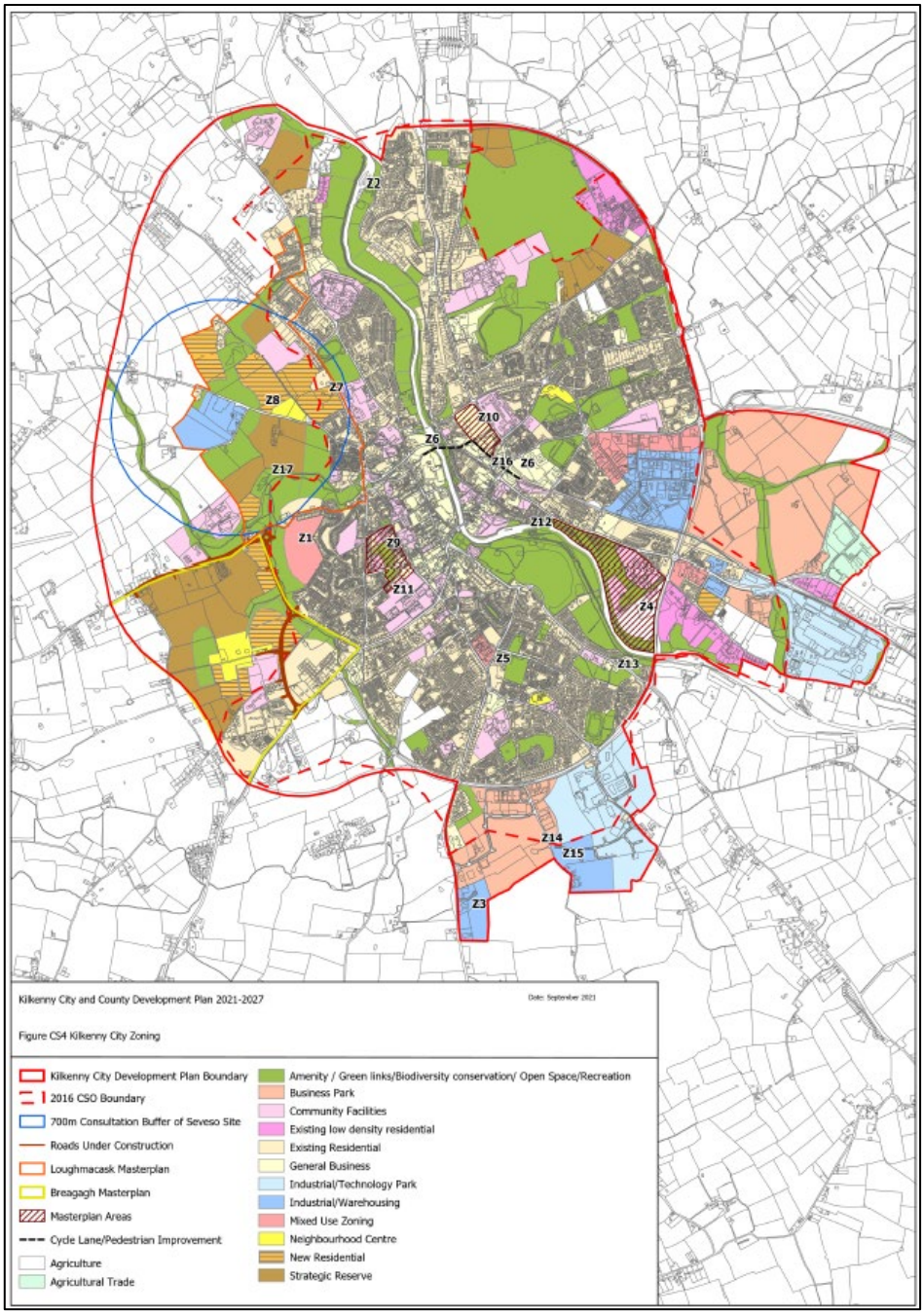


Figure A2: Kilkenny City Zoning

Appendix G – Natura Impact Statement (Ross Swift Ecology Ltd)

ROSS SWIFT ECOLOGY LTD.

APPROPRIATE ASSESSMENT SCREENING
&
NATURA IMPACT STATEMENT

Nore River Facilities Kilkenny

DOCUMENT CONTROL SHEET	
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1.0 INTRODUCTION

Ross Swift Ecology Ltd. has been appointed to prepare an Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) for the proposed Nore River Facilities Kilkenny, located within the grounds of County Hall at Johns Street Lower, Collegepark, Kilkenny City, Co. Kilkenny. See **Figure 1.1** for location. This Natura Impact Statement has been prepared in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011–2023, which give effect to the Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) in Irish law. In line with Article 10 of the Habitats Directive, Member States are required to encourage the management of landscape features that are of major importance for wild flora and fauna, particularly those that function as ecological corridors or stepping stones.

1.1 DESCRIPTION OF DEVELOPMENT

Pursuant to Section 177AE of the Planning & Development Act 2000 (as amended) and the requirements of the Planning & Development Regulations 2001 (as amended), Kilkenny County Council intends to seek the approval of An Coimisiún Pleanála under Section 177AE of the Planning and Development Act 2000 (as amended) for the proposed development, which involves the construction of the 'Nore River Facilities Kilkenny' at a site of approximately 0.24 ha.

The proposed development will consist of the construction of a riverside facilities centre comprising the following:

a) Demolition of an existing single-storey maintenance store,
b) Removal of selected on-site vegetation to facilitate the works,
c) Single-storey facilities block with a flat, intensive green roof build-up, containing toilets, universally accessible bathroom, changing places facility, showering / changing cubicles, cleaner's store, outdoor showers, an external plant area, storage lockers, wash trough, and a drying room,
d) Single-storey adjoining community block with an asymmetrical pitched roof containing a community room, associated kitchenette, and a plant room / central information point,
e) Adjoining external covered terrace area with a flat intensive green roof build-up,
f) A single-storey storage block with an asymmetrical pitched roof containing equipment storage, a dragon-boat / rowing boat storage, and a maintenance store,
g) A single-storey adjoining block with a mono-pitched roof containing a boat / general storage area,
h) Hard landscaped pedestrian central space with raised central planter / seating, planted areas and a boat wash down area,
i) Proposed shared surface including a central set-down / vehicular turning area for boat loading / unloading and pedestrian use generally,
j) Access route to river over berm comprising a sloped access path with associated retaining wall, steps, landings, balustrading, and associated handrails,
k) Raised walkway from top of berm to pontoon with associated balustrading / handrails,
l) Part fixed / part floating access pontoon within the river,
m) Site services connections and drainage works, including connection to existing public foul and stormwater system,
n) Universally accessible parking bay and covered bicycle parking area,
o) Public lighting to all pedestrian / vehicular / parking areas,
p) Associated archaeological investigations, including test excavations and underwater surveys.
q) All necessary landscaping, site boundary and site development works.

The proposed development will be used as a base for activities such as kayaking, dragon boating, cycling, water safety storage, river rescue coordination, community meetings and aquatic club meetings. In addition, the facility can potentially cater to local commercial interests such as river boat tours, which already operate from St John's Bridge pontoon, and stand-up paddle boarding. The maximum operational hours for water activities will be from dawn to dusk. Shower facilities will be used by Council staff before dawn in winter and the community room may be used after dusk; however, there will be no water activities or use of the pontoon during the hours of dusk to dawn. Lighting along the River Nore canal walkway switches off at 22:30 hours and external lighting facing the River Nore will also switch off at 22:30 hours. See **Appendix** for site layout by Ailtiri Architects.

DRA Consulting Engineers have designed the proposed drainage system as per Document Reference (**22175-Civil Eng Report-240418**). Surface water run-off from the site will discharge into an existing 750 mm Ø surface water sewer located in the car park of Kilkenny County Hall. An infiltration test in accordance with BRE Digest 365 was carried out on site, with the results showing that the site is not suitable for soakaway as there is a very poor infiltration rate to ground. It is proposed that surface water run-off will be collected from impermeable surfaces (roofs, road and footpaths) via rainwater pipes, green roof, drainage channels and rain gardens. The surface water runoff from the roof areas will be captured by a combination of green roof system which comprises a multi-layered system that covers the roof of the building with vegetation and a blue roof system with an attenuation cell with 0.95% void to allow for water storage. It is proposed that a Bauder Blue Stormcell sedum green roof or similar be adopted. It is proposed to install a flow control system on the blue roof areas to limit the discharge rate to 0.7 L/s. If any alternative products are used, they will be equivalent to the above and have CE certification or equivalent. It is proposed to discharge stormwater from the footpaths and courtyard to a rain garden that will be planted with flora tolerant of hydrological fluctuations. An attenuation cell system will be provided underneath with 0.95% void to allow for storage. The rain garden will be provided with a flow control device set at an outflow of 2 L/s. The runoff from a section of the proposed storage building roof, part of the footpath and the disabled parking space will be directed into an impermeable attenuation tank with 95% void (Wavin Aquacell or similar approved), with a flow control device set at 2 L/s. The underground tank will have 5.32 m^3 storage. The above runoff and any additional runoff from the roofs or roads/access will then be directed to a proprietary flow control device fitted to manhole SW MH 02 FCD set at an outflow of 5 L/s to avoid blockages. Surcharged surface water upstream from the flow control SW MH 02 FCD device will be directed to an impermeable attenuation tank with 70% void (Stormtech attenuation tank or similar approved). This attenuation tank will provide a storage capacity of 16.78 m^3 for the 100-year storm event plus a 30% storage allowance for climate change. Surface water downstream from flow control device SW MH 02 FCD will finally pass through a proprietary 'Class 1' bypass hydrocarbon interceptor before being discharged into an existing storm sewer. The drainage network has been designed in accordance with the requirements of the Greater Dublin Strategic Drainage Study (GDSDS).

This will enable the proposed development to be SuDS compliant with;

- Green Roof System;
- Attenuation Tank;
- Rain Garden;
- Permeable surfacing.

All wastewaters will be discharged into the existing 525 mm diameter foul sewer located on the footpath beside the car park of Kilkenny County Hall. No wastewater will discharge to the public surface water system.
It is proposed to provide a designated area for users to wash down boats and equipment. This will consist of an external contained hardstanding impermeable surface where equipment can be washed down. Wash-water will be collected by means of a surface channel drain discharging into a precast concrete gravity flow silt chamber. The run-off from the contained wash-down area will firstly be treated with a mild proprietary aquatic disinfectant such as Virkon Aquatic, or similar. Virkon Aquatic and other products are approved for use by Inland Fisheries Ireland. The run-off will then be discharged to a silt chamber for further dilution before finally being treated with ultraviolet (UV) light as tertiary treatment. This has been designed to prevent pathogens such as Crayfish Plague (*Aphanomyces astaci*) from entering the River Nore during the operational phase of the development. Generally, UV systems are used in wastewater treatment applications as a method of pathogen disinfection. The proposed UV sterilisation unit will produce 30 mJ/cm². A UV system with 30 mJ/cm² treating intermittent sand filter effluent will have an effluent coliform count of 23 MPN/100 ml assuming an initial coliform count of 10^2–10^4 MPN/100 ml (Metcalf and Eddy, 2014). The run-off from the wash-down facility will finally pass through a hydrocarbon interceptor before being discharged to the existing stormwater network.

Vehicular traffic will access the site via the County Hall car park access roads and the entrance on Maudlin Street while pedestrians can also access the area through the grounds of the County Hall.

The landscape plan by **Cathal Meara Landscape Architecture** will include:

- A shared surface civic frontage which allows access for vehicles towing and dropping off a range of boats and water sports equipment;
- Access steps and ramp linking the buildings to the Jetty walkway;
- A landscape plaza which allows for easy movement of boats with tracked routes and a designated boat wash down area with central drainage;
- Multi-functional public seating in the form of a concrete raised planter with seating edge and backrest and concrete pebble seats which also act as a traffic barrier;
- Planting beds to soften and accentuate the proposed architecture, with one large central bed acting as a SuDS drainage system.

The landscape plan will include the following details:

Limestone paving, limestone block, resin-bound aggregate (mid-grey basalt aggregate resin-bound system), concrete surfacing (in situ poured concrete with natural stone aggregate surface), precast concrete tactile paving slabs (buff colour, corduroy pattern, stack bond laying pattern), limestone flush kerbs, limestone upstand kerb (as planter edge), in situ concrete raised planter with backrest and timber slat seating top, and stainless-steel slot drain. See Landscape Plan for dimensions and proposed layout. There are three areas of ornamental planting, climbing plants and a native specimen tree; the ecological assessment of each species is outlined in the accompanying **Ecological Impact Assessment** (Document Reference: EcIA_RSE_0626).

An archaeological dive survey and test excavation will be undertaken by **Archaeological Management Solutions**. The purpose of the archaeological testing is to identify and assess any archaeological features, objects or deposits within areas affected by the proposed development, including their nature, extent, date, significance and potential impact. If archaeological material is encountered, an appropriate mitigation strategy will be agreed in consultation with the National Monuments Service (NMS), including preservation *in situ* and/or preservation by record.

The archaeological test excavation and underwater survey will be undertaken under licence by a suitably qualified archaeologist and in accordance with National Monuments Service guidance and licensing requirements. Testing will comprise five trenches totalling approximately 70 linear metres, informed by geophysical survey, previous excavation results and background research, with the final trench layout taking account of constraints associated with the River Nore, existing services and the River Barrow and River Nore SAC. Trenches will be georeferenced to OSI National Grid/ITM and Ordnance Datum and excavated in controlled layers using a tracked excavator fitted with a 1.8 m wide toothless ditching bucket, under continuous archaeological supervision. Excavation will proceed to the first archaeological horizon or undisturbed natural soil/bedrock, and works will stop if archaeological features, deposits or structures are encountered.

The archaeological dive survey will comprise a licensed underwater visual and metal detector survey of the River Nore area potentially affected by the proposed pontoon. The survey will be undertaken by a commercial dive team using appropriate underwater search methods, including jackstay searches, transects and circular or pendulum swims where required due to limited visibility, with the aim of inspecting the full proposed impact area where conditions allow. Any archaeological features, deposits or objects identified on the riverbed will be recorded, photographed, georeferenced using DGPS and reported to the National Monuments Service. For the purposes of the NIS, the later assessment will review the survey location, timing, access requirements, in-river activity, equipment use and any measures needed to avoid effects on water quality, riparian habitats and qualifying interests.

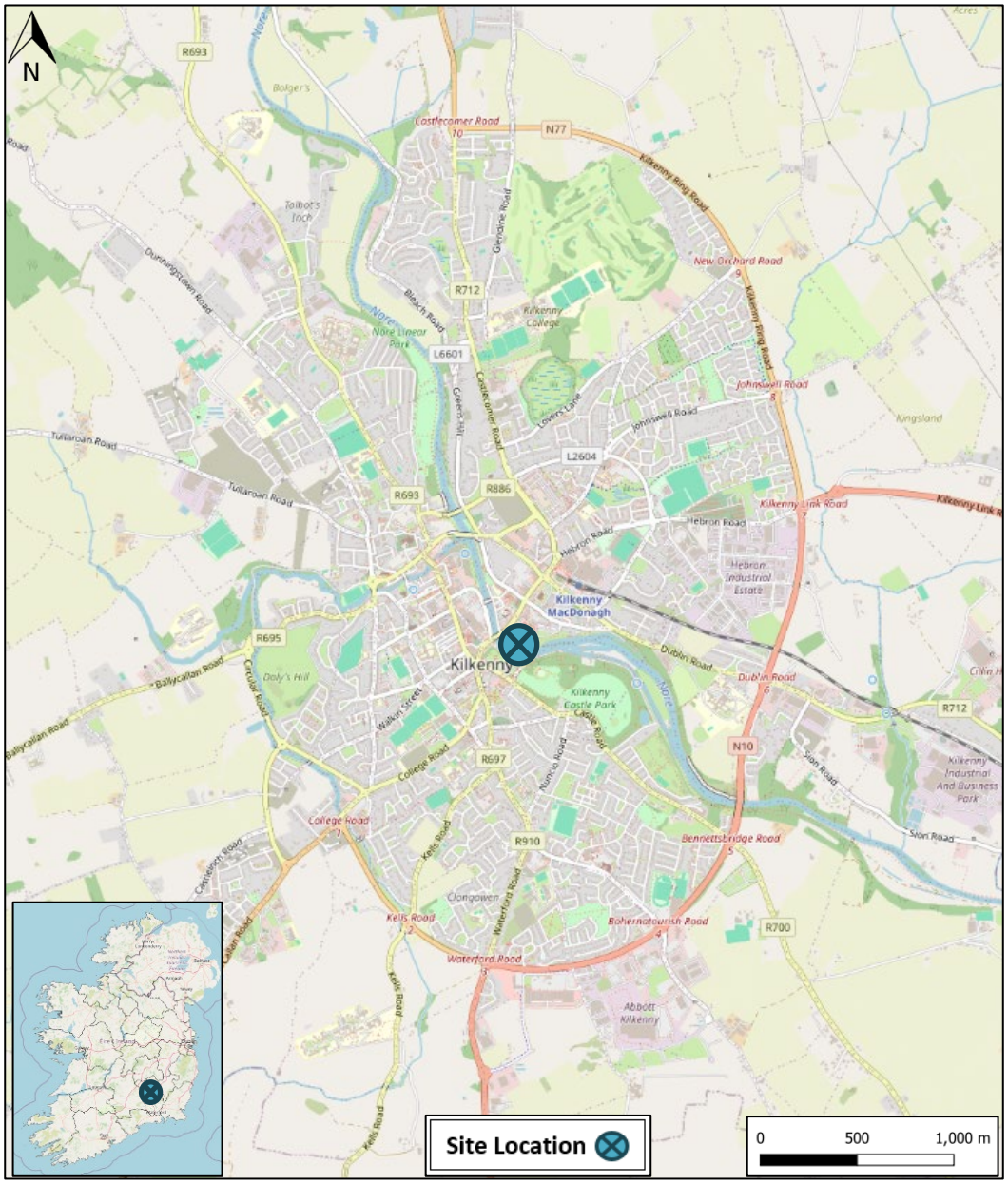


Figure 1.1: Location of proposed development site (Open Street Map ©)

1.2 STATEMENT OF AUTHORITY

This report and assessment were undertaken by Dr Ross Donnelly-Swift who has a BSc (Hons) in Biology from Maynooth University NUI (2005), an MSc in Environmental Science from Trinity College Dublin (2007), and a PhD in Biosystems Engineering from University College Dublin (2016). In addition, Ross was a Research Fellow in the School of Natural Science at Trinity College Dublin. Ross has extensive ecological knowledge gained from academic research and field work, from protected species surveys (birds, otter, badger, bats, flora) and habitat surveys (terrestrial and aquatic) for the completion of scientific and ecological reports (including AA Screening and NIS) to support planning applications and compliance for projects both small and large in a range of areas such as industrial, commercial, agricultural, residential, amenity, and recreational developments. In 2025 he completed an Advanced Diploma in Planning and Environmental Law at the Honorable Society of King's Inns. He continues his CPD with institutions such as CIEEM, Bat Conservation Trust (UK), British Trust for Ornithology, Trinity College Dublin School of Law and University of Limerick on EIA.

2.0 APPROPRIATE ASSESSMENT SCREENING

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of Special Areas of Conservation (SACs), and the Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). It is the responsibility of each Member State to designate SPAs and SACs, both of which form part of Natura 2000, a network of protected sites throughout the European Community. SACs are selected for the conservation of Annex I habitats, including priority types which are in danger of disappearance, and Annex II species other than birds. SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the qualifying interests of the sites, from which the conservation objectives of the site are derived. An Appropriate Assessment (AA) is required to determine the likelihood of significant impacts, based on best scientific knowledge, of any plan or project on Natura 2000 sites. Screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives. This AA Screening has been undertaken to determine the potential for significant effects on relevant Natura 2000 sites. The purpose of this assessment is to determine the appropriateness, or otherwise, of the proposed development in the context of the conservation objectives of such sites.

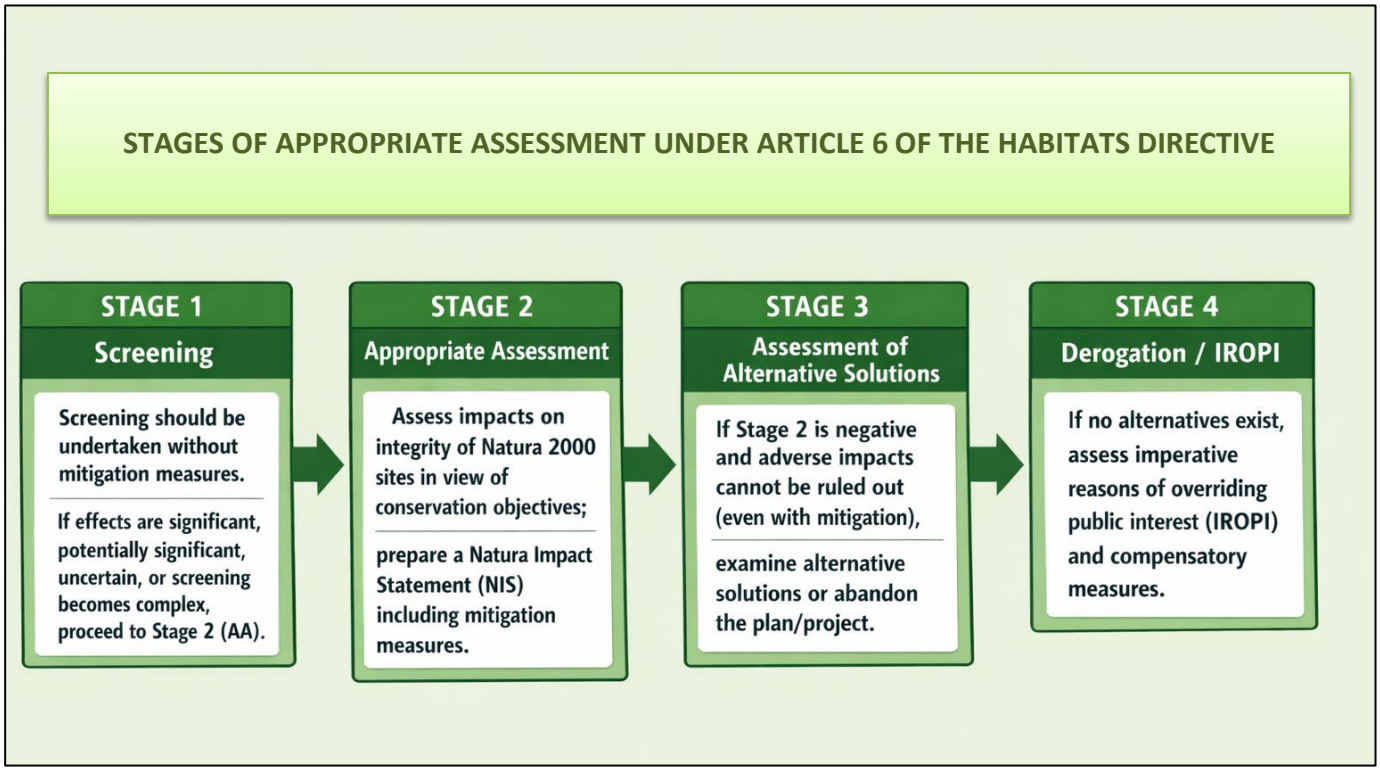
Article 6(3) of the Habitats Directive establishes the requirement for appropriate assessment when planning new developments that might affect a Natura 2000 site. Article 6(3) of the Habitats Directive states; "*Any plan or project not directly connected with, or necessary to the management of the site, but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site, and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.*"

Article 6(4) states: *If, in spite of a negative assessment of the implications for the [European] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

The screening determination must be based on scientific information relevant to the likely effects on the conservation objectives of the relevant European sites. The information should be up-to-date and based on the best available techniques and methods to estimate the presence and extent of effects. This is because if there is any scientific uncertainty as to the absence of significant effects, the project must be screened in for appropriate assessment.

Screening for Appropriate Assessment involves:

- Description of the project and area characteristics (existing environment);
- Identification and description of Natura 2000 sites that could potentially be affected, and compilation of information on their qualifying interests and conservation objectives;
- Assessment of likely effects – direct, indirect and cumulative, undertaken on the basis of availability of objective information as necessary, and Screening statement with conclusions.



The following project elements of the proposed development have been examined for relevance to possible effects on Natura 2000 sites:

- Earthworks & Excavation
- Sediment & Hydrocarbon Runoff
- Stormwater & Waste Water
- Disturbance to Protected Species
- Impact on Protected Habitats
- Dust and Noise
- Invasive Species

2.1 GUIDELINES AND LEGISLATION FOR APPROPRIATE ASSESSMENT SCREENING

This report has been prepared with reference to the following guidelines:

- OPR (2021). *Practice Note PN01: Appropriate Assessment Screening for Development Management.*
- NPWS/DEHLG (2010). *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.*
- European Commission (2018). *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC.*
- European Commission (2021). *Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance.*
- European Court of Justice. Key Article 6 case law (e.g., *People Over Wind*, *Holohan*, *Sweetman*).
- European Commission (2000). *Communication on the Precautionary Principle.*
- European Commission (2017). *Natura 2000 and Spatial Planning.*

- CIEEM (2018, updated 2022/2023). *Guidelines for Ecological Impact Assessment in the UK and Ireland.*

Additional references are provided in the References Section (Section 10.0).

2.2 DATA AND DESKTOP REVIEW

An ecological desktop study was completed for this report through identification of European Sites within the Zone of Influence (ZoI) of the proposed site boundary. The NPWS database was reviewed for the site synopsis and conservation objectives for European Sites identified within the Zone of Influence. Desktop research was conducted to gather information relating to European sites and to the habitats and species that they support. The following data sources were consulted in June 2026:

- Tailte Éireann mapping and aerial photography
- National Parks and Wildlife Service (NPWS)
- Google and Bing aerial imagery
- National Biodiversity Data Centre (NBDC)
- National Planning Database
- Water Quality Data from the EPA
- Geological Survey of Ireland
- Wetland Maps of Ireland

As per the Kilkenny City and County Development Plan 2021-2027

Development Management Requirements: AAs for Recreation

AAs for recreational projects that have the potential to affect the integrity of any European site shall demonstrate that potential direct, indirect and cumulative effects, including in relation to the following issues, have been adequately mitigated where they exist:

- Hard infrastructure in riparian zones;
- Increased recreational access;
- Species and populations of conservation concern, such as Kingfisher and Otter, where relevant;
- Water quality.

Development Management Requirements:

- To ensure that development proposals, where relevant, improve the ecological coherence of the Natura 2000 network and encourage the retention and management of landscape features that are of major importance for wild fauna and flora as per Article 10 of the Habitats Directive.

- To protect and where possible enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands, trees) which are not within designated sites.

- To ensure that appropriate mitigation and/or compensation measures to conserve biodiversity, landscape character and green infrastructure networks are required in developments where habitats are at risk or lost as part of a development.

3.0 SITE BACKGROUND AND DESCRIPTION OF ENVIRONMENT

The proposed development is located within Kilkenny City, which is listed as the largest settlement in the county. It is designated as a significant Key Town in the Regional Spatial and Economic Strategy (RSES) for the Southern Region, as per the **Kilkenny City and County Development Plan 2021–2027**. Kilkenny City's current population is 27,184, as recorded in Census 2022, up from 26,512 in 2016. Kilkenny is the eighth-largest employment centre in Ireland and has strengths in agri-business, finance, tourism and hospitality. Kilkenny has a well-developed tourism industry, with a range of attractions and activities to suit the holiday market. The Council will co-operate with local development organisations, community groups, sporting organisations and other stakeholders in the development of active recreational facilities throughout the City and will enter into joint venture arrangements where appropriate for the provision of such facilities. Water sports cover a wide range of activities such as angling, sailing, canoeing, rowing and sailboarding. Developments associated with water sports adjacent to waterways and inland lakes are required to meet the following criteria:

- The proposed facilities are compatible with any existing use of the water, including non-recreational uses;
- It will not have adverse impacts on any Natura 2000 site, will not result in damage to sites of nature conservation importance or features of the archaeological and built heritage;
- The development can be satisfactorily integrated into its landscape or townscape surroundings;
- The development will not have an unacceptable impact on visual amenity, having regard to the landscape character assessment; and
- The development will not result in over intensification of use leading to pollution, excessive noise and nuisance.

A flood relief scheme was completed in Kilkenny City in 2005 to provide defence against the 100-year flood from the River Nore. The location of the proposed pontoon is at a Kilkenny Flood Relief Scheme (FRS) embankment. The bank at this location is not muddy but is made of stone with some vegetation overgrowth. The proposed facility will be protected from flooding by the earth embankment that runs along the parkland adjacent to Kilkenny County Hall. Maintenance of this FRS is undertaken by the Office of Public Works. The scheme involves a range of standard maintenance activities, including in-channel vegetation management, silt removal, bridge/weir maintenance and tree works. These are all carried out following detailed environmental procedures (EPs) contained in OPW's *Environmental Guidance: Drainage Maintenance and Construction* (Brew & Gilligan, 2019), which sets out the minimum environmental and ecological standards that activities should follow and is subject to Appropriate Assessment (NIS) (Document Reference: **JBA Consulting 2023s0205 - Kilkenny City FRS 2023 NIS S3 P03**). A flood risk assessment for the site has been carried out by **DRA Consulting Engineers (Project Ref. No: 22175)**, which demonstrates that the flood risk to the proposed development is low and that the proposed works would not have an impact on flooding in the area in terms of obstructing important flow paths. In addition, the proposed development would not impede access to the existing watercourses, nor would it result in increased flood risk elsewhere.

As per the percolation test by Cillron Ltd. for the proposed development, the water table was noted at 1.2 m below ground level in the BRE Digest 365 test issued on 29 November 2023. As per the Teagasc Soil Map, the site is located in an area mapped as "Urban". The River Nore is classified as river alluvium. The Geological Survey of Ireland (GSI) has mapped the proposed site location as being on bedrock of crinoidal wackestone/packstone limestone.



Figure 3.1: Landcover surrounding proposed development site (Google Image 2023 ©)

3.1 WATERBODIES AND STATUS

The proposed development is located within the Nore_SC_100, which is part of the Nore Catchment. The closest mapped watercourse to the proposed development site is the River Nore (EPA Code: 15N01 – Order 6), which is located within the site boundary. See **Figure 3.3** below. The Environmental Protection Agency (EPA) undertakes surface water monitoring along the River Nore. EPA comments on the most recent monitoring results for the River Nore are as follows: "Only three of the eighteen sites assessed in the main channel of the River Nore were found to be in satisfactory ecological condition in 2025. The other fifteen sites sampled were in unsatisfactory condition including two (0400, 2305) that have further declined from Moderate to Poor condition since 2022 and three which had declined from good to moderate (0080, 0500, 0700). This situation in 2025 compares unfavourably with 2022 when 12 of 19 sites sampled were unsatisfactory and in 2019 when only 4 of 18 sites were deemed unsatisfactory." **Table 3.1.1** below shows the Water Framework Directive (WFD) status of the River Nore and two tributaries that flow into the River Nore, the Brownstown (downstream c. 2.7 km) and the Bregagh [Kilkenny] (upstream c. 660

m). **Table 3.1.2** shows the monitoring stations and the most recent Q-value status. **Figure 3.4** shows the location of the site and WFD water quality from the last monitoring programme.

The proposed development is located over a Regionally Important Sand/Gravel Aquifer with High Vulnerability. There are no wells or springs located within or adjacent to the site boundary. Subsoil permeability is described as high. The groundwater body is Kilkenny-Ballynakill Gravels (EPA Code: IE_SE_G_163) and is listed as "Not at risk".

TABLE 3.1.1 SURFACE WATERBODIES AND WFD STATUS		
RIVER	CODE	OVERALL WFD STATUS
NORE_190	IE_SE_15N011900	Not At Risk

TABLE 3.1.2 MONITORING STATIONS			
NAME	STATION CODE	Q VALUE STATUS	APPROX. LOCATION FROM SITE
St John's Br, Kilkenny	RS15N011900	Moderate	180 m Downstream (E)
Footbridge d/s of Brewery Br.	RS15B020810	Poor	187 Upstream (NW)
1 km u/s Green's Br, Kilkenny	RS15N011800	Moderate	1.2 km Upstream (NW)
Fennessy's Mill (Ossory Br)	RS15N011950	Moderate	1.2 km Downstream (SE)

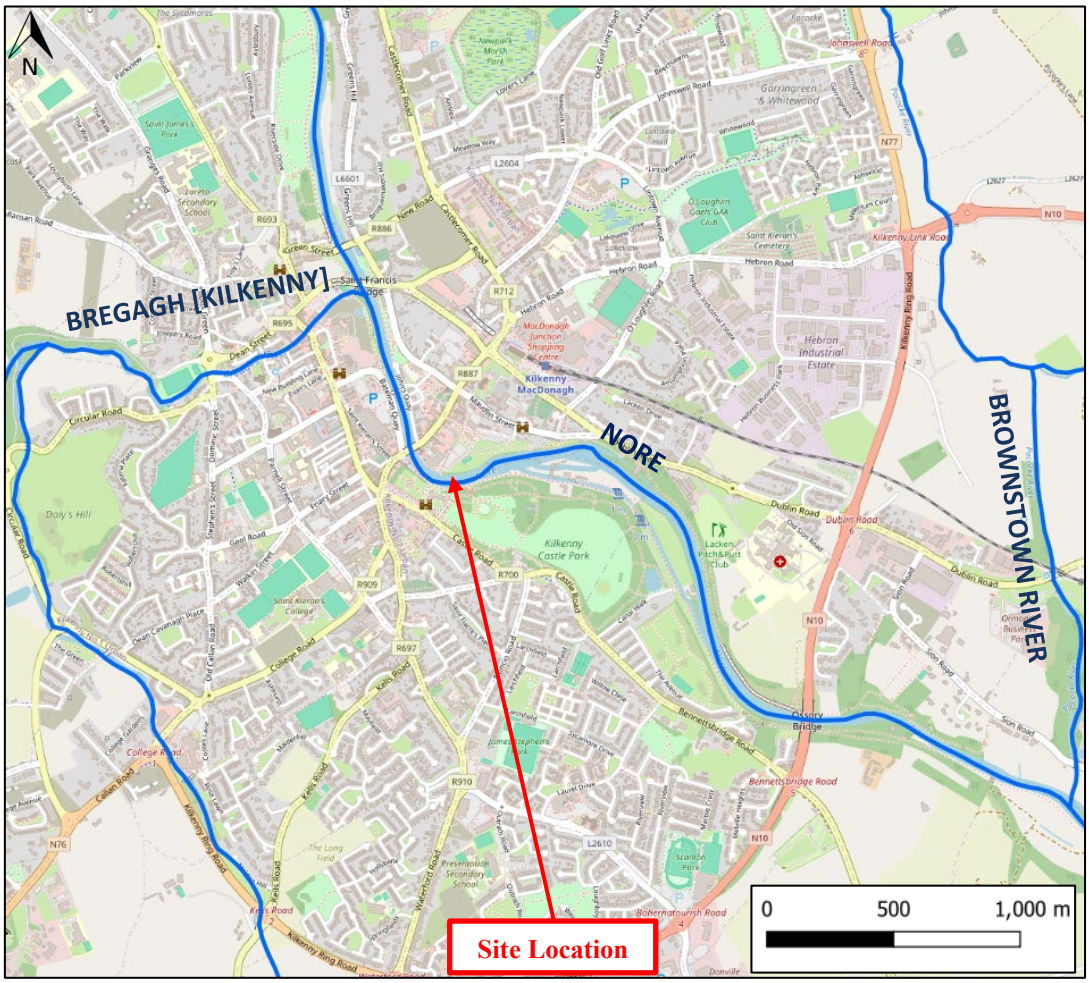


Figure 3.2: Mapped waterbodies within proximity to development site (Open Street Map ©)

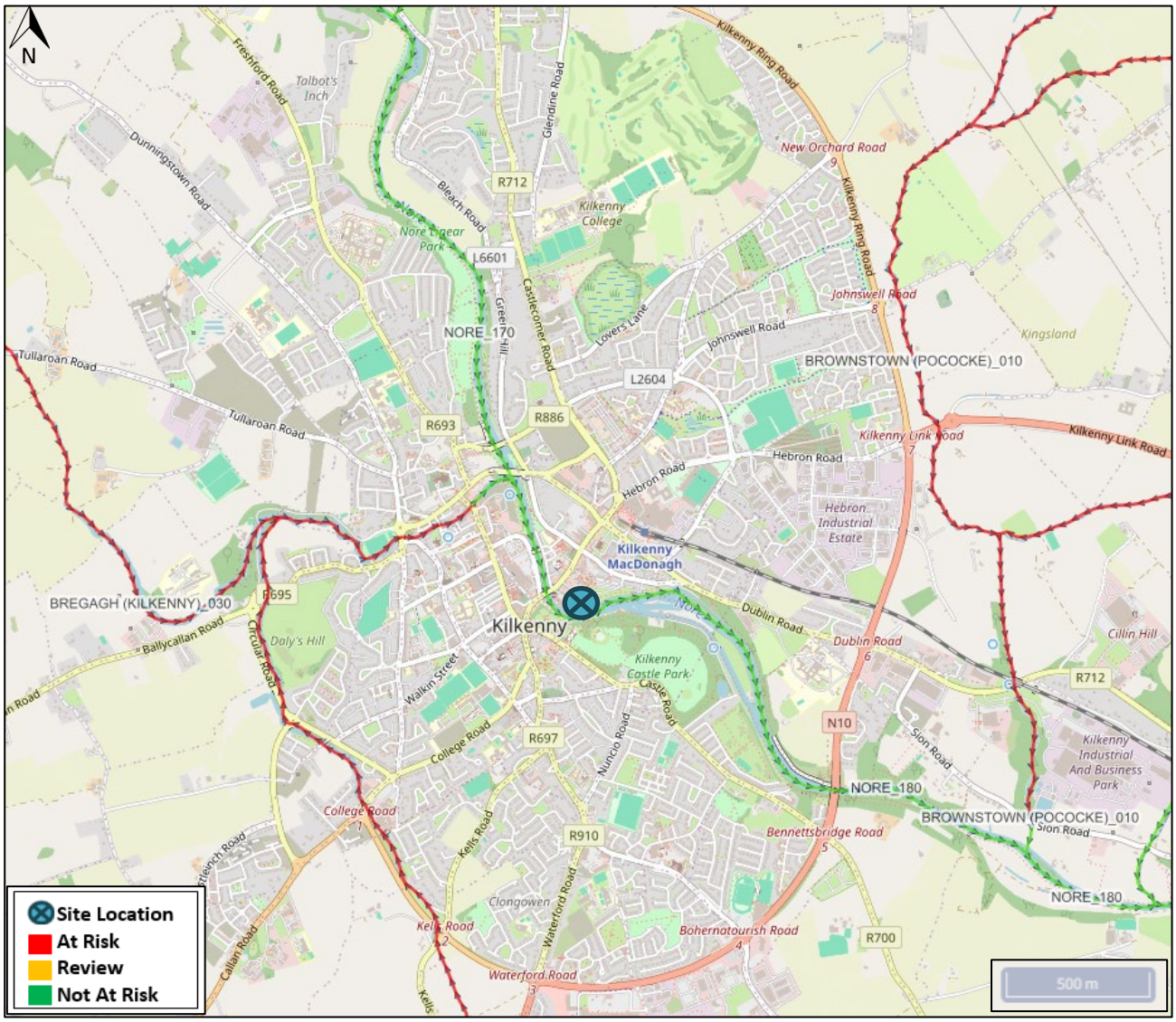


Figure 3.3: Water Quality Monitoring Programme (Open Street Map ©)

3.2 HABITATS AND SPECIES

Site characterisation assessments were undertaken in 2024, 2025 and 2026 to examine the ecological context of the development site by systematically walking the proposed site and boundaries and determining the habitats present. The habitat survey was undertaken in accordance with the standard methodology outlined in Fossitt's *A Guide to Habitats in Ireland*, a hierarchical classification scheme based on the characteristics of vegetation present. The Fossitt system also indicates when there are potential links with Annex I habitats of the EU Habitats Directive (92/43/EEC). Other guidance followed included the Heritage Council guidelines, *Best Practice Guidance for Habitat Survey and Mapping* (Smith *et al.*, 2011). Any species listed under the Flora (Protection) Order, 2022, or any Third Schedule invasive flora, will be noted and discussed in detail if found.

A full ecological site assessment will be contained within the Ecological Impact Assessment (Document Reference **EcIA RSE 0626**). There is a mixture of habitats within the site boundary, which are largely modified, such as buildings and artificial surfaces (**BL3**), amenity grassland (**GA2**) and dry meadows and grassy verges (**GS2**). Riparian woodland (**WN5**) and depositing/lowland river (**FW2**) are found along the

southern section of the site. Scattered trees and parkland (**WD5**) and flower beds and borders (**BC4**) are found in proximity to the site boundary. There are no species protected under the Flora (Protection) Order, 2022 within or along the boundary of the site. Third Schedule invasive species are located along the riparian zone of the River Nore outside the site boundary. All habitats within the boundary are of lower ecological value, with the exception of the River Nore, which is of high ecological value. The identified habitats at the proposed development site, as per the Fossitt habitat classification scheme, are summarised in **Table 3.2** below. See **Appendix** for the photo log of the ecological site assessment.

Table 3.2: Summary of Habitats Identified at the Proposed Development Site

HABITAT CLASSIFICATION HIERARCHY		
LEVEL 1	**LEVEL 2**	**LEVEL 3**
F Freshwater	**FW** Watercourses	**FW2** Depositing / lowland rivers
G – Grassland and marsh	**GA** – Improved grassland	**GA2** Amenity grassland
	GS Semi-natural grassland	**GS2** Dry meadows and grassy verges
W Woodland and scrub	**WN** Semi–natural woodland	**WN5** Riparian woodland
	WD Highly modified / non- native woodland	**WD5** Scattered trees and parkland
B Cultivated and built land	**BC** Cultivated land	**BC4** Flower beds and borders
	BL Built land	**BL3** Buildings and artificial surfaces

The accompanying Ecological Impact Assessment (Document Reference: **EcIA RSE 0626**) provides the wider ecological baseline for the proposed development, including the wintering bird survey, riparian fauna survey and bat survey. For the purposes of this NIS, the findings of those surveys have been used to inform the assessment of potential pathways for effects on the qualifying interests and special conservation interests of European sites, particularly Otter, Kingfisher, riparian habitats, water quality and disturbance within the River Nore corridor.

4.0 NATURA 2000 SITES WITHIN THE ZONE OF INFLUENCE

As per *Appropriate Assessment Screening for Development Management* (OPR, 2021), the Zone of Influence (ZoI) is the criterion for screening any potential impact on the Natura 2000 network. A Zone of Influence (ZoI) for a project is established on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors within the vicinity of the proposed development. The ZoI takes into account the potential for connectivity to ecological receptors through the Source-Pathway-Receptor (S-P-R) model and assesses potential impacts of the proposed development on both immobile and mobile qualifying interests of identified European sites. Functional pathways can include the use of an application site for foraging by a QI/SCI species of an SAC or SPA.

Table 4.1: List of European Sites Within Potential Zone of Influence

SITE NAME	DESIGNATION	SITE CODE	DISTANCE	S-P-R	FIGURE 4.1.1
River Barrow and River Nore	**SAC**	**002162**	**Within Site Boundary**	**Yes**	**1**
River Nore	**SPA**	**004233**	**Within Site Boundary**	**Yes**	**2**
Thomastown Quarry	SAC	002252	14.5 km SE	No	-
Seas off Wexford	SPA	004237	59 km SE	No	-
Hook Head	SAC	000764	60.5 km SE	No	-

The River Barrow and River Nore SAC (Site Code: 002162) and the River Nore SPA (Site Code: 004233) are considered to be within the Zone of Influence of the proposed development due to proximity and the type of development; both will be assessed further within this report. See **Figure 4.1.1** and **Figure 4.1.2** for locations relative to the proposed development site. See **Figure 4.2** for a map of the River Barrow and River Nore SAC and **Figure 4.3** for a map of the River Nore SPA.

Thomastown Quarry SAC (Site Code: 002252) is located approximately 14.5 km to the southeast of the proposed development site. The qualifying interest of this SAC is Petrifying springs with tufa formation (*Cratoneurion*) [7220], and this habitat is not found within or adjacent to the development site. There is no complete Source-Pathway-Receptor pathway between this designated SAC and the proposed development site; therefore, the proposed development has been screened out for likely significant effects on this SAC.

Seas off Wexford SPA (Site Code: 004237) is approximately 59 km to the southeast of the proposed development site. There is a hydrological connection to this SPA that is approximately 85 km downstream. Hook Head SAC (Site Code: 000764) is approximately 60.5 km to the southeast of the proposed development site. There is a hydrological connection to this SAC that is approximately 84 km downstream. Given the large hydrological distance between the proposed development at Kilkenny City and Seas off Wexford SPA and Hook Head SAC, there will be no significant impact on the qualifying interests of these SPA and SAC sites. In addition, Seas off Wexford SPA and Hook Head SAC are located in Waterford Harbour, which is subject to significant tidal influence from the Celtic Sea. Therefore, there is no complete Source-

Pathway-Receptor pathway between the proposed development and Seas off Wexford SPA or Hook Head SAC, and the proposed development has been screened out for likely significant effects on these protected sites. **Figures 4.1.1** and **4.1.2** below show Natura 2000 sites in proximity to the development, with **Table 4.1** indicating the assigned reference number for this report.

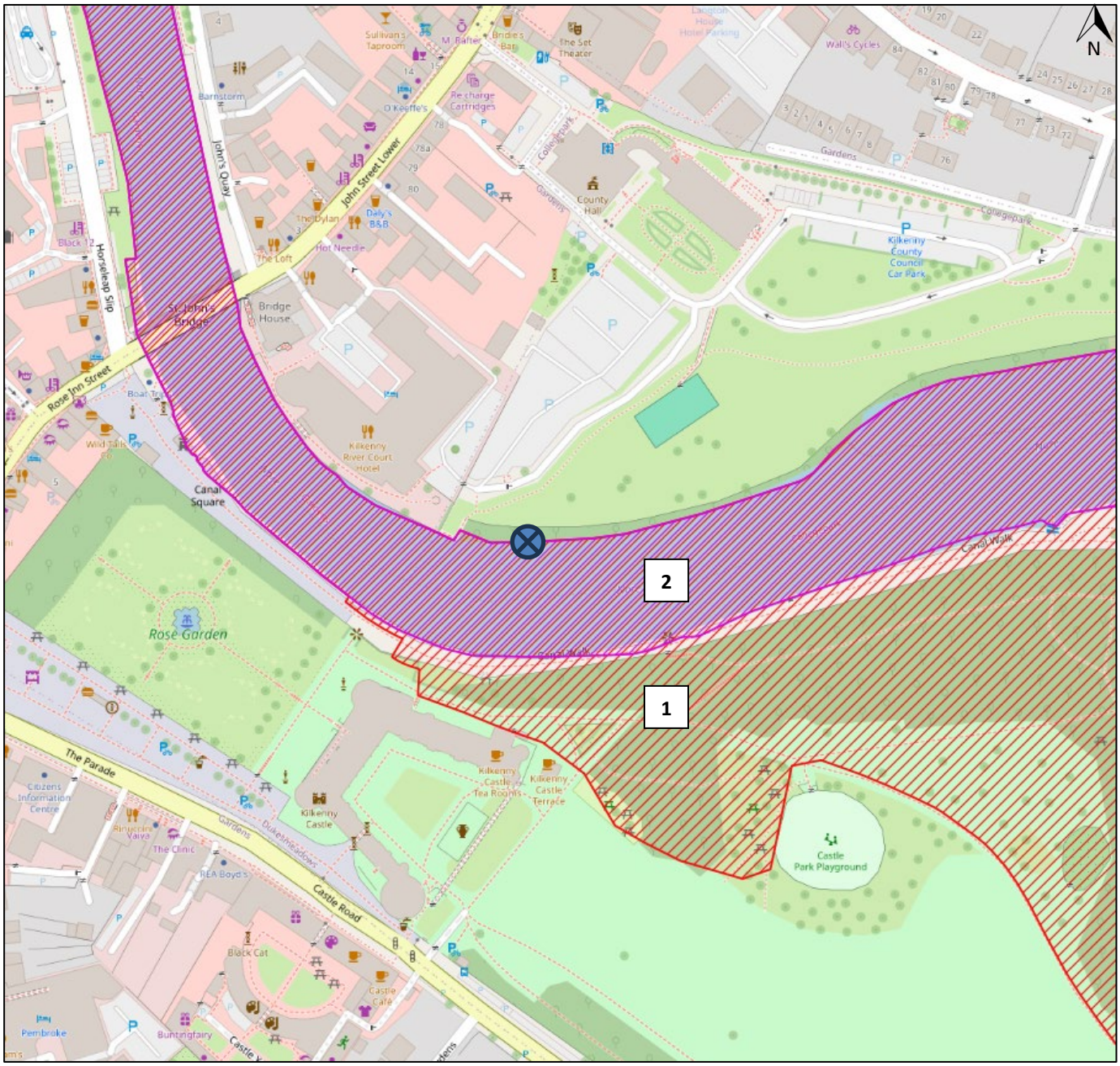
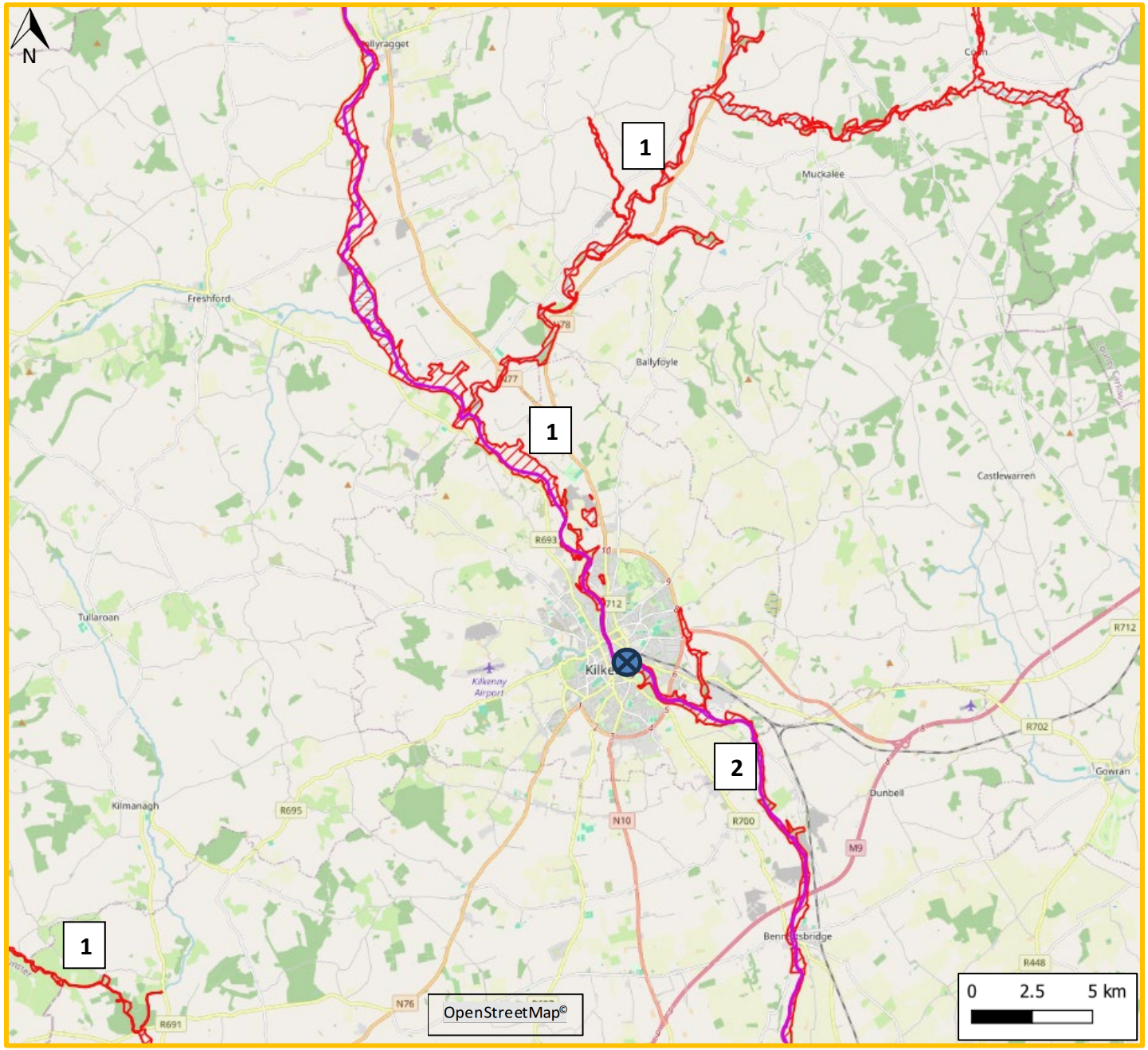


Figure 4.1.1: Location of proposed development and SAC/SPA in the ZOI



SPA

SAC

Site Location

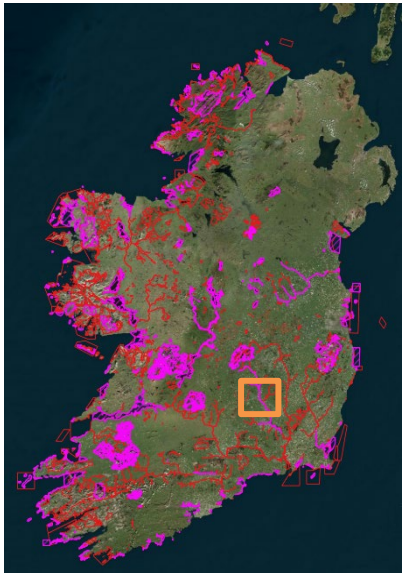


Figure 4.1.2: Location of proposed development at County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny and the Natura 2000 Network

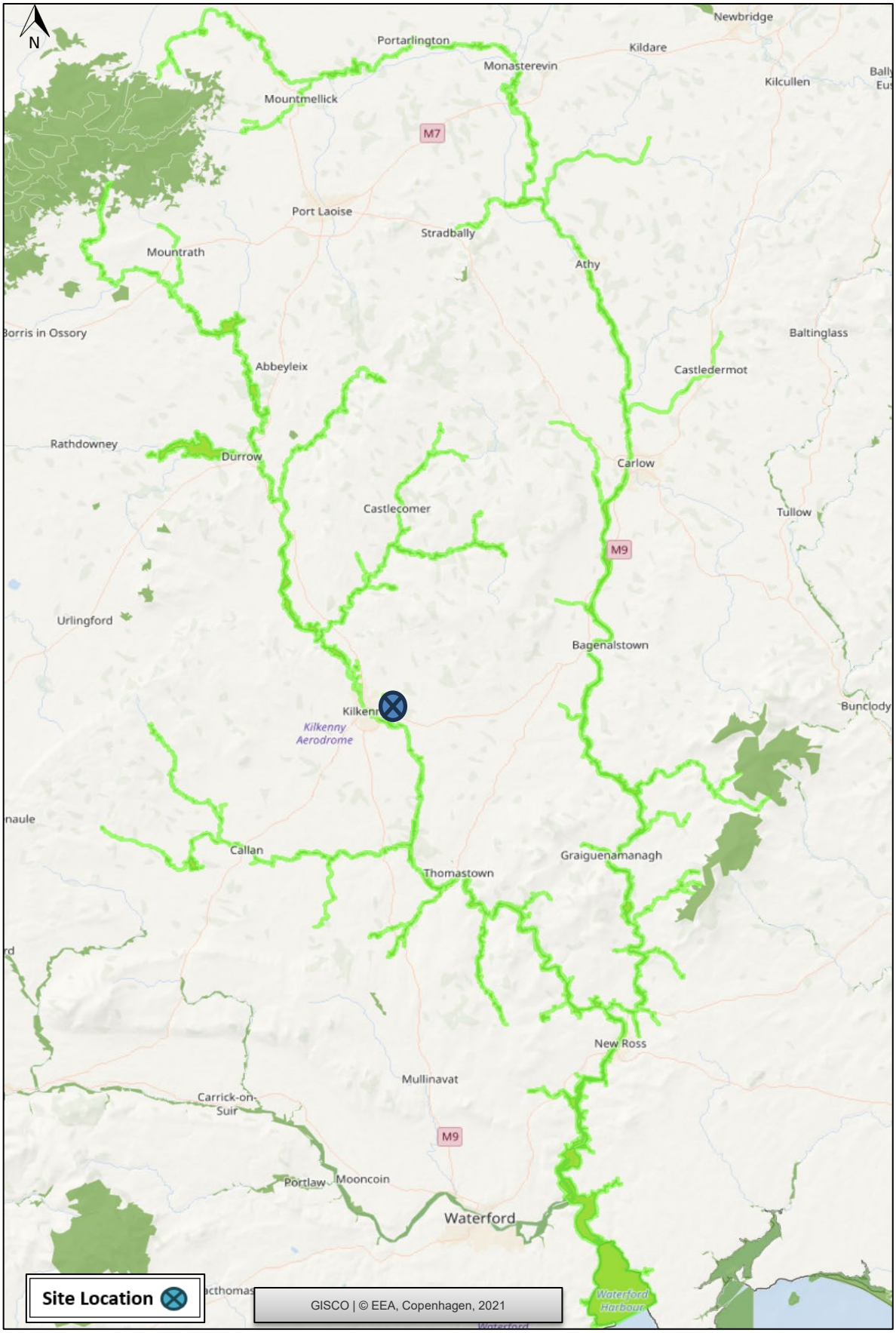


Figure 4.2: Full Map of River Barrow and River Nore SAC (highlighted in light green)

4.1 RIVER BARROW AND RIVER NORE SAC (SITE CODE: 002162)

This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. See **Figure 4.2**. As per **Table 4.2** below the site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

TABLE 4.2 QUALIFYING INTERESTS OF THE RIVER BARROW AND RIVER NORE SAC
HABITATS
Estuaries [**1130**]
Mudflats and sandflats not covered by seawater at low tide [**1140**]
Reefs [**1170**]
Salicornia and other annuals colonising mud and sand [**1310**]
Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [**1330**]
Mediterranean salt meadows (*Juncetalia maritimi*) [**1410**]
Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [**3260**]
European dry heaths [**4030**]
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [**6430**]
Petrifying springs with tufa formation (*Cratoneurion*) [**7220**] *
Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [**91A0**]
Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*) [**91E0**] *
SPECIES
Desmoulin's Whorl Snail (*Vertigo moulinsiana*) [**1016**]
Freshwater Pearl Mussel (*Margaritifera margaritifera*) [**1029**]
White-clawed Crayfish (*Austropotamobius pallipes*) [**1092**]
Sea Lamprey (*Petromyzon marinus*) [**1095**]
Brook Lamprey (*Lampetra planeri*) [**1096**]
River Lamprey (*Lampetra fluviatilis*) [**1099**]
Atlantic Salmon (*Salmo salar*) [**1106**]
Twaite Shad (*Alosa fallax fallax*) [**1103**]
Otter (*Lutra lutra*) [**1355**]
Killarney Fern (*Trichomanes speciosum*) [**6985**]

4.2 RIVER NORE SPA (SITE CODE: 004233)

The River Nore SPA is a long, linear site that includes the following river sections: the River Nore from the bridge at Townparks, (north-west of Borris in Ossory) to Coolnamuck (approximately 3 km south of Inistioge) in Co. Kilkenny; the Delour River from its junction with the River Nore to Derrynaseera bridge (west of Castletown) in Co. Laois; the Erkina River from its junction with the River Nore at Durrow Mills to Boston Bridge in Co. Laois; a 1.5 km stretch of the River Goul upstream of its junction with the Erkina River; the Kings River from its junction with the River Nore to a bridge at Mill Island, Co. Kilkenny. The

site includes the river channel and marginal vegetation. For a large part of its course the River Nore traverses Carboniferous limestone plains; it passes over a narrow band of Old Red Sandstone rocks below Thomastown, see **Figure 4.3**. As per **Table 4.3** below the site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species:

TABLE 4.3 QUALIFYING INTERESTS OF THE RIVER NORE SPA
SPECIES
Kingfisher (*Alcedo atthis*) [**A229**]

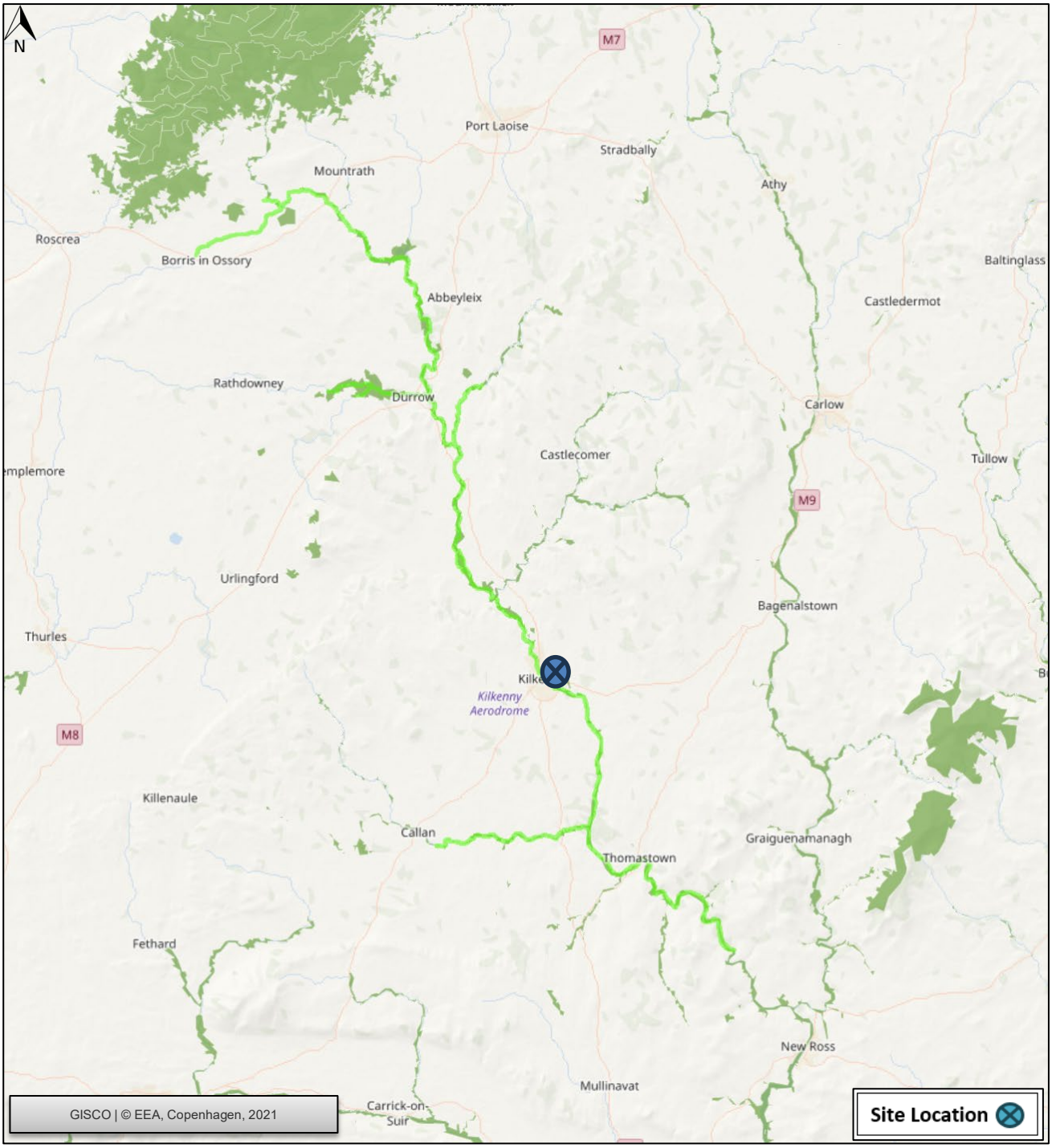


Figure 4.3: Full Map of River Nore SPA (highlighted in light green)

4.3 NATIONAL CONSERVATION STATUS OF QUALIFYING INTERESTS

As per the Habitats Directive, favourable conservation status of a habitat is achieved when its natural range and the areas it covers within that range are stable or increasing, when the specific structure and functions necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and when the conservation status of its typical species is favourable. Favourable conservation status of a species is achieved when population dynamics data indicate that the species is maintaining itself on a long-term basis as a viable component of its natural habitats, when the natural range of the species is neither being reduced nor likely to be reduced for the foreseeable future, and when there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. The conservation status of Kingfisher is listed as per Gilbert et al. (2021), *Birds of Conservation Concern in Ireland 2021–2026*. The conservation status of each habitat and species is listed in **Table 4.4** below.

QUALIFYING INTERESTS	CONSERVATION STATUS
HABITATS	
[1130] Estuaries	Bad
[1140] Tidal Mudflats and Sandflats	Inadequate
[1170] Reefs	Bad
[1330] Atlantic Salt Meadows (*Glauco-Puccinellietalia maritimae*)	Bad
[1410] Mediterranean salt meadows (*Juncetalia maritimi*)	Inadequate
[3260] Floating River Vegetation	Inadequate
[4030] Dry Heath	Bad
[6430] Hydrophilous tall-herb swamp	Bad
[7220] Petrifying Springs	Inadequate
[91A0] Old Oak Woodlands	Bad
[91E0] Alluvial Forests	Bad
SPECIES	
[1016] Desmoulin's Whorl Snail (*Vertigo moulinsiana*)	Inadequate
[1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)	Bad
[1092] White-clawed Crayfish (*Austropotamobius pallipes*)	Bad
[1095] Sea Lamprey (*Petromyzon marinus*)	Bad
[1096] Brook Lamprey (*Lampetra planeri*)	Favourable
[1099] River Lamprey (*Lampetra fluviatilis*)	Inadequate
[1103] Twaite Shad (*Alosa fallax*)	Bad
[1106] Atlantic Salmon (*Salmo salar*)	Bad
[1355] Otter (*Lutra lutra*)	Favourable
[6985] Killarney Fern (*Trichomanes speciosum*)	Favourable
BIRDS	
[A229] Kingfisher (*Alcedo atthis*)	Amber

5.0 ASSESSMENT OF POTENTIAL IMPACTS TO NATURA 2000 SITES

The threats to the integrity of the European sites and the potential impacts that could arise as a result of the proposed development have been grouped into the following categories, which are used to scope the potential impacts on the qualifying interests of each site within the Zone of Influence. See Tables **5.1** (**All Qualifying Interests**) and **5.2** (**Qualifying Interests Within the Zone of Influence**). Impacts on a Natura 2000 site can arise from, for example:

- Direct habitat loss within a European site where development occurs on undeveloped land.
- Indirect effects on the ecological networks supporting European sites (developments that cut off ecological corridors).
- Indirect threats to environmental quality, including changes to surface water and groundwater quality.
- Direct/Indirect threats to European sites by invasive species.

Under Regulation 49(2) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), save in accordance with a licence granted under paragraph (7), any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place specified in relation to any plant included in Part 1 of the Third Schedule shall be guilty of an offence. Materials containing invasive species are considered "controlled waste" and, as such, there are legal restrictions on their handling and disposal. Under Regulation 49(7), it is a legal requirement to obtain a licence to move "vector materials" listed in the Third Schedule, Part 3. The following Third Schedule invasive flora were recorded in the NBDC hectad S55: American Skunk-cabbage (*Lysichiton americanus*), Canadian Waterweed (*Elodea canadensis*), Giant Hogweed (*Heracleum mantegazzianum*), Giant-rhubarb (*Gunnera tinctoria*), Indian Balsam (*Impatiens glandulifera*), Nuttall's Waterweed (*Elodea nuttallii*), Japanese Knotweed (*Fallopia japonica*) and Three-cornered Garlic (*Allium triquetrum*). There are no Third Schedule invasive species within the site boundary. Indian Balsam (*Impatiens glandulifera*), Spanish Bluebell (*Hyacinthoides hispanica*) and Giant Hogweed (*Heracleum mantegazzianum*) were observed along the banks of the River Nore downstream of the proposed development. Measures to prevent the spread of these invasive species will be required if found within the site boundary during the construction phase and during the operational phase of the facility and will also be outlined in the accompanying Visitor Management Plan.

There is potential for disturbance to habitats and species of the River Barrow and River Nore SAC and the River Nore SPA during both the construction and operational phases of the proposed development, including operational disturbance of riparian habitats from increased recreational use. This potential impact will be assessed in **Table 5.1** below.

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
RIVER BARROW AND RIVER NORE SAC			
HABITATS			
[1130] Estuaries	Estuaries are coastal inlets with a significant freshwater influence. They are diverse, dynamic habitats that help maintain the health of coastal ecosystems. They are a significant resource for bird and mammal species for feeding, breeding, and resting, and depending on their geomorphology and hydrology support a mosaic of other habitats, including Annex I habitats such as mudflats. Boulder and cobble beds frequently fringe the edges of estuaries, and intertidal mudflats are often associated with the margins of estuaries where the tidal influence is stronger (NPWS, 2025). One of the most important factors in the prevailing estuarine conditions is the degree of fresh and saltwater mixing and the rate at which this mixing occurs (NPWS, 2025). The proposed development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). The closest example of this habitat is 32 km downstream at Inistioge. **The Conservation Objectives for this qualifying interest include water quality attributes; therefore, potential water quality effects will be considered further in Table 5.2.**	**YES**	**YES**
[1140] Tidal Mudflats and Sandflats	Tidal mudflats and sandflats habitat is comprised of the intertidal section of the coastline where sands and muds dominate. They are dynamic ecosystems, dependent on the balance of natural accretion and erosion. The fundamental building block of this habitat is sediment ranging from around 1µm to 2mm. The finer silt and clay sediments are dominant in mudflats and the larger sand fractions are associated with areas exposed to significant wave energy. A range of physical pressures operate in these habitats including dynamic fluctuations in salinity, temperature, and immersion (NPWS, 2025). Small sediment grains can be very closely packed, and the consequent minimal exchange of water may lead to oxygen deprivation of underlying sediments. Sandflats associated with larger estuaries are frequently shaped by locally generated or coastal wind-waves (NPWS, 2025). The proposed development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). The closest example of this habitat is c. 52km downstream that is past the confluence with the River Barrow. Given the hydrological distance and type of development it is unlikely that works within the site boundary could cause a significant impact to water quality in the tidal zone of an estuary therefore the development has been screened out for a likely significant impact to this habitat.	**NONE**	**NO**
[1170] Reefs	Reefs are widespread marine features with immobile hard substrates available for colonisation by epifauna. Reef habitat in Irish waters ranges from the intertidal to 4,500 m below the sea surface and out to the 200 nautical miles limit. Factors influencing this habitat include tidal immersion, influence of freshwater, variation in temperature, desiccation, exposure to waves, stability of substrate, and weathering of substrate (NPWS, 2025). The proposed development is located within the current known distribution and favourable reference range	**NONE**	**NO**

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
	of this qualifying interest (NPWS, 2025). The closest example of this habitat is c. 78km downstream that is past the confluence with the Rivers Barrow and Suir. Given the hydrological distance and type of development it is unlikely that works within the site boundary could cause a significant impact to water quality in the tidal zone of an estuary therefore the development has been screened out for a likely significant impact to this habitat.		
[1310] *Salicornia* and other annuals colonising mud and sand	Salicornia and other annuals colonising mud and sand is a pioneer saltmarsh community that may occur on muddy sediment seaward of established saltmarsh, or form patches within other saltmarsh communities where the elevation is suitable and there is regular tidal inundation. Flora found here are tolerant of saline conditions. Mono-specific swards of *Salicornia* spp. growing on muddy sediments are the most common plant community of this habitat found in Ireland (NPWS, 2025). *Salicornia* is an annual species, so its distribution can vary significantly from year to year (NPWS, 2012). Mapped with [1330] Atlantic Salt Meadows. The proposed development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). The closest example of this habitat is c. 68km downstream that is past the confluence with the River Barrow. Given the hydrological distance and type of development it is unlikely that works within the site boundary could cause a significant impact to water quality in the tidal zone of an estuary therefore the development has been screened out for a likely significant impact to this habitat.	**NONE**	**NO**
[1330] Atlantic Salt Meadows (*Glauco-Puccinellietalia maritimae*)	Atlantic salt meadows generally occupy the widest part of the saltmarsh gradient. They also contain a distinctive topography with an intricate network of creeks and salt pans occurring on medium and large-sized saltmarshes. Atlantic salt meadows contain several distinctive zones that are related to elevation and submergence frequency. Atlantic salt meadows are distributed around most of the coastline of Ireland (NPWS, 2025). This habitat is also important for other wildlife including wintering waders and wildfowl (NPWS, 2025). The proposed development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). The closest mapped example of this habitat is c. 68km downstream that is past the confluence with the River Barrow. Given the hydrological distance and type of development it is unlikely that works within the site boundary could cause a significant impact to water quality in the tidal zone of an estuary therefore the development has been screened out for a likely significant impact to this habitat.	**NONE**	**NO**
[1410] Mediterranean salt meadows (*Juncetalia maritimi*) [9]	Mediterranean salt meadows occupy the upper zone of saltmarshes and usually occur adjacent to the boundary with terrestrial habitats. They are widespread on the Irish coastline; however, they are not as extensive as Atlantic salt meadows. There are still areas of unmapped habitat in the country, mostly in the form of narrow fringes along the shoreline in places (NPWS, 2025). The development is located outside the current known distribution and favourable reference range of these qualifying interests (NPWS, 2019a). The proposed	**None**	**No**

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
	development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). The closest example of this habitat is c. 68km downstream that is past the confluence with the River Barrow. Given the hydrological distance and type of development it is unlikely that works within the site boundary could cause a significant impact to water quality in the tidal zone of an estuary therefore the development has been screened out for a likely significant impact to this habitat.		
[3260] Floating River Vegetation	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation has a broad definition, covering upland, flashy, oligotrophic, bryophyte- and algal-dominated rivers, to tidal reaches dominated by higher plants. In Ireland, the riverine areas of highest conservation interest are associated with lowland depositing and tidal rivers and unmodified, fast-flowing, low-nutrient rivers. The low-nutrient, high-velocity river types are associated with high bryophyte diversity, cascades, riffles, and riparian woodland (NPWS, 2025). The proposed development is located within the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). **The Conservation Objectives for this qualifying interest include water quality attributes; therefore, potential water quality effects will be assessed further in Table 5.2.**	**Yes**	**Yes**
[4030] Dry Heath	Dry heaths comprise vegetation dominated by ericaceous dwarf shrubs typically occurring on well-drained, nutrient-poor, acidic, mineral soils or on shallow peats and peaty podzols. Ling (*Calluna vulgaris*) is generally the main species, but Bell Heather (*Erica cinerea*), Western Gorse (*Ulex gallii*) and Bilberry (*Vaccinium myrtillus*) may also be important components. Dry heaths occur from sea level to around 400m, where they may transition to [4060] Alpine and Boreal heaths. The proposed development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). This habitat is not located within or along the site boundary and will not be impacted during the operational or construction phase of the development. Therefore, the development has been screened out for a likely significant impact to this habitat.	**None**	**No**
[6430] Hydrophilous Tall Herb Communities	Three distinct hydrophilous tall-herb swamp communities can be considered in Ireland. No. 1 is a lowland community of watercourses, particularly unmanaged edges of slow-moving rivers and the margins of lakes, dominated by tall hydrophilous herbs such as Wild Angelica (*Angelica sylvestris*), Meadowsweet (*Filipendula ulmaria*), Yellow Iris (*Iris pseudacorus*), Yellow Loosestrife (*Lysimachia vulgaris*), Purple-loosestrife (*Lythrum salicaria*) and Common Valerian (*Valeriana officinalis*). No. 2 is an upland community of ungrazed or lightly grazed cliff ledges. Small patches (<1 m across) occur on calcareous cliffs and on wet siliceous cliffs where there is some base enrichment from the water. Species include lady's-mantles (*Alchemilla* spp.), Wild Angelica, Marsh Hawk's-beard (*Crepis paludosa*), Meadowsweet (*Filipendula ulmaria*), Water Avens (*Geum rivale*) and Lesser Meadow-rue (*Thalictrum minus*). Pressures on the habitat include invasive species, agricultural intensification and drainage in the lowlands (NPWS, 2025). The proposed development is located outside the current known	**Yes**	**Yes**

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
	distribution, current range and favourable reference range of this qualifying interest (NPWS, 2025). The SAC Conservation Objectives report notes that the distribution of this habitat within the SAC is currently unknown, but it is considered to occur at some riverside woodlands, river islands and in narrow bands along the floodplain of slow-flowing river stretches. **The Conservation Objectives for this qualifying interest include invasive species; therefore, it will be assessed further in Table 5.2.**		
[7220] Petrifying Springs	Petrifying springs are lime-rich water sources where tufa is actively deposited and where characteristic species of bryophytes are dominant or abundant. The emerging spring water is rich in carbon dioxide and dissolved calcium carbonate. On contact with the atmosphere, carbon dioxide is outgassed, and calcium carbonate is deposited as tufa. The resulting ecological conditions, with high pH and constant inundation by water and deposition of precipitated calcium carbonate, constitute a challenging environment for plants and animals, and the communities associated with petrifying springs are therefore highly specialised. The ecological significance of petrifying springs is seldom confined to a point source; rather, there is often a continuum of intergrading hydrological conditions from the spring head, through a flushed slope and into small streams. Spring heads may be distinct point locations giving rise to small streams immediately below the point of emergence, or water may seep to the surface in a more diffuse pattern over a larger area (NPWS, 2025). The proposed development is located outside the current known distribution but within the current range and favourable reference range of this qualifying interest (NPWS, 2025). The nearest example of this qualifying interest is located c. 26km downstream. Given its location downstream on a different river catchment and that it is a groundwater dependent wetland habitat, it is not anticipated that the proposed development would have direct or indirect negative impacts upon this qualifying interest and therefore the proposed development has been screened out.	**None**	**No**
[91A0] Old Oak Woodlands	Typical species include the trees Sessile Oak (*Quercus petraea*), Holly (*Ilex aquifolium*), Downy Birch (*Betula pubescens*) and Rowan (*Sorbus aucuparia*); low woody species such as Honeysuckle (*Lonicera periclymenum*), Ivy (*Hedera helix*) and Bilberry (*Vaccinium myrtillus*); and ferns such as Buckler Ferns (*Dryopteris* spp.), Hard Fern (*Blechnum spicant*) and Great Woodrush (*Luzula sylvatica*). There are also many bryophytes (NPWS, 2025a). The development is located outside the current known distribution but within the favourable reference range of this qualifying interest (NPWS, 2025a). According to the SAC Conservation Objectives report, old oak woodlands are located approximately 17 km downstream (22 km hydrologically) along the River Nore at Thomastown. Old oak woodlands are a terrestrial habitat; therefore, a potential deterioration in water quality would not be anticipated to have a significant adverse impact on this qualifying interest should it be present closer to the proposed development. Water quality is not listed as a conservation objective for this qualifying	**Yes**	**Yes**

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
	interest. **The Conservation Objectives for this qualifying interest include invasive species; therefore, it will be assessed further in Table 5.2.**		
[91E0] Alluvial Forests*	A number of variants of Alluvial woodland habitat exist, of which riparian forests of Ash (*Fraxinus excelsior*) and Alder (*Alnus glutinosa*) (*Alno-Padion*). The herbaceous layer includes many large species such as Meadowsweet (*Filipendula ulmaria*), Wild angelica (*Angelica sylvestris*), Wood dock (*Rumex sanguineus*) and Sedges (*Carex* spp.). In addition, there are gallery forests of tall Willows (*Salicion albae*) alongside river channels and occasionally on river islands, where the tree roots are almost continuously submerged. There is a luxuriant herb layer of species such as Reed canary-grass (*Phalaris arundinacea*) and Common nettle (*Urtica dioica*) (NPWS, 2025a). The development is within the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). According to the SAC Conservation Objectives report, the closest example of Alluvial Forests [91E0] is approximately 1.5 km southeast of the proposed site (2.3 km hydrologically) along the River Nore. A potential deterioration in water quality would not be anticipated to have a significant adverse impact on this qualifying interest should it be present closer to the proposed development. **The Conservation Objectives for this qualifying interest include invasive species; therefore, it will be assessed further in Table 5.2.**	**Yes**	**Yes**
SPECIES			
[1016] Desmoulin's Whorl Snail (*Vertigo moulinsiana*)	*Vertigo moulinsiana* is the largest of all the Vertigo species, growing to between 2.2 and 2.7mm in height. All whorl snails favour damp or wet habitats, where they live mostly in moss, leaves and decaying vegetation. They feed on bacterial films and decaying vegetation. *V. moulinsiana* lives on living and dead stems and leaves of tall wetland plants. It has a requirement for tall, structured vegetation containing tall riparian grasses and sedges, particularly reeds. Sites are usually at the end of hydroseral succession and unmanaged, allowing the build-up of litter. As well as the tall vegetation structure of the habitats, *V. moulinsiana* requires a stable hydrology with the water table at, or slightly above, the ground surface for much of the year and very low-amplitude seasonal flooding. It climbs tall vegetation in the summer and autumn, but in severe conditions aestivates on the lower leaves of plants. In winter it descends to the litter level and becomes less active (NPWS, 2025). The proposed development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). Water quality is not listed as a conservation objective for this qualifying interest, there will be no works within habitat associated with this species therefore disturbance of this species won't occur. It is not anticipated that the proposed development would have direct or indirect negative impacts upon this qualifying interest and therefore the proposed development has been screened out.	**None**	**No**

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
[1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)	The Freshwater Pearl Mussel is a large, long-lived, bivalve mollusc found in clean, fast-flowing rivers. Individuals can grow to very large sizes relative to other freshwater molluscs, slowly building up thick calcareous shells in rivers with relatively soft water and low levels of calcium. In natural conditions, individual mussels can live to over a hundred years of age in Ireland. Mussels mature between seven and 15 years of age and have a prolonged fertile period lasting into old age. The species produces glochidial larvae that use a temporary salmonid host, typically Atlantic salmon and Sea Trout in Ireland, but also Brown Trout. Juvenile mussels occupy interstitial habitats in the riverbed for five years or more (NPWS, 2025). The proposed development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). **The Conservation Objectives for this qualifying interest include water quality attributes; therefore, potential water quality effects will be assessed further in Table 5.2.**	**Yes**	**Yes**
[1092] White-clawed Crayfish (*Austropotamobius pallipes*)	The White-clawed Crayfish is the only native crayfish species found in Ireland and is a relatively long-lived species with a maximum life of 10 years. It occurs in both streams and lakes in Ireland and requires relatively hard water with a pH of 7 or above and calcium concentrations of at least 5mg/l. White-clawed crayfish are omnivorous, with young crayfish more reliant than adults on animal foods. The proposed development site is located within the current distribution, current range and favourable reference range of this qualifying interest. The closest record for White-clawed Crayfish is downstream within the main channel of the River Nore at Ossory Bridge. **The Conservation Objectives for this qualifying interest include water quality attributes; therefore, potential water quality and biosecurity effects will be assessed further in Table 5.2.**	**Yes**	**Yes**
[1095] Sea Lamprey (*Petromyzon marinus*)	The life cycle of the Sea lamprey (*Petromyzon marinus*) contains both a marine phase and a freshwater phase. Adult sea lamprey at sea as external parasites on host fish or marine mammals grow in length from 60 to 100 cm before migrating in spring into freshwater to excavate redds or spawning nests in gravelled areas of large rivers. Egg laying follows nest excavation and the resulting larvae, called ammocoetes. The ammocoete is a filter feeder and retains its burrowing habit in fine-grained sediment over a period of years. Transformation to the young adult stage occurs in late summer and the juvenile sea lamprey can be found migrating downriver to estuarine waters and the open sea in late autumn – winter (NPWS, 2025). The proposed development is located outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). Lamprey sp. have been found throughout the Nore Catchment (Gordon et al 2021)**. The Conservation Objectives for this qualifying interest include water quality attributes potential water quality effects will be assessed further in Table 5.2.**	**Yes**	**Yes**
[1096] Brook Lamprey (*Lampetra planeri*)	In Ireland, Brook Lamprey typically reach no more than 15–18 cm in length. The Brook Lamprey is non-parasitic and non-migratory as an adult, living its entire life in freshwater. Adults spawn in spring, excavating shallow nests	**Yes**	**Yes**

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
	in relatively small-sized gravels in areas of reduced flow. The adult fish die after spawning. River and Brook Lamprey are indistinguishable as larvae, living as filter feeders in sediment. Lamprey surveys have necessarily focused on juvenile lamprey. Consequently, the vast majority of available data relates to "*Lampetra* sp." and cannot be assigned to one species or the other. The proposed development is located within the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). Lamprey sp. have been found in the Nore Catchment (Gordon et al., 2021). **The Conservation Objectives for this qualifying interest include water quality attributes; therefore, potential water quality effects will be assessed further in Table 5.2.**		
[1099] River Lamprey (*Lampetra fluviatilis*)	The River Lamprey (*Lampetra fluviatilis*) breeds in freshwater rivers and streams. Adults spawn in spring, excavating shallow nests in riverine sections comprising fine gravels and small stones. The ammocoetes drift or swim downstream to areas of riverbed or margins with fine silt deposits. They burrow into this bed material where they live as filter feeders over a period of years before transforming into young adult fish and migrating downriver to estuarine and marine habitats. As adults, they are parasitic, attaching to and feeding on larger fish in coastal waters. Lamprey surveys have necessarily focused on juvenile lamprey. Consequently, the vast majority of available data relates to "*Lampetra* sp." and cannot be assigned to one species or the other. The proposed development is outside the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). Lamprey sp. have been found throughout the Nore Catchment (Gordon et al., 2021). **The Conservation Objectives for this qualifying interest include water quality attributes; therefore, potential water quality effects will be assessed further in Table 5.2.**	**Yes**	**Yes**
[1103] Twaite Shad (*Alosa fallax*)	The Twaite Shad (*Alosa fallax fallax*) is a diadromous species, spending most of its life in estuaries and coastal waters but returning upriver to spawn in late May/early June. Limited knowledge indicates that Irish Twaite Shad may live in estuarine waters for at least two full years prior to going to sea. The nearest records for Twaite Shad are located approximately 32 km downstream from the proposed development site. Artificial barriers block the upstream migration of Twaite Shad, thereby limiting the species to lower stretches and restricting access to spawning areas. Therefore, the development has been screened out for a likely significant impact to this species.	**None**	**No**
[1106] Atlantic Salmon (*Salmo salar*)	The Atlantic Salmon (*Salmo salar*) is indigenous to the North Atlantic (NPWS, 2025). While at sea, adult salmon are steel-blue or silver in colour. Salmon that mature after one year at sea are called *grilse* and usually return to rivers in the summer. Bigger, older fish that return after multiple winters at sea are often called *springers* and usually return to rivers in the spring or early summer. In Ireland, juvenile salmon usually stay in the river for two to three years. After hatching as larvae called *alevins*, immature salmon develop into *fry* in their first year and	**Yes**	**Yes**

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
	then into *parr* in their second and subsequent years in the river (IFI, 2026). The proposed development is within the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). Salmon have been found throughout the Nore Catchment (Gordon et al., 2021). **The Conservation Objectives for this qualifying interest include water quality attributes; therefore, it will be assessed further in Table 5.2.**		
[1355] Otter (*Lutra lutra*)	The Otter is an opportunistic predator with a broad and varied diet. In freshwater areas, a variety of fish from sticklebacks to salmon and eels will be taken, while crayfish and frogs can be important locally or seasonally. Terrestrial prey is taken infrequently, with birds occurring in just 3% of spraints, and mammals occurring even more rarely. Otter cubs may be born at any time of year. They are born in natal holts, which tend to be especially well hidden, usually far from other otter traffic to avoid potential aggression. Holts and couches may be found some distance from freshwater, but most are within the immediate area of riparian vegetation. Otters can occasionally be found some distance from a stream or lake. In certain areas, the availability of frogs, particularly in springtime, will draw otters to marshes and ponds several hundred metres from their usual territory (NPWS, 2025). The proposed development is within the current known distribution and favourable reference range of this qualifying interest (NPWS, 2025). This species was directly observed foraging along the River Nore and by trail camera during the ecological surveys in 2026. **The Conservation Objectives for this qualifying interest include water quality, prey availability and potential disturbance; therefore, it will be assessed further in Table 5.2.**	**Yes**	**Yes**
[6985] Killarney Fern (*Trichomanes speciosum*)	The Killarney Fern is a type of filmy fern, with characteristically thin, membranous, translucent fronds. This fern grows in deeply shaded, humid areas such as dripping caves, crevices and overhangs of cliffs, within stream gullies, by waterfalls and on the floor of damp woodlands. This species is not located within or along the site boundary and will not be impacted during the operational or construction phase of the development. Therefore, the development has been screened out for a likely significant impact to this species.	**None**	**No**
RIVER NORE SPA			
[A229] Kingfisher (*Alcedo atthis*)	Likely to be found along the banks of the River Nore up and downstream of the proposed site and with records of activity and Kingfisher observed during the ecological site assessments in 2026. This bird will sit on a favoured tree branch or post that it will dive from into the water to catch its prey. It kills its prey by beating it off the branch. Feeds on small fish such as minnows, sticklebacks and juvenile fish. The lifespan of a Kingfisher is typically 2 years. They nest in burrows in the muddy banks of a river. Breeding is from mid-April to mid-July and eggs hatch after 20 days, chicks are fledged after 25 days. Multiple broods are common within one season. A significant impact on water quality could indirectly impact upon this qualifying interest by reducing prey	**Yes**	**Yes**

TABLE 5.1 ALL QUALIFYING INTERESTS			
QUALIFYING INTEREST	**DESCRIPTION AND LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE**	**POTENTIAL FOR IMPACTS**	**FURTHER EXAMINATION**
	populations and availability. Disturbance to riverbanks, nesting habitat or foraging areas may also affect Kingfisher. **Potential impacts relating to water quality, prey availability and disturbance will therefore be assessed further in Table 5.2.**		

TABLE 5.2 QUALIFYING INTERESTS WITHIN THE ZONE OF INFLUENCE			
Conservation Objectives	**Threats and Pressures (NPWS, 2025)**	**Key Environmental Conditions (NPWS, 2025)**	**Potential Impacts from Development**
RIVER BARROW AND RIVER NORE SAC			
INFLUENCE (ON AREA OR HABITAT CONDITION) LISTED AS: HIGH (H), MEDIUM (M), LOW (L)			
To maintain the favourable conservation condition of [1130] **Estuaries**	• Agricultural activities generating pollution to surface or ground waters (including marine): (**M**) • Shipping lanes, ferry lanes and anchorage infrastructure (e.g. canalisation, dredging): (**L**) • Marine fish and shellfish harvesting activities causing physical loss and disturbance of seafloor habitats: (**L**) [1130]: The main factor to increased nutrient enrichment on estuarine waters is diffuse pollution from agricultural and forestry activities and wastewater discharges.	<u>Key Conservation Measures</u> • Management of professional/commercial fishing, shellfish and seaweed harvesting (incl. restoration of habitats) • Manage the use of natural and synthetic fertilisers as well as chemicals in agricultural for plant and animal production • Reduce/eliminate point or diffuse source pollution to surface or ground waters (including marine) from agricultural activities	• Water quality The hydrological distance is c.32km downstream. It is unlikely that works within the site boundary would significantly impact on water quality of the estuary of the River Nore downstream. The development has been screened out.
To maintain the favourable conservation condition of [3260] **Floating River Vegetation**	• Agricultural activities generating pollution to surface or ground waters (including marine) (**H**) • Drainage for use as agricultural land Ongoing and likely to be in the future (**H**)	<u>Key Conservation Measures</u> • Manage the use of natural and synthetic fertilisers as well as chemicals in agricultural for plant and animal production. • Reduce/eliminate point or diffuse source pollution to surface or ground waters	• Water quality **As construction works will take place within and in proximity to the River Nore, mitigation measures to prevent a significant impact to water quality of the River Nore will be required during the construction phase.**

TABLE 5.2 QUALIFYING INTERESTS WITHIN THE ZONE OF INFLUENCE			
Conservation Objectives	**Threats and Pressures (NPWS, 2025)**	**Key Environmental Conditions (NPWS, 2025)**	**Potential Impacts from Development**
	• Agricultural crops for renewable energy production (**H**) • Forestry activities generating pollution to surface or ground waters (including marine) (**H**) • Peat extraction (**M**) • Residential and commercial activities and structures generating pollution to surface or ground waters (**M**) • Industrial activities and structures generating pollution to surface or ground waters (**M**) • Modification of hydrological flow (mixed or unknown drivers) (**M**) • Physical alteration of water bodies (mixed or unknown drivers) (**M**) • Abstraction from groundwater, surface water or mixed water (mixed or unknown drivers) (**L**)	(including marine) from agricultural activities. • Reduce/eliminate pollution to surface or ground waters from commercial, residential and recreational areas and activities, and from industrial activities and structures. • Reduce impact of mixed source pollution	
To maintain the favourable conservation condition of [6430] **Hydrophilous Tall Herb Communities**	• Invasive alien species of Union concern and other invasive alien species (**H–L**) • Mowing, cutting, abandonment of management, overgrazing or undergrazing of grasslands (**M–L**) • Drainage for agricultural land and other hydrological changes (**M–L**) • Sports, tourism and leisure activities or infrastructure (**M–L**)	• Reduce/eliminate point or diffuse source pollution to surface or ground waters (including marine) from agricultural activities Early detection and rapid eradication of invasive alien species of Union concern	• Habitat disturbance • Invasive species Operational recreational use has the potential to cause localised disturbance, trampling or erosion of riparian tall herb vegetation if access is not controlled. There is also potential for Third Schedule invasive species to be introduced or spread through contaminated equipment, footwear, clothing or other user activity. **Mitigation measures to prevent**

TABLE 5.2 QUALIFYING INTERESTS WITHIN THE ZONE OF INFLUENCE			
Conservation Objectives	**Threats and Pressures (NPWS, 2025)**	**Key Environmental Conditions (NPWS, 2025)**	**Potential Impacts from Development**
	• Application of fertilisers and other agricultural pressures (**L**)		**habitat disturbance and the spread of invasive species will be required.**
To restore the favourable conservation condition of (**i**) [91A0] **Oak Woodlands** To restore the favourable conservation condition of (**ii**) [91E0] **Alluvial Forests**	• Logging, thinning, removal of dead or dying trees, and loss of natural regeneration (**H–L**) • Invasive alien species, problematic native species, plant diseases, pathogens and pests (**H–M**) • Drainage, hydrological modification and agricultural pressures including grazing or fertiliser application (**M–L**) • Sports, tourism, leisure activity, waste deposition, harvesting/collection, vandalism or fire (**L**) • Storm or cyclone events affecting woodland structure (**H**)	<u>Key Conservation Measures</u> • Adapt/manage reforestation and forest regeneration: (i) (ii) • Adapt/change forest management and exploitation practices: (i) • Management, control or eradication of other invasive alien species: (i) (ii) • Management of problematic native species: (i) (ii)	• Habitat disturbance • Invasive species Operational recreational use has the potential to cause localised disturbance, trampling or erosion at woodland edges and riparian woodland habitat if access is not controlled. There is also potential for Third Schedule invasive species to be introduced or spread into woodland edge habitats through contaminated equipment, footwear, clothing or other user activity. **Mitigation measures to prevent habitat disturbance and the spread of invasive species will be required.**
To restore the favourable conservation condition of [1029] **Freshwater Pearl Mussel** (*Margaritifera margaritifera*)	• Conversion into agricultural land (excluding drainage and burning): (**H**) • Agricultural activities generating pollution to surface or ground waters (including marine) : (**H**) • Livestock farming generating pollution: (**H**) • Drainage for use as agricultural land: (**H**) • Conversion to forest from other land uses, or afforestation (excluding drainage) : (**H**)	Freshwater Pearl Mussels are sensitive to sedimentation and nutrient enrichment. Furthermore, as the larval stages rely on salmonid fish hosts, any potential impact on salmonids can have an impact upon the Freshwater Pearl Mussel. <u>Key Conservation Measures</u> • Manage agricultural drainage and water abstraction (incl. the restoration of drained or hydrologically altered habitats)	• Water quality **As construction works will take place within and in proximity to the River Nore, mitigation measures to prevent a significant impact to water quality of the River Nore will be required during the construction phase.**

TABLE 5.2 QUALIFYING INTERESTS WITHIN THE ZONE OF INFLUENCE			
Conservation Objectives	**Threats and Pressures (NPWS, 2025)**	**Key Environmental Conditions (NPWS, 2025)**	**Potential Impacts from Development**
	• Forestry activities generating pollution to surface or ground waters (including marine) • Physical alteration of water bodies for forestry (including dams): (**H**) • Drainage for forestry: (**H**) • Peat extraction: (**H**) • Residential and commercial activities and structures generating pollution to surface or ground waters: (**H**) • Modification of flooding regimes, flood protection for built-up areas: (**H**) • Active abstraction of water for built up areas • Extraction of minerals (e.g. rock, metal ores, gravel, sand, shell): (**M**) • Wind, wave and tidal power (including infrastructure): (**M**) • Hydropower (dams, weirs, run-off-the-river and respective infrastructure): (**M**) • Drainage, land reclamation and conversion of wetlands, marshes, bogs, etc. for built-up areas: (**M**)	• Reduce/eliminate point or diffuse source pollution to surface or ground waters (including marine) from agricultural activities • Manage the use of natural and synthetic fertilisers as well as chemicals in agricultural for plant and animal production • Prevent conversion of (semi-) natural habitats into forests and of (semi-) natural forests into intensive forest plantation • Reinforce populations of species from the directives	
To restore the favourable conservation condition of (**i**) [1095] **Sea Lamprey** (*Petromyzon marinus*)	• Hydropower (dams, weirs, run-off-the-river), including infrastructure: (i) (iii) (**H**) • Marine fish and shellfish harvesting causing reduction of species/prey populations and disturbance of species (professional): (i) (iii) (**H**)	<u>Key Conservation Measures</u> • Manage the use of natural and synthetic fertilisers as well as chemicals in agricultural for plant and animal production: (i) (ii) (iii) • Reduce/eliminate point or diffuse source pollution to surface or ground waters (including marine) from agricultural activities: (i) (ii) (iii)	• Water quality **As construction works will take place within and in proximity to the River Nore, mitigation measures to prevent a significant impact to water quality of the River Nore will be required during the construction phase.**

TABLE 5.2 QUALIFYING INTERESTS WITHIN THE ZONE OF INFLUENCE			
Conservation Objectives	**Threats and Pressures (NPWS, 2025)**	**Key Environmental Conditions (NPWS, 2025)**	**Potential Impacts from Development**
To maintain the favourable conservation condition of (**ii**) [1096] **Brook Lamprey** (*Lampetra planeri*)' To restore the favourable conservation condition of (**iii**) [1099] **River Lamprey** (*Lampetra fluviatilis*)	• Temperature changes and extremes due to climate change: (i) (iii) (**H**), (ii) (**L**) • Old barriers or other obsolete infrastructures (mixed or unknown drivers): (i) (iii) (**H**), (ii) (**L**) • Application of natural or synthetic fertilisers on agricultural land: (i) (**H**), (iii) (**M**), (ii) (**L**) • Agricultural activities generating pollution to surface or ground waters (including marine): (i) (iii) (**M**), (ii) (**L**) • Drainage for use as agricultural land: (i) (iii) (**M**), (ii) (**L**) • Clear-cutting, removal of all trees: (ii) (**L**) • Hydropower (dams, weirs, run-off-the-river and respective infrastructure): (ii) (**L**) • Shipping lanes, ferry lanes and anchorage infrastructure (e.g. canalisation, dredging): (i) (iii) (**M**), (ii) (**L**) • Residential and commercial activities and structures generating pollution to surface or ground waters: (i) (iii) (**M**), (ii) (**L**) • Marine fish and shellfish harvesting causing reduction of species/prey populations and disturbance of species (recreational): (i) (iii) (**M**) • Changes in precipitation regimes due to climate change: (i) (iii) (**M**), (ii) (**L**)	• Manage agricultural drainage and water abstraction (incl. the restoration of drained or hydrologically altered habitats): (i) (ii) (iii) • Other measures related to agricultural practices: (ii) • Reduce impact of hydropower operation and infrastructure (incl. the restoration of freshwater habitats): (i) (ii) (iii) • Reduce impact of transport operation and infrastructure: (i) (ii) (iii) • Reduce/eliminate pollution to surface or ground waters from commercial, residential and recreational areas and activities, and from industrial activities and structures: (i) (ii) (iii) • Reduce impact of mixed source pollution: (i) (ii) (iii) • Restoration of habitats impacted by multi-purpose hydrological changes: (i) (ii) (iii)	

TABLE 5.2 QUALIFYING INTERESTS WITHIN THE ZONE OF INFLUENCE			
Conservation Objectives	**Threats and Pressures (NPWS, 2025)**	**Key Environmental Conditions (NPWS, 2025)**	**Potential Impacts from Development**
	• Threats and pressures from outside the Member State: (iii) (**M**) • Application of natural or synthetic fertilisers on agricultural land: (ii) (**L**) • Shipping lanes and ferry lanes transport operations: (i) (iii) (**L**) • Mixed source pollution to surface and ground waters (limnic and terrestrial): (i) (ii) (iii) (**L**)		
To restore the favourable conservation condition of [1106] **Atlantic Salmon** (*Salmo salar*)	• Agricultural activities generating pollution to surface or ground waters (including marine): (**H**) • Drainage for use as agricultural land: (**H**) • Hydropower (dams, weirs, run-off-the-river and respective infrastructure):(**H**) • Other activities related to aquaculture and extraction or cultivation of biological living resources not referred to above:(**H**) • Conversion to forest from other land uses, or afforestation (excluding drainage): (**M**) • Residential and commercial activities and structures generating pollution to surface or ground waters: (**M**) • Problematic native species: (**M**) • Changes in precipitation regimes due to climate change: (**M**) • Temperature changes and extremes due to climate change: (**M**)	<u>Key Conservation Measures</u> • Reduce impact of hydropower operation and infrastructure (incl. the restoration of freshwater habitats) • Reduce impact of transport operation and infrastructure • Restoration of habitats impacted by multi-purpose hydrological changes	• Water quality **As construction works will take place within and in proximity to the River Nore, mitigation measures to prevent a significant impact to water quality of the River Nore will be required during the construction phase.**

TABLE 5.2 QUALIFYING INTERESTS WITHIN THE ZONE OF INFLUENCE			
Conservation Objectives	**Threats and Pressures (NPWS, 2025)**	**Key Environmental Conditions (NPWS, 2025)**	**Potential Impacts from Development**
	• Old barriers or other obsolete infrastructures (mixed or unknown drivers): (**M**)		
To restore the favourable conservation condition of [1355] **Otter** (*Lutra lutra*)	• Conversion from one type of agricultural land use to another (excluding drainage and burning) : (**M**) • Application of natural or synthetic fertilisers on agricultural land: (**M**) • Agricultural activities generating pollution to surface or ground water (including marine) : (**M**) • Clear-cutting, removal of all trees Ongoing and likely to be in the future: (**M**) • Forestry activities generating pollution to surface or ground waters (including marine): (**M**) • Roads, paths, railroads and related infrastructure: (**M**) • Residential and commercial activities and structures generating pollution to surface or ground waters: (**M**) • Drainage, land reclamation and conversion of wetlands, marshes, bogs, etc. for built-up areas: (**M**) • Modification of hydrological flow (mixed or unknown drivers): (**M**)	<u>Key Conservation Measures</u> • Prevent conversion of natural and semi-natural habitats, and habitats of the species, into agricultural land • Manage the use of natural and synthetic fertilisers, as well as chemicals, in agriculture • Reduce/eliminate point or diffuse source pollution to surface waters from agricultural activities • Reduce diffuse or point source pollution to surface or ground waters (incl. marine) from forestry activities • Reduce impact of transport operation and infrastructure • Reduce/eliminate pollution to surface waters from commercial, residential and recreational areas and activities, and from industrial activities and structures	• Water quality • Disturbance **As construction works will take place within and in proximity to the River Nore, mitigation measures to prevent a significant impact to water quality of the River Nore will be required during the construction phase.** **As Otter forage along the River Nore corridor, mitigation measures to prevent disturbance during construction will be required.**

TABLE 5.2 QUALIFYING INTERESTS WITHIN THE ZONE OF INFLUENCE			
Conservation Objectives	**Threats and Pressures (NPWS, 2025)**	**Key Environmental Conditions (NPWS, 2025)**	**Potential Impacts from Development**
RIVER NORE SPA			
To maintain the favourable conservation condition of [A229] **Kingfisher** (*Alcedo atthis*)	<u>Key threats and pressures</u> As per the Conservation Objectives**:** loss or alteration of suitable riverbank nesting habitat; deterioration in water quality affecting prey availability; disturbance from construction, recreation, dogs, angling and other human activity near nesting or foraging areas; bank erosion or hard engineering works that reduce nesting opportunities; hydrological alteration affecting riverbank structure and fish populations; and loss of riparian vegetation used for perching, cover and hunting.	<u>Key Environmental Measures</u> • Stable breeding population and distribution within the SPA, with no loss of active or potential nesting territories • Suitable vertical, friable riverbanks retained for nesting, with no reprofiling, infilling, hard engineering or disturbance during the breeding season • Good water quality and sufficient small fish prey maintained to support foraging success • Riparian vegetation, perches and cover retained along the river corridor to support hunting, shelter and movement • Low levels of disturbance from construction, recreation, lighting, dogs and other human activity near nesting and foraging areas.	• Water quality • Disturbance **As construction works will take place in proximity to the River Nore, mitigation measures to prevent a significant impact to water quality of the River Nore will be required during the construction phase.** **As Kingfisher may forage and nest along the River Nore corridor, mitigation measures to prevent disturbance from construction and operational activity will be required.**

5.1 SCREENING CONCLUSION

For an effect to occur, there must be a pathway between the source and the receptor (the SAC/SPA). Where such a pathway does not exist, an impact cannot occur. The proposed development site is located within and in proximity to the River Barrow and River Nore SAC (Site Code: 002162) and River Nore SPA (Site Code: 004233). As outlined above, it is considered that the proposed development would not result in any significant impact on the protected habitats and species of the River Barrow and River Nore SAC through habitat fragmentation or loss, or reduction in species density or diversity. However, the assessment has determined that, during the construction and operational phases, the proposed development has the potential to impact upon the qualifying interests / special conservation interests of the River Barrow and River Nore SAC and River Nore SPA due to the potential for impacts on water quality, spread of Third Schedule invasive species and disturbance within the River Nore corridor. Mitigation measures to prevent significant effects will therefore be required during the construction and operational phases, and accordingly a Natura Impact Statement is required.

6.0 APPROPRIATE ASSESSMENT STAGE TWO: NATURA IMPACT STATEMENT

The main objective of Stage 2 (Natura Impact Statement) in the Appropriate Assessment process is to determine whether the proposed development at County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny (either alone or in combination with other plans, programmes, and projects) will result in significant adverse impacts to the integrity of River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (Site Code 004233) with respect to this site's structures, species, functions and/or conservation objectives. This stage also outlines the mitigation measures that should be taken in order to avoid any negative impacts on the River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (Site Code 004233).

The proposed development has the potential to impact upon the qualifying interests of the River Barrow and River Nore SAC and the River Nore SPA due to potential deterioration in water quality of the River Nore. During construction works, there is potential for water quality deterioration through the release of suspended solids during soil disturbance works and from other associated construction materials. The term suspended sediment refers to any silt, mud or other fine sediment that becomes suspended in water. Sediment can impact on water quality, macroinvertebrates and fish spawning habitats (Lawler et al., 2010). Water can be contaminated by suspended sediment from open earthworks and excavations. Suspended solids can become entrained in surface water run-off and can affect aquatic qualifying interests through deposition. Nutrients can be bound in suspended solids; therefore, a significant increase in suspended solids can result in excessive eutrophication, leading to deoxygenation of waters and subsequent asphyxia of aquatic species. The effects of eutrophication on macroinvertebrate species are not immediately visible. The first impact will be on oxygen-sensitive species, eventually affecting leaf-litter breakdown, which is essential for nutrient cycling. Proliferation of filamentous or planktonic algae growth is attributed to eutrophication from nutrient enrichment and pollution from runoff or discharges (Kelly and Reynolds, 2020). Maintaining near-zero suspended solids in Freshwater Pearl Mussel rivers is a requirement to ensure Freshwater Pearl Mussels, and in particular juvenile mussels, are protected. This species is highly sensitive to sediment deposition (NPWS, 2009).

An increase in sediment has the potential to impact upon fish species by damaging gravel beds required for spawning, smothering fish eggs and, in extreme cases, interfering with the gills of fish. An increase in suspended solids also has the potential to reduce water clarity, which can reduce light penetration and may affect certain behaviours of aquatic fauna, such as foraging success. Excessive fine sediment loading can create a blanket of fine silt, excluding plant communities that inhabit gravel substrates. Excess fine sediment is highly damaging, reducing both the diversity and abundance of river invertebrates through coating and clogging of benthic substrates, loss of habitat, damage to feeding and breathing structures, and smothering of eggs and larval stages (Kelly and Reynolds, 2020). A potential source of chemical contamination would be the release of hydrocarbons (oils, fuels) from construction plant and equipment. Concrete and cement products are highly toxic to fauna, particularly fish and other aquatic species. Impacts on water quality can arise from hydrocarbons and from the release of excess nutrients from soils into water channels, which can lead to eutrophication (Bruen et al., 2017). All of the above can result in significant impacts on water quality and degradation of an aquatic ecosystem. This can impact qualifying interests that have conservation objectives relating to water quality. Fish were not directly observed due to the depth of the River Nore at this location, but there is likely to be a significant number of fish along this section of the River Nore given the depth and flow.

The proposed development has the likely potential to impact upon the qualifying interests of the River Barrow and River Nore SAC and the River Nore SPA due to a potential disturbance of otter and kingfisher. There was no direct evidence or likely suitable embankment for an otter holt along the River Nore within 50m of the proposed pontoon during the ecological site assessment. This section of the River Nore is actively in use by otter as this was observed at dusk and by a Trail Camera at the location of the proposed pontoon during ecological surveys in May and June 2026.

Kingfisher is a qualifying interest of the River Nore SPA and was recorded during the ecological site assessments in 2026. The species may forage and nest along the River Nore corridor and is dependent on good water quality, suitable small fish prey, bankside nesting habitat and low levels of disturbance. The proposed development could therefore affect Kingfisher indirectly through deterioration in water quality and associated prey availability, and through disturbance from construction works, lighting, human presence and operational river-based activity. The riverbanks at the location of the proposed pontoon do not offer suitable nesting habitat for Kingfisher. These banks were modified as part of previous flood defence works and are now vegetated, but they are artificial in large sections and do not comprise exposed mud. Mitigation measures will be required to protect water quality and minimise disturbance to Kingfisher during both the construction and operational phases.

During the operational phase, disturbance may arise from increased recreational use, human presence, lighting, noise, river-based activity, dogs, and trampling, erosion or localised disturbance of riparian habitats associated with access to and use of the proposed river facilities.

A spraint is grey or black and may contain evidence of prey such as fish scales. Spraints are often left at vantage points or prominent locations such as rocks. In addition to digestive functions, spraints are used for communication by scent, with otters known to be creatures of habit, returning to the same feeding locations (Kruuk, 2006). A holt is essentially a hole in the ground used by an otter for sleeping and resting. The most common type of holt is a hole leading to a cavity under the roots of a bankside tree. However, otters are very versatile and can also form holts in log piles or cavities in rocky banks or caves. Most holts are situated on riverbanks. Otters breed throughout the year. Otters are sensitive to development and require their resting places to be protected from disturbance. Where identified, an Otter holt or couch will require a 30 m protection zone, and a natal den will require a 50 m protection zone.

The ultraviolet (UV) sterilisation unit associated with the designated wash-down facility is considered an operational biosecurity mitigation measure for the purposes of this NIS. It is not relied upon as a standard element of the development description, but as a specific mitigation measure to reduce the risk that wash-water from boats, paddles, footwear, clothing, trailers and other equipment could transfer aquatic pathogens or invasive species to the River Nore catchment. The UV treatment stage will form part of a treatment train comprising contained wash-down on an impermeable surface, collection through a channel drain, silt settlement, use of an approved aquatic disinfectant where required, UV sterilisation and final passage through the hydrocarbon interceptor before discharge to the existing stormwater network.

The spread of Crayfish Plague (*Aphanomyces astaci*) is a key operational risk, as this highly infectious disease can cause up to 100% mortality in White-clawed Crayfish (*Austropotamobius pallipes*), the only crayfish species native to Ireland (NBDC, 2026). The purpose of the UV stage is to provide tertiary disinfection of contained wash-water and to add a further safeguard against the transfer of Crayfish Plague (*Aphanomyces astaci*) and other aquatic pathogens associated with recreational water use. This is particularly relevant because Crayfish Plague can cause very high mortality in susceptible crayfish populations. The UV system will therefore operate alongside, and not instead of, the Check, Clean, Dry

protocol, user awareness, equipment inspection, aquatic disinfectant use where required and operational controls set out in the Visitor Management Plan.

There is also potential for the introduction or spread of Third Schedule invasive species through contaminated boats, paddles, footwear, clothing, trailers or other equipment used within the river corridor. Third Schedule invasive species recorded from the wider area include Indian Balsam (*Impatiens glandulifera*), Giant Hogweed (*Heracleum mantegazzianum*), Japanese Knotweed (*Fallopia japonica*) and aquatic invasive species such as Canadian Waterweed (*Elodea canadensis*) and Nuttall's Waterweed (*Elodea nuttallii*). Accordingly, operational controls, including the designated wash-down facility, treatment of wash-water, Check, Clean, Dry protocols and user awareness measures, will be required to prevent the spread of Crayfish Plague and Third Schedule invasive species to the River Nore, its catchment and associated riparian habitats.

Table 6.1 Summary of Potential Impacts and Mitigation Measures

Qualifying Interest / Receptor	Summary of Potential Impact(s)	Type of Mitigation Measures Required
[**3260**] Floating River Vegetation	Potential indirect impact on water quality of the River Nore during construction through sediment, nutrient, concrete/cement or hydrocarbon runoff.	Construction-phase water quality protection measures, including sediment control, pollution prevention, drainage management, runoff control and emergency response procedures.
[**6430**] Hydrophilous Tall Herb Communities	Potential operational disturbance to riparian tall herb vegetation from increased recreational use, trampling and erosion, and potential spread of Third Schedule invasive species via contaminated equipment, footwear, clothing or user activity.	Operational biosecurity and habitat protection measures, including Check, Clean, Dry, wash-down controls, user awareness, Leave No Trace principles and measures to prevent spread of invasive species and disturbance to riparian tall herb vegetation.
[**91A0**] Old Oak Woodlands / [**91E0**] Alluvial Forests	Potential disturbance to woodland and riparian woodland habitats from increased recreational use, trampling, erosion and informal access, and potential spread of Third Schedule invasive species into woodland edge habitats via contaminated equipment, footwear, clothing or user activity.	Operational management and biosecurity measures, including user awareness, Leave No Trace principles, control of access to sensitive woodland edges, Check, Clean, Dry protocols, wash-down controls and measures to prevent the spread of Third Schedule invasive species.
[**1029**] Freshwater Pearl Mussel (*Margaritifera margaritifera*)	Potential indirect impact from deterioration in water quality, particularly sedimentation and nutrient enrichment, with associated effects on salmonid host species.	Construction-phase water quality mitigation, including silt control, protection of drainage pathways, pollution prevention and prevention of contaminated runoff entering the river system.
[**1092**] White-clawed Crayfish (*Austropotamobius pallipes*)	Potential operational risk from the introduction or spread of Crayfish Plague via contaminated boats, paddles, footwear, clothing, trailers or other equipment used within the river corridor.	Operational biosecurity mitigation, including the designated wash-down facility, contained drainage, silt settlement, approved aquatic disinfectant use where required, UV sterilisation as tertiary treatment, hydrocarbon interception, Check, Clean, Dry protocols and user awareness measures.

[**1095**] Sea Lamprey, [**1096**] Brook Lamprey, [**1099**] River Lamprey	Potential indirect impact from reduced water quality during construction, with possible effects on aquatic habitat condition and supporting riverine habitat.	Construction-phase water quality mitigation, including runoff control, sediment containment, pollution prevention and maintenance of hydrological pathways.
[**1106**] Atlantic Salmon (*Salmo salar*)	Potential indirect impact from deterioration in water quality during construction, with possible effects on aquatic habitat, spawning habitat and salmonid receptors.	Construction-phase water quality protection measures, including silt and runoff control, pollution prevention and careful management of works near drainage features and watercourses.
[**1355**] Otter (*Lutra lutra*)	Potential indirect impact from deterioration in water quality and disturbance to otter foraging, commuting and resting activity along the River Nore corridor during construction and operation.	Water quality mitigation and species protection measures, including disturbance avoidance, control of lighting/noise, protection zones where required and protection of otter commuting and foraging areas.
[**A229**] Kingfisher (*Alcedo atthis*)	Potential indirect impact from deterioration in water quality and prey availability, and disturbance to foraging or potential nesting areas from construction works, lighting, human presence and operational river-based activity.	Water quality protection and disturbance avoidance measures, including control of lighting/noise, protection of riparian vegetation and avoidance of disturbance to suitable nesting or foraging areas.

7.0 IN COMBINATION EFFECTS

Plans, programmes and projects related to sectors outside local authority land-use planning will undergo Appropriate Assessment as required. These procedures are overseen by the relevant competent authority. The following developments will have undergone Appropriate Assessment Screening, where required, and will have included mitigation measures if a project proceeds to NIS, where required, to prevent adverse effects on the habitats and species of Natura 2000 sites within the Zone of Influence. All developments will also have reviewed the Kilkenny City and County Development Plan and in-combination effects with the proposed development. The proposed development site is located in Kilkenny City, which is a large urban area with significant architectural heritage. Subject to the full implementation of the construction-phase mitigation measures, operational mitigation measures, biosecurity controls and Visitor Management Plan identified in this NIS, there will be no residual adverse effect on surface water or groundwater quality during the operational phase, and no adverse effect on air quality during the construction or operational phases, that would cause an adverse effect on the qualifying interests of these Natura 2000 sites. Kilkenny County Council's planning system identifies residential and agricultural developments within the area surrounding the proposed development site. With the proposed mitigation measures and operational controls in place and given the relatively small scale and nature of recent nearby developments and the recreational nature of the proposed development, it is considered that there would be no potential for in-combination effects that would cause a significant impact on the Natura 2000 network. Developments granted permission within the last five years (the duration of planning permission is five years from the date permission was granted) are listed in **Table 7.1**. There are no planning applications for recreational water activities on the River Nore at Kilkenny City. Air emissions would be typical of a recreational facility, being primarily from heating, and therefore low impact in and of themselves. In-combination residential impacts would be controlled by national energy policies, grant schemes and motor fuel emission targets. The upkeep of the Kilkenny FRS by the OPW will be undertaken with mitigation measures as outlined in the Natura Impact Statement submitted by JBA Consulting (Document Reference: JBA Consulting 2023s0205 - Kilkenny City FRS 2023 NIS S3 P03). The works for the pontoon within the River Nore will take approximately 15 weeks and are localised to a section of the River Nore that does not contain suitable nesting habitat for Kingfisher or a breeding holt for Otter, as the banks on either side of the proposed pontoon are highly modified. Therefore, with the mitigation measures identified in this NIS and the Visitor Management Plan in place, there will be no in-combination effects from the proposed maintenance works of the FRS.

TABLE 7.1: DEVELOPMENTS IN PROXIMITY

Application No.	Development Type	Possible significant effects from plan or project	Is there a risk of in-combination effects	Possible Significant in-combination effects
22423 Granted (Conditional)	To retain external covered seating, single storey toilets and all associated site development works	Located along the western site boundary. This project is small in scale and for retention. There will be no construction or operational activities that will cause significant in-combination effects on Natura 2000 sites.	No	No
2560700 (Further Information)	For development at this site situated adjacent to the city wall, listed as part of a Recorded	Located c. 83 m to the north. This project has been requested to submit a CEMP and Waste Management Plan. With full	No	No

TABLE 7.1: DEVELOPMENTS IN PROXIMITY				
Application No.	**Development Type**	**Possible significant effects from plan or project**	**Is there a risk of in-combination effects**	**Possible Significant in-combination effects**
	Monument subject to a Preservation Order: TPO 2/96. The development will consist of a building, 3 storeys' above existing carparking, providing 40 No. additional hotel bedrooms, storage, staircases, lift, entrance hall together with all ancillary works situated in the existing car park, to the rear	implementation of the CEMP, there will be no construction or operational activities that will cause significant in-combination effects on Natura 2000 sites.		
2560535 Granted (Conditional)	For the 1) Retention of a 42 sq.m portacabin and access ramp within the service yard, to be used for online grocery order processing and storage (online pick room). 2) Permission to install new panel fencing above the service yard wall facing the Market Yard Car Park and Bateman Quay. 3) Retention of existing service access door onto Bateman Quay on a temporary basis. Permission is sought to create a new service access door to the Market Yard Car Park, with the Bateman Quay service access door to be removed and the opening infilled once the new access is in use. 4) Retention of a click and collect sign on the northern boundary wall, facing the Market Yard Car Park. 5) All associated and necessary site works required to complete the development for which retention and planning permission is sought	Located c. 215 m to the west. This project is relatively small in scale and relates to a cabin, fencing and signage. As per the Planner's Report, "Notwithstanding the location adjacent to the River Nore, due to the nature of the development there is no discharge and hence there are no anticipated impacts on the SAC." There will be no construction or operational activities that will cause significant in-combination effects on Natura 2000 sites.	No	No
249366 Granted (Conditional)	Retention permission for demolition of existing extension and for laying of foundation & construction of blockwork. Permission to build & complete extension to the rear of existing dwellinghouse & all associated site development works.	Located c. 320 m to the northwest. This project is relatively small in scale and relates to a house. As per the Inspector's Report, "As regards the issue of Appropriate Assessment, having regard to nature of the proposed development and the serviced nature of the site together with the separation from any designated European Site and having regard to the source pathway receptor model, it is not considered that the proposed development is likely to have significant effect either individually or in combination with other plans or projects on a	No	No

TABLE 7.1: DEVELOPMENTS IN PROXIMITY				
Application No.	**Development Type**	**Possible significant effects from plan or project**	**Is there a risk of in-combination effects**	**Possible Significant in-combination effects**
		European Site. It is therefore considered that appropriate assessment under the Habitats Directive (92/43/EEC) is not relevant in this case." There will be no construction or operational activities that will cause significant in-combination effects on Natura 2000 sites.		
2460652 Granted (Conditional)	For storage / laundry shed and all associated site works	Located c. 436 m to the east. This project is relatively small in scale and relates to a house. As per the Planner's Report, the site lies some distance from the River Nore with no direct pathways from this proposed development; therefore, due to this distance and the nature of the works, there are no anticipated impacts on the SAC. There will be no construction or operational activities that will cause significant in-combination effects on Natura 2000 sites.	No	No
2560240 Granted (Conditional)	For the following works. The site is located within the Lacken Architectural Conservation Area. Building fabric upgrade works to include: external insulation to the building façade including new plaster finish, replacement of existing windows and external doors, installation of Solar PV panels and associated plant on the building roof. Permission is also sought for the demolition of existing reception area and construction of a new entrance reception with associated hard and soft landscaping to the front of the building and the reconfiguration of the existing car parking areas, and all associated site & ancillary works	Located c. 790 m to the southeast. The development comprises a mix of small-scale works, alterations and landscaping. As per the Planner's Report, "The site adjacent to the River SAC, although at a substantial level difference with the River. The proposed works will not have any anticipated impacts on the SAC." There will be no construction or operational activities that will cause significant in-combination effects on Natura 2000 sites.	No	No
2560043 Granted (Conditional)	For proposed demolition of existing 2-storey dwelling house and garage, and proposed erection of new replacement 2-storey dwelling house and garage, and all	Located c. 800 m to the southeast. This project is relatively small in scale and relates to a house. As per the Planner's Report, "The NIS concludes that it is not anticipated that with the implementation of the proposed mitigation measures the development will, by itself or in	No	No

TABLE 7.1: DEVELOPMENTS IN PROXIMITY				
Application No.	**Development Type**	**Possible significant effects from plan or project**	**Is there a risk of in-combination effects**	**Possible Significant in-combination effects**
	associated site works at Castle Springs, Canal Walk, Kilkenny, R95 HDK6. A Natura Impact Statement (NIS) was submitted with the application	combination, give rise to any potential for impact on the Natura 2000 network. I agree with this conclusion." There will be no construction or operational activities that will cause significant in-combination effects on Natura 2000 sites.		
22280 Granted (Conditional)	For rear extension comprising split level lower ground floor and ground floor levels with external terracing, rear sunroom extension also to include elevation alterations comprising revised bay window extension to the front elevation, roof finish, widened road entrance and new pedestrian gate, internal alterations, boundary treatment, landscaping including all ancillary and associated works also Retention Permission sought for the demolition of the garage and rear extension	Located c. 1.3 km to the north. This project is relatively small in scale and relates to a house. As per the Planner's Report, the development underwent AA Screening and is considered not to have a potential impact on the River Nore. There will be no construction or operational activities that will cause significant in-combination effects on Natura 2000 sites.	No	No

The Water Framework Directive (WFD) (2000/60/EC) requires all Member States to protect and improve water quality in all waters so that good ecological status is achieved. It applies to rivers, lakes, groundwater and transitional coastal waters. The WFD requires that management plans be prepared on a river-basin basis. Catchments.ie is an online resource to support the protection and improvement of the water environment and ensure compliance with the WFD. This catchment includes the area drained by the River Nore and all streams entering tidal water between its confluence with the River Barrow at Ringwood and the Barrow railway bridge at Drumdowney, Co. Kilkenny, draining a total area of 2,595 km². The largest urban centre in the catchment is Kilkenny. The other main urban centres are Abbeyleix, Callan and Thomastown. The total population of the catchment is approximately 94,734, with a population density of 37 people per km². A total of 38% of surface waterbodies were at Good or High Ecological Status in the 2016–2021 monitoring period. Ninety-six percent of groundwater bodies were at Good Status. A total of 70 waterbodies (40%) are At Risk of not meeting their environmental objective in the Nore Catchment, while 34 (19%) are under Review and 72 (41%) are Not at Risk. The issues driven by these pressures are mainly nutrient pollution, organic pollution and altered morphological condition impacts for surface water, and nutrient pollution and chemical quality diminution for groundwater. The proposed development is located in the Nore_SC_100 sub-catchment, with urban run-off, agriculture, urban wastewater, anthropogenic pressures and industry listed as the main pressures on this catchment.

Wastewater from the proposed development will be sent to Kilkenny City and Environs WWTP (D0018-01), which has a plant capacity PE of 77,000 and provides tertiary phosphorus removal. The WWTP discharge was compliant with the ELVs set in the wastewater discharge licence. The discharge from

Kilkenny City and Environs WWTP does not have an observable negative impact on Water Framework Directive status (Uisce Éireann, 2024). There is available capacity at Kilkenny City and Environs WWTP, with a Green status (Uisce Éireann, 2026). The surface water runoff drainage system has been designed to prevent a significant impact on water quality from operational runoff from the proposed development. Surface water drainage from the proposed development will not impact the local drainage network or affect SuDS compliance for Kilkenny City. In addition, the proposed development will not increase flood risk to third-party lands. Therefore, there would be no likely significant cumulative impacts due to flooding.

There are no potential in-combination impacts with any national or local policies that would result in a significant impact on the Natura 2000 network. Any local development with the potential to impact the Natura 2000 network will undergo AA Screening to determine the potential for impacts, with any potential significant effects from air, water, habitat, or disturbance to species being objectively and scientifically assessed during both the construction and operational phases. All developments must not cause an adverse effect on water quality as required by the WFD. There will be no in-combination impact from the proposed development on the River Barrow and River Nore SAC or any other Natura 2000 site.

8.0 MITIGATION MEASURES

The following measures are proposed to minimise and/or eliminate likely effects on the favourable conservation condition of the qualifying interests. This assessment has determined that the proposed development has the potential to impact upon the River Barrow and River Nore SAC and the River Nore SPA due to potential deterioration in water quality, disturbance and the spread of invasive species. All mitigation measures will be implemented in full and are best-practice, tried and tested control measures to protect the receiving environment during the construction and operational phases. The mitigation measures will be undertaken in an environmentally sensitive manner and will include measures for the protection of water quality, such as the implementation of silt control features. The accompanying Construction Environmental Management Plan (CEMP) sets out the practical construction-stage procedures for implementing these mitigation measures on site, including contractor responsibilities, environmental induction and toolbox talks, site set-up controls, pollution prevention, silt and surface-water management, fuel and chemical storage, concrete and cement controls, waste management, invasive species controls, biosecurity procedures, monitoring, record keeping, emergency response and stop-work procedures. The CEMP shall be read in conjunction with this NIS and shall be implemented in full by the appointed contractor for the duration of the construction phase.

The construction-phase mitigation measures are set out in **Table 8.1** below. These measures provide the framework for managing construction-related pathways for effects on the River Barrow and River Nore SAC and River Nore SPA, including water quality protection, invasive species prevention, biosecurity controls, habitat protection, disturbance avoidance, construction-stage supervision, monitoring, emergency response and stop-work procedures. The measures shall be implemented in full and in conjunction with the accompanying CEMP for the duration of the construction phase.

TABLE 8.1: CONSTRUCTION PHASE MITIGATION MEASURES
WATER QUALITY MITIGATION MEASURES
An Ecological Clerk of Works (ECoW) must be present during construction works at the proposed pontoon and any works within the River Nore riparian zone. The ECoW must agree and approve the location of silt fencing, inspect fencing, and develop a method statement for works in the riparian zone/River Nore in conjunction with NPWS, Inland Fisheries Ireland (IFI) and other relevant statutory bodies. The ECoW shall have explicit authority to instruct the contractor to stop, modify, delay or relocate works where mitigation measures are not being implemented, where water quality deterioration is observed or suspected, where there is a risk to qualifying interests or special conservation interests, or where protected species disturbance, biosecurity failure, invasive species spread, pollution risk, flood risk or other environmental non-compliance is identified. Works shall not recommence until the ECoW is satisfied that the issue has been rectified and the relevant mitigation controls are effective.
Daily visual inspections of the River Nore will be undertaken during construction works. Monitoring for suspended solids will be undertaken daily and records will be kept. Weather conditions will be considered when planning works to minimise the risk of silty runoff from the site.
Silt control features, including silt fencing, silt mats and interceptor trenches, will be installed prior to site clearance and maintained for the duration of the works. Silt fencing will be provided along the boundary with the River Nore and adjacent to soil storage areas, and all silt control features will be inspected daily and maintained as required.
Sediment-laden water will be directed to a settlement pond, silt buster, contained tank or equivalent treatment system agreed with the ECoW. Under no circumstances will sediment-laden water be

discharged to the River Nore or drainage network. Pumping operations will be supervised at all times and any pump used near the River Nore will be fitted with an appropriate filter.
Works within or adjacent to the River Nore will use double-bagged sandbags where required, absorbent booms around the construction area, daily monitoring of water levels and weather forecasts, and immediate cessation of works where flood risk or water quality deterioration is identified.
Spoil, hardcore, crushed concrete, topsoil and subsoil will be stored temporarily only, outside the flood zone and at least 10m from surface water drains or watercourses. Stockpiles will be covered or graded to prevent runoff, and excavations and earthworks will be planned outside periods of heavy rainfall.
All plant, machinery and equipment will be maintained in good working order and regularly inspected. Fuels, oils and chemicals will be stored in designated bunded areas, with bund capacity of at least 110% of the largest container volume or 25% of the total stored volume, and refuelling will not occur near watercourses, drainage ditches or drainage pipes.
Spill kits, absorbent pads and booms will be readily available on site. Any hydrocarbon spill will be contained and contaminated material disposed of by an authorised waste contractor. Any plant showing signs of leakage will be removed from service until repaired.
Pre-cast concrete will be prioritised. Concrete delivery and pouring will be supervised, avoided during heavy rainfall where practicable, and no concrete washout will be permitted on site or in any location where runoff could enter surface waters. Excess uncured concrete will be removed by an authorised waste contractor.
Weekly checks will be undertaken to ensure surface water drains are not blocked by silt or other material. Inspection records will be maintained, and any significant blockage, spill or deterioration in water quality will result in immediate cessation of works, investigation of the cause and notification of NPWS and IFI where required.
INVASIVE SPECIES MITIGATION MEASURES
Pre-construction checks will be undertaken for Third Schedule invasive species within and adjacent to the working area. Any stands of Indian Balsam, Giant Hogweed, Japanese Knotweed or other Third Schedule invasive species identified within or adjacent to the works area will be fenced off, avoided and managed under an invasive species method statement prepared by a suitably qualified ecologist.
No soil, plant material, water, sediment or waste containing invasive species will be moved off site or reused without appropriate control, licensing and disposal procedures. Any material containing Third Schedule invasive species will be treated as controlled waste and disposed of by an authorised waste contractor.
Construction personnel will be briefed on the identification and management of Third Schedule invasive species prior to works commencing. Measures will be implemented to prevent the spread of invasive species through soil movement, vegetation clearance, machinery tracking, footwear, clothing, boats, paddles or other equipment.
BIOSECURITY MITIGATION MEASURES
All plant, machinery, tools, footwear, PPE, ropes, pumps, sandbags, absorbent materials and other equipment used in or near the River Nore will be checked, cleaned, disinfected and dried before arrival on site and before reuse in any other watercourse. Equipment will be inspected for attached vegetation, mud, seeds or animal material before entering or leaving the works area.
The Check, Clean, Dry protocol will be implemented during construction for all plant, machinery, tools, PPE, temporary works materials and survey equipment used in or near the River Nore. Any equipment that has been used in or near another watercourse will not be used within or adjacent to the River Nore unless it has been fully checked, cleaned, disinfected and dried.

During archaeological in-water surveys, all dive equipment, metal detection equipment, measuring tapes, ropes, marker buoys, sampling or recording equipment, footwear, PPE and any other equipment used within or near the River Nore corridor will be subject to biosecurity controls. Equipment will be checked, cleaned, disinfected and dried before arrival on site and before leaving the site where there is potential for transfer to another watercourse. Any archaeological survey or dive equipment that has been used in or near another waterbody will not be used within or adjacent to the River Nore unless it has been fully cleaned, disinfected and dried, in accordance with the Check, Clean, Dry protocol, to prevent the spread of Crayfish Plague, aquatic invasive species and Third Schedule invasive species.
DISTURBANCE MITIGATION MEASURES
Access to sensitive riparian vegetation, hydrophilous tall herb communities, woodland edges and riverbank habitats will be controlled during construction. Works areas will be clearly demarcated and unnecessary construction access to the riparian zone will be avoided.
Construction personnel and contractors will use designated access routes, working areas and storage areas only. Temporary fencing, signage and demarcation will be used where required to keep construction activity away from sensitive riparian vegetation, riverbanks and woodland edge habitats, and to minimise trampling, erosion and localised habitat disturbance along the River Nore corridor.
Construction activity in proximity to the River Nore will be restricted to daylight hours where practicable, with no works in the river corridor during sensitive dusk and dawn periods unless agreed by the Ecological Clerk of Works. Lighting will be controlled to avoid unnecessary spill towards the river corridor.
Pre-works ecological checks will be undertaken to confirm the absence of active Otter resting places and Kingfisher nesting activity within the works influence area. Where sensitive features are identified, appropriate exclusion zones, timing restrictions, supervision by the EcoW and stop-work procedures will be implemented until the risk of disturbance has been avoided or suitably controlled.

In addition to the mitigation measures outlined above, the Contractor will implement all works in accordance with the following recognised best-practice guidance documents. These documents remain current or commonly accepted guidance for construction-phase water quality protection, fisheries protection, drainage management, pollution prevention and protected species mitigation in Ireland. Where newer statutory, IFI, NPWS or TII requirements are issued prior to or during the works, the most recent applicable guidance will take precedence.

- IFI (2016). *Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters*.
- OPW (Brew & Gilligan, 2019). *Environmental Guidance: Drainage Maintenance and Construction*, including relevant procedures for construction environmental management, silt management, water pollution, invasive species, otter, lamprey, crayfish, freshwater pearl mussel, floating river vegetation and alluvial woodland.
- CIRIA (2023). *Environmental Good Practice on Site Guide*, Fifth Edition, C811.
- CIRIA (2001). *Control of Water Pollution from Construction Sites: Guidance for Consultants and Contractors*, C532.
- CIRIA (2006). *Control of Water Pollution from Linear Construction Projects*, Technical Guidance C648 and Site Guide C649.
- TII (2015). *Road Drainage and the Water Environment*, DN-DNG-03065, including Amendment No. 1.
- TII/NRA (2005; reissued 2025). *Guidelines for the Crossing of Watercourses During the Construction of National Road Schemes*, CC-ENV-01101.

- NRA (2008). *Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes*.
- National Biodiversity Data Centre / Invasives.ie (current guidance). *Check, Clean, Dry* biosecurity guidance and associated aquatic invasive species resources.

Operational mitigation will be implemented through the Visitor Management Plan (Document Reference: **VMP_RSE_0626**), which will control access, activity levels, biosecurity, disturbance, monitoring and adaptive management during operation.

TABLE 8.2: OPERATIONAL PHASE MITIGATION MEASURES	
OPERATIONAL RISK / PATHWAY	**OPERATIONAL MITIGATION / MONITORING MEASURES**
Unmanaged visitor access, shortcutting, informal paths, bank trampling, craft dragging or congregation outside approved areas.	Visitors, operators and groups shall use only approved routes, formal paths, hardstanding, raised walkway, pontoon, designated viewing areas and approved launch/landing points. No-go areas shall include riparian vegetation, sensitive banks, informal access gaps, potential otter resting places, kingfisher nesting banks and temporarily closed areas. Craft and equipment shall not be stored, dragged or dried on riverbanks, vegetation, informal paths, the pontoon route or emergency access routes. The site operator shall maintain access controls, signage and barriers; activity leads shall brief and supervise users; and monitoring shall record informal routes, trampling, erosion, vegetation damage and unauthorised launching/landing.
Disturbance from organised water activities, pontoon use, school/group visits, spectators, events and high-intensity activity.	Organised water activities shall be booked, supervised and normally limited to 8–20 participants per session unless otherwise approved. School, youth, community and group visits shall normally be limited to 10–30 participants, briefed before activity and kept away from sensitive banks and vegetation. Events, demonstrations and competitions shall require prior approval and an event plan covering numbers, routes, stewarding, signage, no-go areas, litter, noise, lighting, emergency access, ecological checks and post-event inspection. Activities shall be reduced, paused, rerouted, rescheduled or suspended if disturbance or ecological risk is observed. The site operator shall control bookings and retain activity records, with ecological advice where protected-species disturbance, nesting activity or seasonal sensitivity is identified.
Disturbance to otter resting, commuting or foraging areas from people, dogs, noise, night-time activity or access to riverbanks.	Potential holts, couches, slides, sprainting areas and bank refuges shall be treated as no-go areas where identified. Visitor access, landing, launching, congregation and dog access shall be excluded from sensitive banks. Routine water-based activity shall not occur from dusk to dawn unless separately assessed and approved following ecological assessment. Dogs, where permitted, shall be kept under control and prevented from entering sensitive banks, refuge areas or the water where this could disturb wildlife. The site operator and activity leads shall

	enforce no-go areas and visitor code requirements, with ecologist advice on suspected otter resting places or disturbance triggers. Incident records shall include otter sightings, disturbance, unauthorised bank access and corrective actions.
Disturbance, erosion or close approach at potential or confirmed kingfisher nesting banks.	Potential and confirmed nesting banks shall be treated as no-go areas and shall not be highlighted on public-facing signage where this could increase disturbance. Unauthorised landing, bank climbing, repeated congregation and close approach at friable or vertical riverbanks shall be prohibited. Activities shall be modified or suspended if kingfisher nesting activity or repeated disturbance is suspected. The site operator shall ensure signage and staff briefings direct users away from sensitive banks, with ecologist advice on seasonal controls, nest-bank sensitivity and recommencement decisions where required.
Light spill, night-time activity and illumination of the river corridor, trees, vegetation or water.	Lighting shall be kept to the minimum required for safe operation and shall not be directed onto the River Nore, riparian vegetation, trees, sensitive banks or wildlife refuge areas except for emergency response. Lighting shall be positioned, angled or shielded to avoid spill onto water and vegetation and to maintain dark corridors wherever practicable. No routine pontoon or water-based activity shall occur from dusk to dawn unless separately assessed and approved. The site operator shall maintain lighting controls and review complaints or observations of light spill, with ecological advice where lighting may affect bat-sensitive corridors or other protected species.
Noise from groups, events, amplified sound, public address systems, music or megaphones.	Group noise shall be managed at arrival points, changing areas, pontoon access, launching/landing areas, riverside paths and viewing areas. Amplified sound, public address systems, music, megaphones or event commentary shall require prior approval and shall not be directed towards the river, riparian vegetation, sensitive banks or refuge areas. Where excessive noise or wildlife disturbance is observed, activity shall be reduced, moved away, paused or stopped. The site operator and event organiser shall approve and manage noise controls, with monitoring to record complaints, wildlife disturbance and corrective actions.
Litter, food waste, discarded fishing line, pollutants, fuel, oil, detergents, cleaning chemicals, wash water, sediment or other contaminants entering the river, drains or riparian habitats.	Visitors and operators shall follow a “pack it in, pack it out” approach or use designated bins only. Waste, wash water, sediment, fuel, oils, detergents or chemicals shall not enter the River Nore, drains, planted margins or riparian habitats. Routine refuelling shall not occur on the pontoon, riverbank, access route or any location where spills could reach the river or drainage system. Spill kits shall be available at appropriate operational locations and incidents shall trigger immediate response. The site operator shall maintain waste, spill-kit and

	incident-response arrangements, and monitoring shall record litter, spill events, turbidity concerns, dead fish, pollution and corrective actions.
Transfer of invasive species, pathogens or contaminants on boats, boards, paddles, footwear, dogs, clothing, ropes, trailers, fishing gear, tools or maintenance equipment.	All water users and operators shall apply Check, Clean, Dry biosecurity before and after use where equipment or clothing has been used in or near another waterbody. Equipment shall be checked for mud, plants, animals, fragments, sediment and standing water; material shall be removed and left at the source waterbody; and equipment shall be cleaned in the approved wash-down area only where the full treatment train is operational. Wash-water from the designated wash-down area shall be contained, treated with the approved aquatic disinfectant where required, passed through the silt chamber and UV sterilisation unit, and then through the hydrocarbon interceptor before discharge to the existing stormwater network. The wash-down area, silt chamber, UV sterilisation unit and hydrocarbon interceptor shall be inspected and maintained in accordance with manufacturer requirements. If the UV sterilisation unit stops working, is operating below specification, or its operational status cannot be confirmed, the facility shall not open for water-based activity and no boats, boards, paddles or other water-sports equipment shall be launched from the facility until the UV unit and associated treatment train have been inspected, repaired, tested and confirmed to be fully operational. No wash-water shall be discharged while the UV system is not operational. Equipment and clothing shall be dried for as long as practicable, preferably at least 48 hours before reuse in another waterbody, or disinfected where drying is not possible and current guidance requires it. Suspected invasive species, Crayfish Plague risk, contaminated equipment, treatment-system failure or biosecurity failure shall be reported immediately. The site operator shall maintain inspection, maintenance, UV failure, repair, recommissioning, incident and biosecurity monitoring records.
Fishing or angling-related access causing informal bank use, litter, tackle loss, disturbance or biosecurity risk.	Anglers shall not enter no-go areas, sensitive banks, riparian vegetation, pontoon access routes during organised activity, or approved launch/landing areas where this conflicts with safe operation. All fishing line, hooks, bait packaging and waste shall be removed, and equipment shall be checked, cleaned, dried and disinfected where required. The site operator shall manage conflicts between angling, pontoon access and organised activities, and incidents such as discarded line, bank damage, fish kill, pollution or wildlife disturbance shall be recorded and reported where required.
Failure of controls, repeated non-compliance, new ecological	The Visitor Management Plan shall operate as an adaptive management tool, with activities stopped, reduced, rerouted,

constraints, storm/flood damage, erosion or ineffective signage.	rescheduled or suspended where action thresholds are met. Corrective actions may include re-briefing, temporary closure, barriers, signage changes, group-size reduction, additional supervision, suspension of operator access, ecological review or revised operating procedures. The plan shall be reviewed following commencement of operations, at least annually thereafter and sooner where incidents, monitoring findings, updated ecological advice or authority requirements arise. The site operator shall maintain logs, incident records, complaints records, monitoring findings and review records, with ecological advisor support where protected species or sensitive habitats are involved.

The mitigation measures set out in **Tables 8.1** and **8.2** are integral to the conclusions of this NIS and shall be implemented in full. Construction-phase controls will be secured through the CEMP, contractor procedures, monitoring, record keeping, ECoW oversight, explicit ECoW stop-work authority where required and stop-work procedures. Operational controls will be secured through the Visitor Management Plan (Document Reference: VMP_RSE_0626), biosecurity procedures, inspection and maintenance records, incident reporting and adaptive management. Where monitoring identifies a pollution risk, disturbance risk, biosecurity failure, UV treatment failure, invasive species risk or other non-compliance, the relevant activity shall be stopped, modified or suspended until the issue has been rectified. On this basis, and subject to full implementation of the proposed design, mitigation measures and operational Visitor Management Plan, no residual adverse effects on water quality, protected habitats, protected species, the qualifying interests of the River Barrow and River Nore SAC or the special conservation interest of the River Nore SPA are predicted during the construction or operational phases.

Residual Effects

Following implementation of the construction and operational mitigation measures set out in this section, the remaining residual risk is limited to low-level, controlled and temporary construction-stage disturbance, routine operational activity within approved areas, and the managed use of the wash-down and biosecurity system. These residual risks will be controlled through the CEMP, ECoW oversight where required, inspection and monitoring records, stop-work procedures, the Visitor Management Plan, biosecurity controls and adaptive management. No residual adverse effects are predicted in relation to water quality, habitat condition, invasive species spread, Crayfish Plague risk, Otter, Kingfisher, aquatic qualifying interests or the integrity of the River Barrow and River Nore SAC and River Nore SPA.

9.0 CONCLUSION

It is not anticipated that the proposed development, subject to the full implementation of the recommended construction-phase mitigation measures, operational mitigation measures, biosecurity controls and Visitor Management Plan, by itself or in combination with other developments, would impact negatively upon European sites (the Natura 2000 network) during the construction or operational phases of the project. In-combination effects from interactions with other plans and projects were considered in the assessment. The mitigation measures incorporated into the construction and operational phases, including water quality protection, species disturbance avoidance, invasive species controls, biosecurity procedures and the Visitor Management Plan, will ensure that there will be no residual significant adverse effects as a result of the proposed development, either alone or in combination with other plans or projects.

The proposed development site is located within the River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (Site Code 004233). It is considered that the proposed development would not result in any adverse effect to the protected habitats and species of the aforementioned sites due to habitat fragmentation or loss, disturbance, reduction in species density, deterioration in water quality or introduction/spread of invasive species, provided that the mitigation measures set out in this NIS are implemented in full.

The proposed development site has direct ecological and hydrological connectivity with the River Nore corridor. However, no adverse effects upon the qualifying interests of the River Barrow and River Nore SAC or the special conservation interest of the River Nore SPA are anticipated where the construction-phase water quality controls, species protection measures, invasive species measures, operational biosecurity procedures and Visitor Management Plan are implemented and maintained for the lifetime of the development.

It is the conclusion of this Natura Impact Statement that, with the identified mitigation measures and operational Visitor Management Plan (Document Reference: VMP_RSE_0626) implemented in full, including construction water quality protection, disturbance avoidance for Otter and Kingfisher, invasive species controls, biosecurity procedures and adaptive operational monitoring, it can be concluded, beyond reasonable scientific doubt, that the Project, either alone or in combination with other plans and projects, will not undermine the conservation objectives of any European site and therefore would not have an adverse effect on the integrity of any European site, in view of the sites' conservation objectives and best scientific knowledge.

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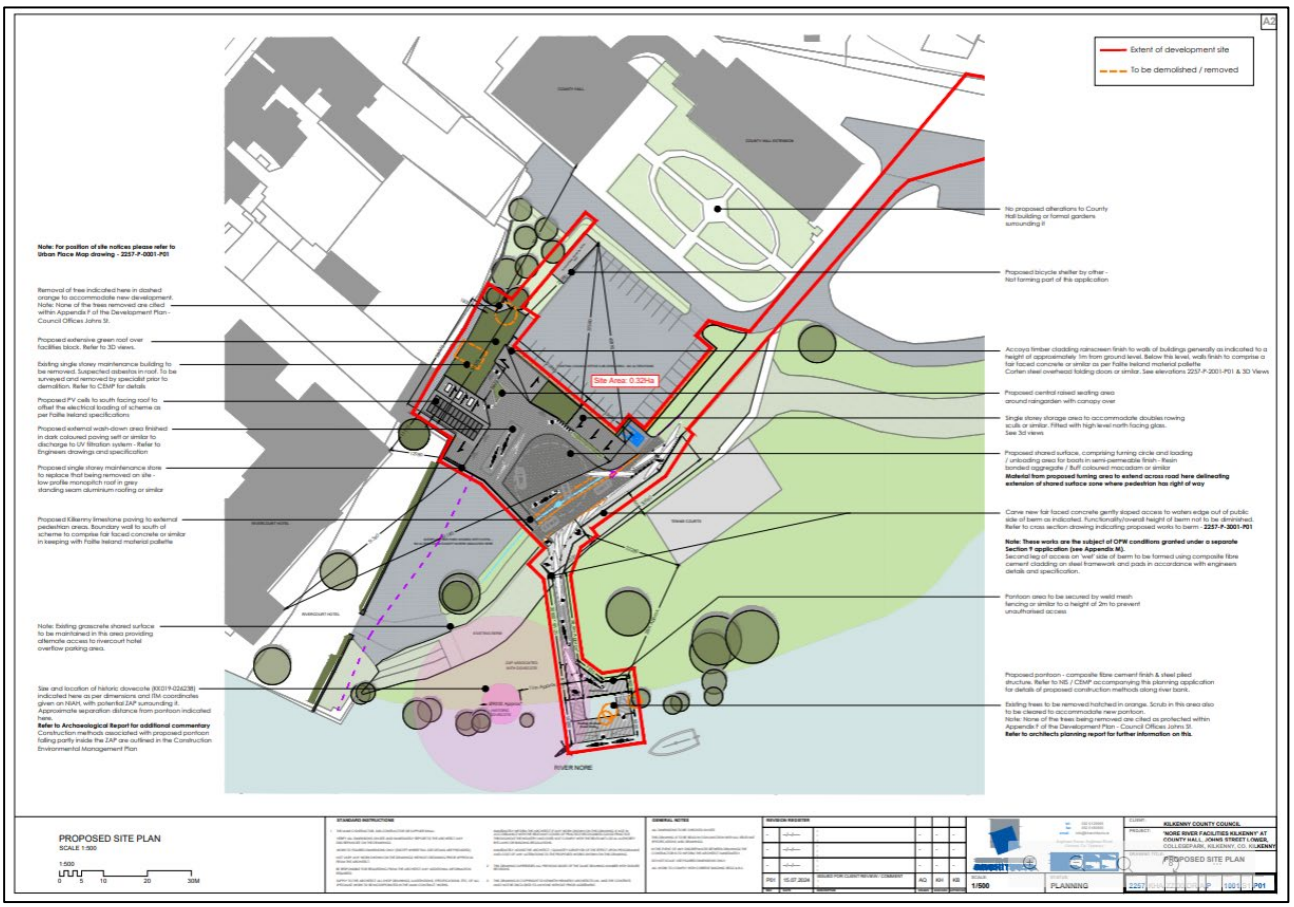
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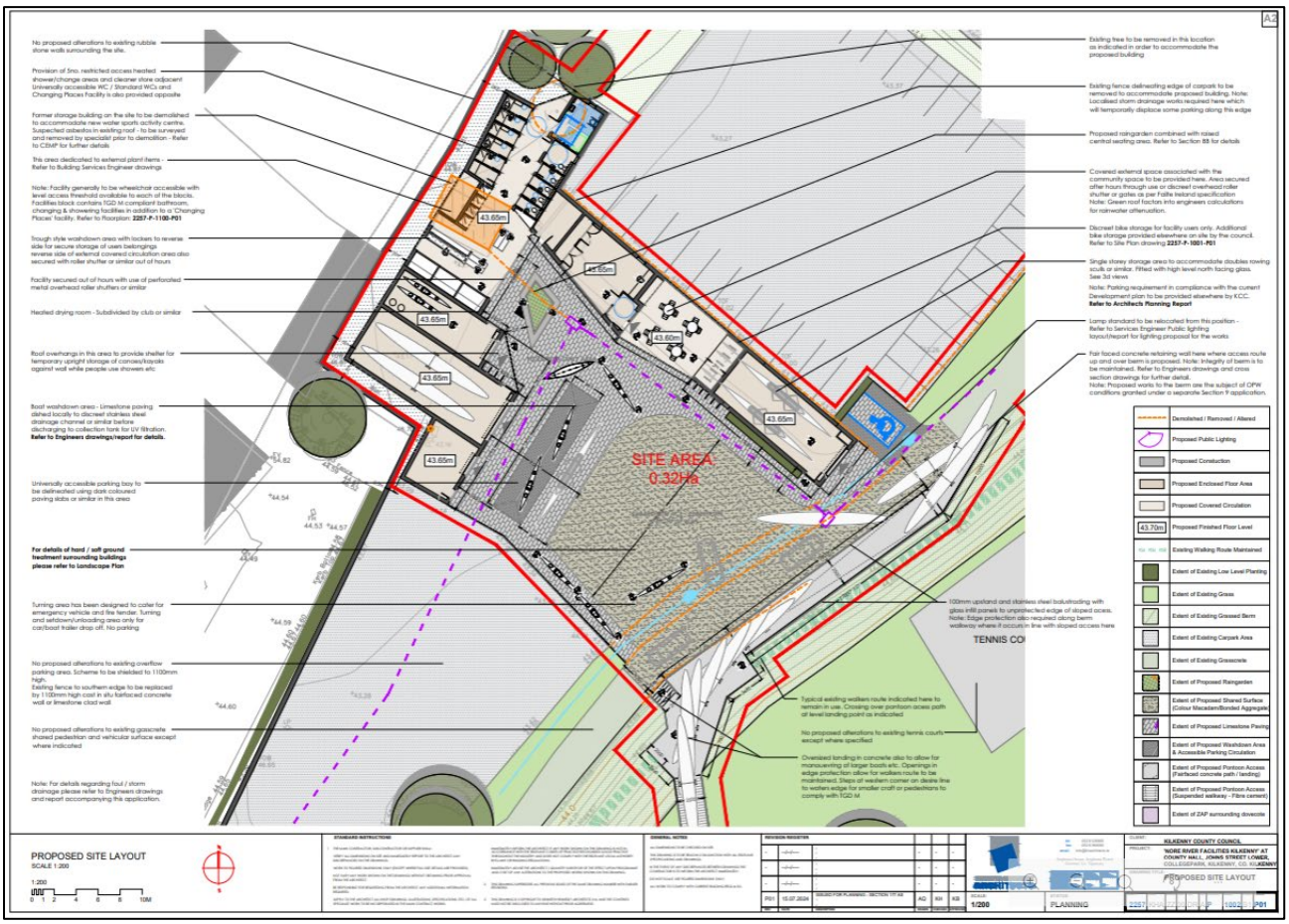
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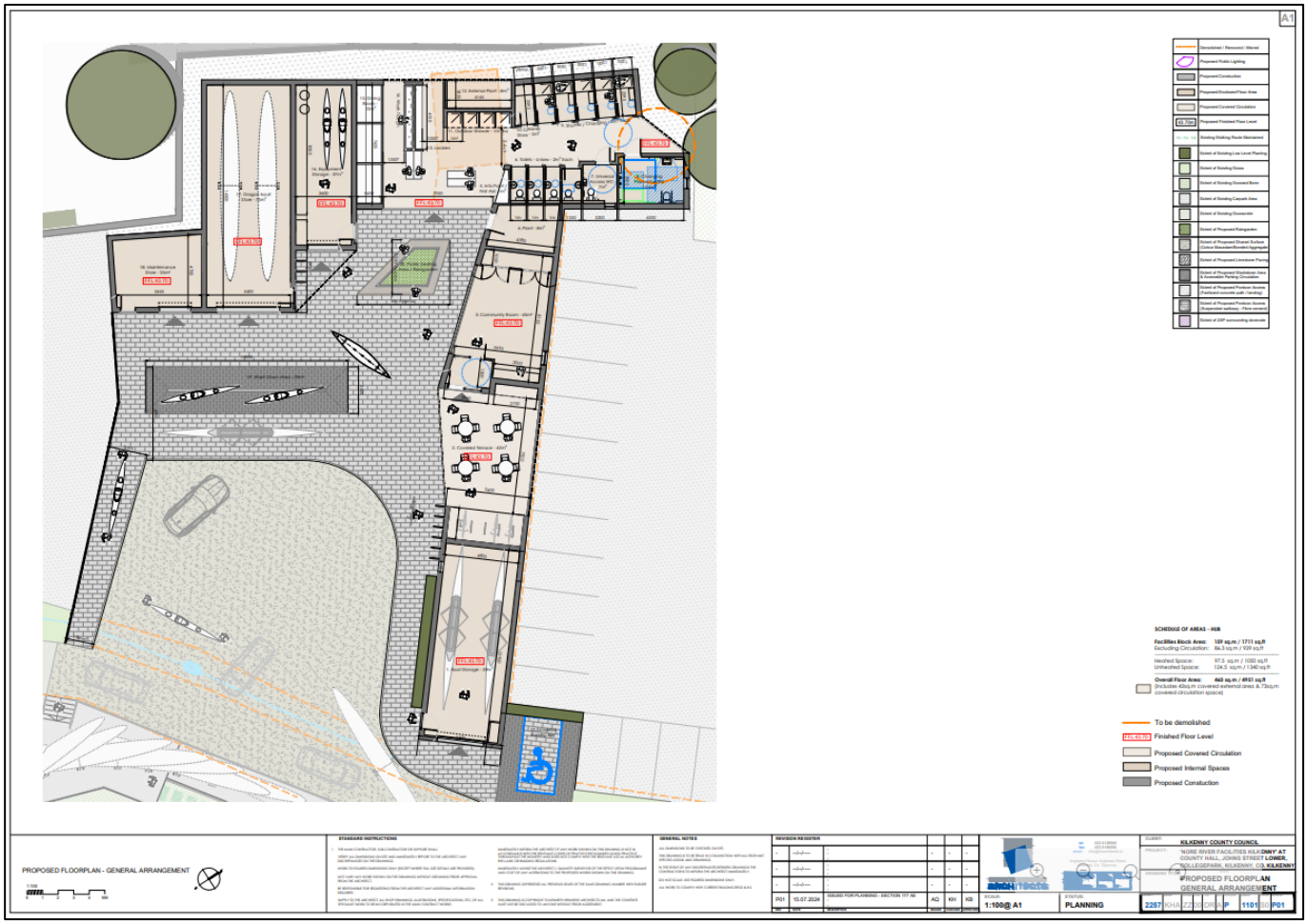
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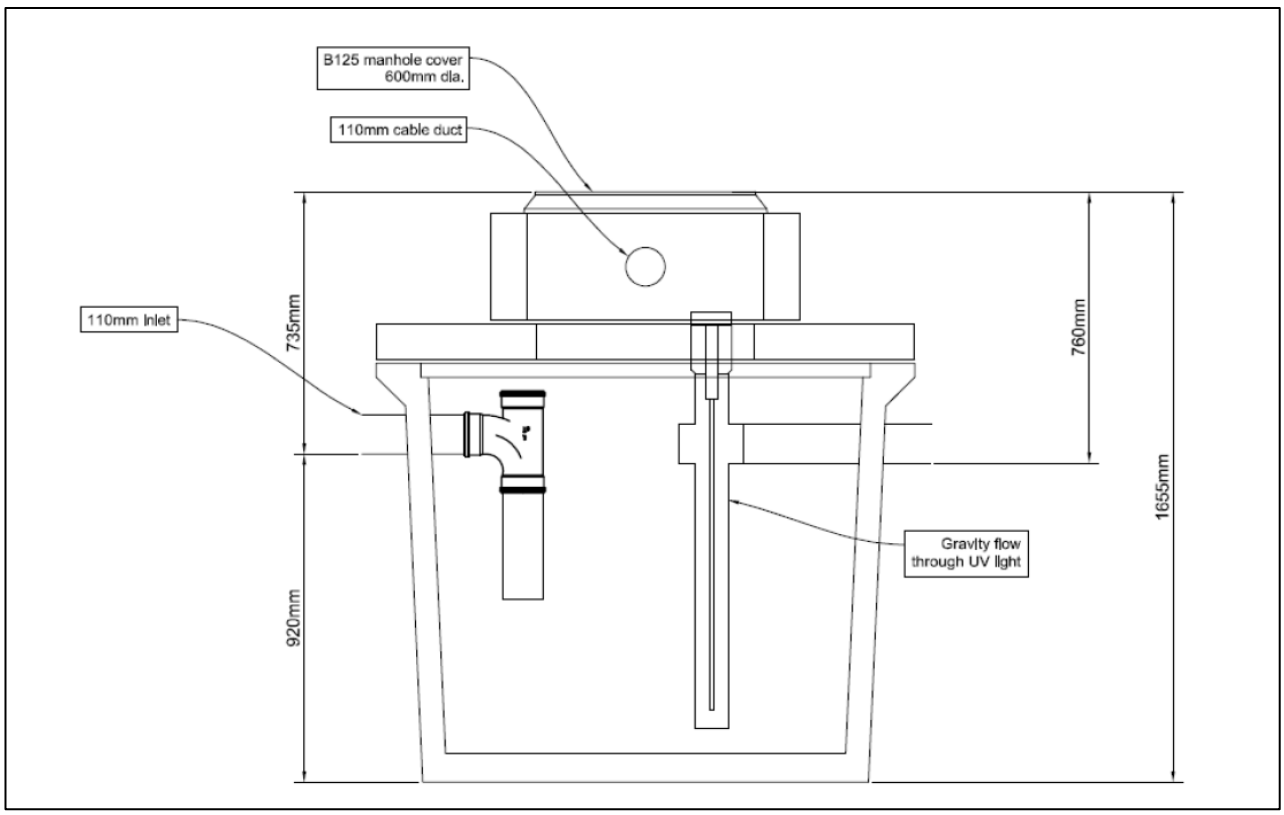
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APPENDIX: SITE LAYOUT, UV Sterilisation Unit AND ECOLOGICAL SITE ASSESSMENT









Proposed Silt chamber with UV Sterilisation Unit



Plate A1: Boundary of site with SAC



Plate A2: Riparian zone of River Nore



Plate A3: River Nore towards proposed pontoon



Plate A4: Location of proposed facilities building



Plate A5: Existing car park



Plate A6: Amenity walkway with grassland

Appendix H – Ecological Impact Assessment (Ross Swift Ecology Ltd)

ROSS SWIFT ECOLOGY LTD.

ECOLOGICAL IMPACT ASSESSMENT

Nore River Facilities Kilkenny

DOCUMENT CONTROL SHEET	
DOCUMENT REFERENCE	ECIA_RSE
DOCUMENT TITLE	ECOLOGICAL IMPACT ASSESSMENT OF NORE RIVER FACILITIES KILKENNY
DATE OF ISSUE	22nd June 2026

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1.0 INTRODUCTION

Ross Swift Ecology Ltd. has been appointed to prepare an Ecological Impact Assessment relative to the proposed development, which will allow the competent authority, to assess the ecological impact of the proposed development on sensitive receptors and in the vicinity of County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny. The proposed development will be used as a base for activities such as kayaking, dragon boat, cycling, water safety storage, river rescue coordination hub, community meeting space and a meeting space for aquatic clubs. In addition, the facility can potentially cater to local commercial interests such as river boat tours (already in operation from St Johns Bridge pontoon) and stand-up paddle boarding. The maximum operational hours for water activities will be from Dawn to Dusk. Shower facilities will be used by Council Staff (before dawn in winter) and the community room used after dusk, however there will be no water activities or use of the pontoon during the hours of dusk to dawn. Lighting along the River Nore canal walkway switches off at 22:30 hours and external lighting facing the River Nore will also switch off at 22:30 hours.

1.1 STATEMENT OF AUTHORITY

This report and assessment were undertaken by Dr Ross Donnelly-Swift, who holds a BSc (Hons) in Biology from Maynooth University, an MSc in Environmental Science from Trinity College Dublin, and a PhD in Biosystems Engineering from University College Dublin. Dr Donnelly-Swift was also a Research Fellow in the School of Natural Sciences at Trinity College Dublin. He has extensive ecological knowledge gained through academic research, fieldwork, protected and specialist species surveys, and ongoing review of academic and professional literature. He has undertaken bat surveys, otter surveys, breeding and wintering bird surveys, targeted species-specific surveys and other protected species surveys for ecological reports, including Ecological Impact Assessments and biodiversity chapters of Environmental Impact Assessment Reports, in support of planning applications and statutory compliance. His project experience includes small- and large-scale industrial, commercial, agricultural, residential, amenity and recreational developments. He has completed a range of ecological, environmental, planning and legal training and continuing professional development courses with organisations including Trinity College Dublin School of Law, Bat Conservation Ireland, Bat Conservation Trust, CIEEM and other wildlife organisations. In 2025, Dr Donnelly-Swift completed an Advanced Diploma in Planning and Environmental Law at King's Inns, The Honorable Society of King's Inns.

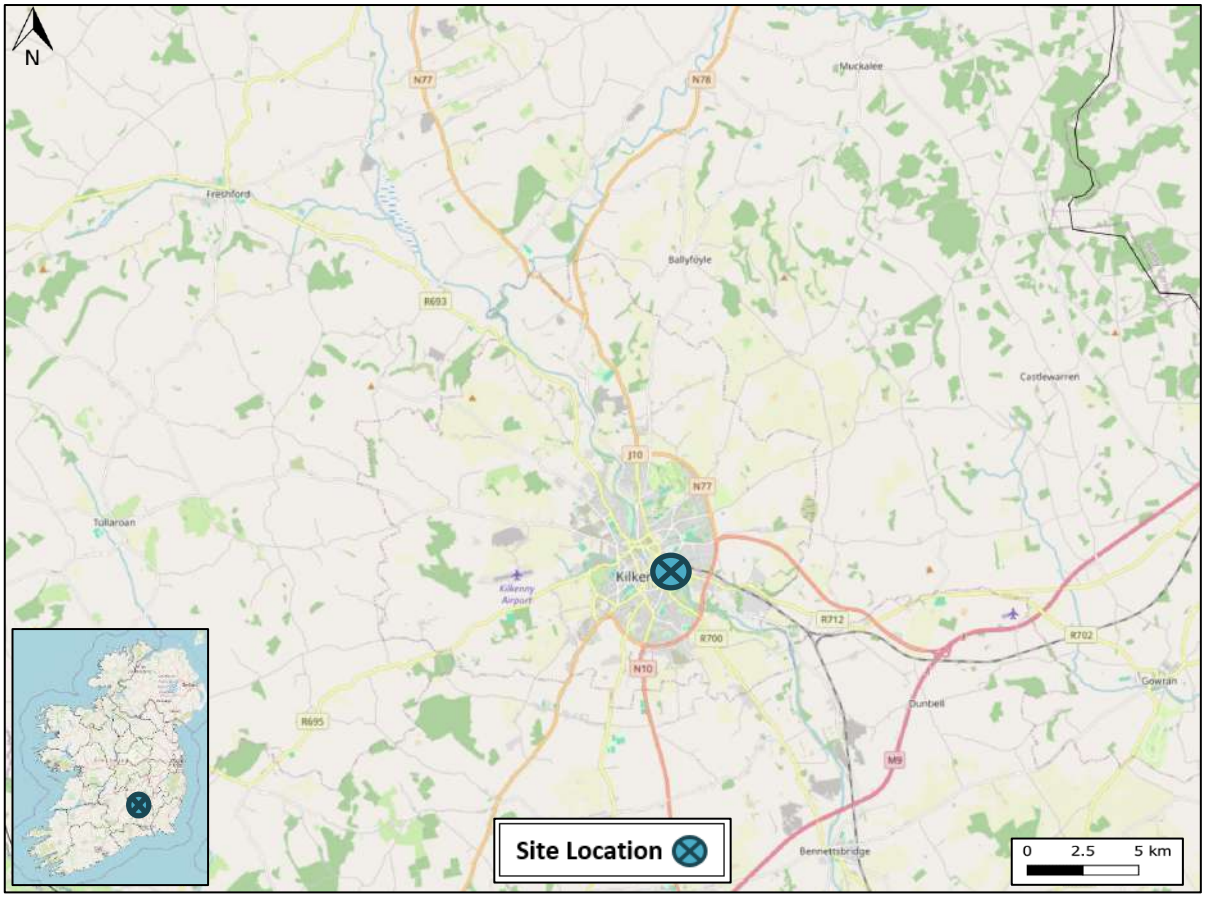


Figure 1.1: Location of proposed development site (Open Street Map ©)

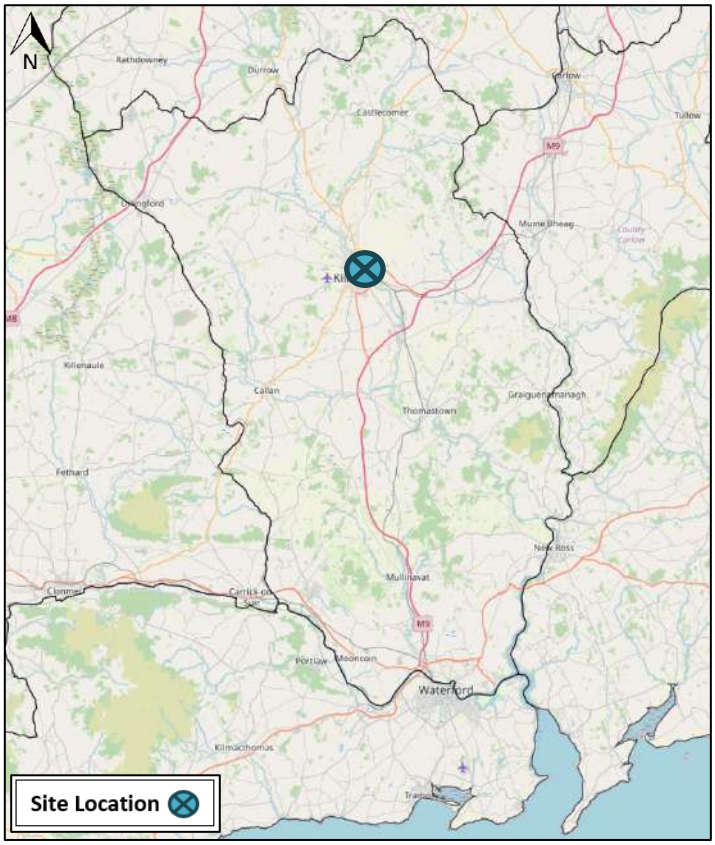


Figure 1.2: Location of Kilkenny City (Open Street Map ©)

2.0 LEGLISLATION AND POLICIES

The Wildlife Act 1976 is the primary piece of Irish legislation providing for the protection and conservation of wildlife. It also provides for the control of specific activities that could adversely affect wildlife, including the regulation of hunting and wildlife trading. Under the Wildlife Act, all bird species, together with specified fauna and flora species in Ireland, are afforded protected status. The Wildlife Act 1976 allows for the designation of specific areas of ecological value, such as Statutory Nature Reserves and Refuges for Fauna. The Wildlife (Amendment) Act 2000 provides for greater protection and conservation of wildlife and also provides for the designation and statutory protection of Natural Heritage Areas. The European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended, transpose the Habitats Directive 92/43/EEC and the Birds Directive 2009/147/EC into Irish law. The Wildlife (Amendment) Act 2023 introduced a new public-sector biodiversity duty and places reporting obligations on public bodies whose statutory functions could have an impact on biodiversity.

The Flora (Protection) Order 2022 (S.I. No. 235 of 2022) provides statutory protection for listed plant species, hybrids and subspecies under Section 21 of the Wildlife Act 1976. Under the Order, it is illegal to wilfully cut, uproot or damage protected plants, or to interfere in any way with their habitats.

Water Framework Directive (2000/60/EC). The Water Framework Directive (WFD) aims to improve the water environment (including groundwater, rivers, lakes, estuaries, and coastal waters) of E.U. Member States. The aim of the WFD is for Member States to achieve and maintain “good status” in all water bodies.

Biodiversity Plan 2023-2030. Irelands forth National Biodiversity Plan 2023-2030 identifies actions towards understanding and protecting biodiversity with a vision that, “biodiversity and ecosystems in Ireland are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally”.

National Biodiversity Data Centre, All-Ireland Pollinator Plan 2026–2030. This is the third phase of the All-Ireland Pollinator Plan and builds on the 2015–2020 and 2021–2025 plans. It provides a voluntary, island-wide framework for coordinated action to support pollinators and wider biodiversity, with implementation coordinated by the National Biodiversity Data Centre.

Kilkenny County Council Development Plan 2021-2027. Under these development plans must include mandatory objectives for the conservation of natural heritage and for the conservation of European sites.

2.1 GUIDELINES FOR ECOLOGICAL IMPACT ASSESSMENT

This Ecological Impact Assessment has been carried with reference to the following guidelines:

- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3. Chartered Institute of Ecology and Environmental Management, Winchester;
    - *Criteria used to evaluate ecological features;*
    - *Criteria used to assess the significance of effects arising from the impacts of the project;*

- *Justification of methods used;*
- *The identification of likely impacts (positive and negative) on ecological features together with an explanation of the significance of the overall effects for each important ecological feature;*
- *Mitigation, compensation and enhancement measures;*
- *Legal and policy consequences;*
- *Identification of any limitations to the assessment, or the surveys which underpin it, and an explanation of the implications.*

ADDITIONAL GUIDANCE

- Department of Housing, Local Government and Heritage (2018). *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*. August 2018.
- Environmental Protection Agency (EPA) (2022). *Guidelines on the information to be contained in Environmental Impact Assessment Reports*.
- European Commission (2019). *Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC*. Commission Notice 2019/C 33/01.
- European Commission (2021). *Assessment of plans and projects in relation to Natura 2000 sites: Methodological guidance on Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC*.
- National Roads Authority / Transport Infrastructure Ireland (2009). *Guidelines for Assessment of Ecological Impacts of National Road Schemes*.
- National Roads Authority / Transport Infrastructure Ireland (2010). *The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads*.
- National Roads Authority / Transport Infrastructure Ireland (2006a). *Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes*.
- National Roads Authority / Transport Infrastructure Ireland (2006b). *Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes*.
- National Roads Authority / Transport Infrastructure Ireland (2006c). *Guidelines for the Treatment of Bats during the Construction of National Road Schemes*.
- Marnell, F., Kelleher, C. and Mullen, E. (2022). *Bat Mitigation Guidelines for Ireland – V2*. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.
- Institution of Lighting Professionals and Bat Conservation Trust (2023). *Guidance Note 08/23: Bats and Artificial Lighting at Night*.
- Bat Conservation Ireland (2010). *Bats and Lighting: Guidance Notes for Planners, Engineers, Architects and Developers*. Retained as an Irish contextual reference, to be read alongside current ILP/BCT lighting guidance.

- Bats and Lighting in the UK – Bats and the Built Environment Series (Institute of Lighting Professionals, September 2018)

- Guidance Notes for the Reduction of Obtrusive Light GN01-21 (Institute of Lighting Professionals, 2021).

2.2 DATA AND DESKTOP REVIEW

Every effort has been made to provide an accurate assessment of the ecological baseline pertaining to the site. However, an ecological survey can only assess a site at a particular point in time and is limited by factors such as season, survey timing, climatic conditions and species behaviour. Ecological surveys are therefore snapshots in time and should not be regarded as complete inventories. Direct observations of, or evidence for, protected species are not always recorded during ecological surveys; however, this does not indicate that such species are absent from the site. To ensure that any limitations encountered did not significantly affect the findings of the ecological assessment, the surveys undertaken also assessed the potential of habitats to support protected species. Cognisance has also been taken of available online baseline data, including flora and fauna records from the NBDC, published NPWS records for protected and threatened species, published Bat Conservation Ireland records, previous ecological surveys where available, and a precautionary approach.

Desktop research was carried out to gather information on the ecology of the site and surrounding areas. The locations of the Natura 2000 sites, Natural Heritage Areas (NHAs) and protected flora and fauna records for the proposed development within the grounds of County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny.

Water quality data from the EPA was reviewed for the assessment of biological and environmental data collected on waterbodies in Ireland under the Water Framework Directive (WFD) monitoring programme of River Ecology Monitoring Results.
Biological records from the National Biodiversity Data Centre (NBDC) for the site and surrounding area (10km grid square/Hectad) were reviewed and account taken of notable species including any rare, protected, threatened and invasive species.

Information on the characteristics of Natura 2000 sites within the potential zone of influence was reviewed, including conservation objectives, site synopses and additional Natura 2000 data available from the NPWS. In addition, spatial data on protected flora and fauna were reviewed and mapped where relevant.

A Natura Impact Statement (NIS) has been undertaken for the proposed development (Document Ref: **NIS_RSE_0626**). This NIS took into consideration the locations of the Natura 2000 sites within the Zone of Influence of the proposed development.

2.3 ECOLOGICAL IMPACT ASSESSMENT METHODOLOGIES

Zone of Influence of works can impact areas outside of the immediate footprint of works. CIEEM (2018) guidelines states that the "Zone of Influence (ZoI) is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities" and that the "zone of influence will vary for different ecological features depending on their sensitivity to an environmental change".

The term **Significant Effect** as used in this report follows guidance (CIEEM, 2018) and is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. In the case of designated sites, a negative significant effect would be one that undermines the conservation objectives and targets for that site. The significance

of impacts on habitats was determined with reference to the value of the feature being affected and the magnitude of the impact. Impacts are considered ecologically significant at a stated geographic scale or are considered not significant. Potential direct, indirect, or cumulative impacts on ecological features can be described in relation to their magnitude, extent, duration, reversibility, and timing/frequency, as outlined in the CIEEM (2018) guidelines. Depending on the type of impact and the sensitivities of the important ecological feature, the ecologist may determine that the impact would have a significant effect. "*A significant effect is simply an effect that is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project*, a significant negative effect is an effect that undermines biodiversity conservation objectives for important ecological features or for biodiversity in general."

The term **Ecological Receptors** is used when impacts upon them are likely. The term **Ecological Value** is intended to refer to those that are judged to be of importance at a particular geographic scale. Actives during the construction phase and operational phase of a proposed development will each potentially give rise to changes in the natural environment that could have impacts upon resources of ecological value.

Survey Limitations

Every effort has been made to provide an accurate assessment of the situation pertaining to the site. However, an ecological survey can only assess a site at a particular time and is limited by various factors such as the season, timing of the survey, climatic conditions, and species behaviour. Ecological surveys are therefore snapshots in time and should not be regarded as a complete study. Direct observations or evidence of protected species is not always recorded during ecological surveys. However, this does not indicate that the species is absent from the site.

The optimal habitat survey period generally runs from April to September, the growing season for the majority of plants (Smith et al., 2011). Survey suitability is also determined by climate conditions such as sunlight, precipitation, and temperature. Most grass species will grow when the temperature is above 5℃ (Whitehead, 1995). To ensure any limitations encountered did not significantly impact upon the findings of the ecological assessments, the ecological survey undertaken also assessed the potential of the habitats to support protected species, and cognisance has been taken of available online baseline data and a precautionary approach taken.

Where areas within a site cannot be accessed, this should be noted in the report as a constraint to the survey. The development site within the grounds of County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny was fully assessable, with access to the riverbanks. A survey of the riverbed of the River Nore was not done at this location. The river banks were accessible for all surveys and again for the winter bird survey. This assessment is based on a review of available historical information, environmental and ecological records, site visit, consultations, relevant guidance information, and any additional reports from third parties. All information received has been taken as being true and representative of the site. The Bat Survey has been prepared in line with best industry standards. The methodology adopted and the sources of information are outlined in this report.

3.0 ECOLOGICAL SURVEYS

The Heritage Council's A Guide to Habitats in Ireland (Fossitt, 2000) is the standard habitat classification system used in Ireland (hereafter referred to as the Guide to Habitats). Habitats should be recorded as they are at the time of the site visit or survey. Habitats frequently merge or grade from one to another, or form complex mosaics, with the result that a continuum of variation often exists within and between different habitat types. This may be entirely natural but, in many cases, management, damage and disturbance blur the distinctions between habitats. The objectives of the habitat survey will determine the survey scale and the key pieces of information that must be gathered; these in turn will affect the resources that will be required to meet the survey objectives. How a particular habitat survey should be conducted to meet the desired objectives must be determined by those commissioning and carrying out the survey (The Heritage Council, 2011).

Table 3.1: Ecological Surveys

SURVEY	STUDY AREA	SURVEY DATES
Habitat Survey	Complete Site & Boundary Buffer	27th April 2024 3rd May 2024 17th May 2024 30th May 2024 27th May 2026 28th May 2026 20th June 2026
Otter & Fauna Survey	Complete Site & Upstream / Downstream of Site	27th April 2024 3rd May 2024 17th May 2024 30th May 2024 24th November 2024 14th December 2024 18th January 2025 8th February 2025 20th March 2025 27th May 2026 20th June 2026
General Bird Survey	Complete Site & Boundary Buffer	27th April 2024 3rd May 2024 17th May 2024 30th May 2024 24th November 2024 27th May 2026 28th May 2026 20th June 2026
Bat Survey	Complete Site & Boundary Buffer	27th April 2024 3rd May 2024 17th May 2024 27th May 2026

SURVEY	STUDY AREA	SURVEY DATES
		20th June 2026
Wintering Bird Survey	Complete Site & Boundary Buffer & River Banks	16th November 2024 14th December 2024 18th January 2025 8th February 2025 20th March 2025
Tail Camera	River Bank	27th April to 3rd May 2024 17th May to 30th May 2024 16th to 24th November 2024 18th January 2025 to 20th March 2025 (inclusive) 28th May 2026 to 20th June 2026

3.1 FAUNA SURVEY

Fauna surveys were undertaken during bright and dry weather conditions. Direct observation methods were used for the survey of fauna, however, these methods may not be suitable for shy and nocturnal species. Therefore, indirect methods were also employed, focusing on evidence of fauna including tracks, burrows/setts/nests, droppings, food items and hair. The habitats on site were assessed for signs of usage by fauna, and the potential to support protected or red-listed species.

Badgers and their setts are protected under the provisions of the Wildlife Act, 1976, and the Wildlife Amendment Act, 2000. It is an offence to intentionally kill or injure a protected species or to wilfully interfere with or destroy the breeding site or resting place of a protected wild animal. The removal of badgers from affected setts and subsequent destruction of these setts must be conducted under licence by experienced badger experts or other suitably qualified personnel. Typically, the main setts of a badger, which are the focus of the social groups, are usually larger than other setts, averaging seven entrances each (Smal, 1995). A badger sett is divided into different types with main setts used for breeding and have multiple entrances. With outliers usually have one entrance and lie towards the fringes of their territory (Lowen, 2016).

3.2 BAT SURVEY

Areas within the site with the potential to support bat roosts and / or foraging / commuting routes, and which have the potential to be impacted upon by the proposed development were the main focus of the survey outlined below. The aim of the bat surveys are to collect robust data following good practice guidelines to allow an assessment of the potential impacts of the proposed project on local bat populations. To facilitate the design of control measures, enhancement, and monitoring strategies for local bat populations recorded. Provide information to enable robust decisions with definitive outcomes that aid in the conservation of local bat populations. Depending on the type of site or habitats contained within the survey can concentrate on areas of suspected or potential bat roots such as buildings (with accessible features) and trees with cracks and crevices as noted below.

The assessment comprised of an external inspection of trees to identify potential roost features (PRFs) and evidence of bat activity. Any cracks or crevices were further inspected visually with the

aid of a strong torch to look for bat droppings, urine staining, grease marks (oily secretions from glands present on stonework) and claw marks. The criteria used to categorise the PRFs or suitability of trees as a potential roost are summarised in the table below, based upon the guidelines by BTHK (2018), Collins (2016) and Hundt (2012).
Examples of such features include;

- Natural holes;
- Cracks/splits in major limbs;
- Loose bark; and,
- Hollows/cavities.

Climbing trees to look for roosts, using appropriate equipment and safety precautions, is a possible approach for small numbers of trees with a high probability of bats, but the results of radiotracking studies of some species suggest that bats may use cracks or crevices that are far from obvious (Kelleher & Marnell, 2006).

A bat activity survey with an Active Bat Detector was undertaken as part of the Bat Assessment of the site.

3.1.1 Assessment of Bat Roost Potential

An extensive daytime assessment of the site was undertaken. The assessment comprised of an external inspection of any trees and buildings to identify potential roost features (PRFs) and evidence of bat activity, using close focusing binoculars and a Thermal Imaging Monocular. The criteria used to categorise the PRFs or suitability of trees and buildings as a potential roost are summarised in the table below, based upon the guidelines by BTHK (2018), Collins, J. (ed.) (2023) and Marnell et al, (2022). A great majority of roosts are used only seasonally, so there is usually some period when bats are not present. Although there are differences between species, maternity sites are generally occupied between May and September and hibernation sites between October and March, depending on the weather. A hibernation site will have a constant cool temperature and humidity. The majority of bat species do not hibernate in trees with the exception of Leisler's bat (*Nyctalus leisleri*) noted as "probably tree cavities" and Brown long-eared bat (*Plecotus auratus*) "tree holes." The probability of bats roosting in a tree decreases in coniferous plantations with no specimen trees and young trees with simple growth form and little damage Marnell et al, (2022). Where bats are found, either individually or in groups in the winter months will have a constant cool temperature and humidity. The pipistrelles are the smallest and most often seen of our bats, flying at head height, and taking small prey such as midges and small moths. Summer roost sites are usually in buildings. Both Common pipistrelle and Soprano pipistrelle can hibernate in a variety of places, which may be quite exposed frequently in cavities in buildings, rarely underground. Brown long-eared bat can be found hibernating in roofs.

Table 3.2: Bat Roost Potential Categories

CATEGORY	DESCRIPTION
High Trees / Buildings / Structures that are suitable for use by large	Features include holes, cracks or crevices that extend or appear to extend back to cavities suitable for bats. In buildings, examples include eaves, barge boards, gable ends and corners of adjoining beams, ridge and hanging tiles, behind roofing felt or within cavity walls. In trees,

CATEGORY	DESCRIPTION
numbers of bats on a regular basis	examples include hollows and cavities, rot holes, cracks/splits and flaking or raised bark which could provide roosting opportunities. Any ivy cover is sufficiently well-established and matted so as to create potential crevices beneath. Further survey work would be required to determine whether or not bats are present, and if so, the species present. Appropriate mitigation and potential licencing requirements may then be determined.
Moderate Moderate potential is assigned to Trees / Buildings / Structures with potential to support bat roosts but supports fewer features than a high potential building / tree and is unlikely to support a roost of high conservation value.	From the ground, building / tree appears to have features (e.g. holes, cavities, cracks or dense ivy cover) that may extend back into a cavity. However, owing to the characteristics of the feature, they are deemed to be sub-optimal for roosting bats. Further survey work would be required to determine whether or not bats are present, and if so, the species present. Appropriate mitigation and potential licencing requirements may then be determined.
Low Low potential is assigned to Trees / Buildings / Structures with features that could support individual bats opportunistically.	If no features are visible, but owing to the size, age and/or structure, hidden features, sub-optimal for roosting bats, may occur that only an elevated inspection may reveal. In respect of ivy cover, this is not dense (i.e. providing PRF in itself) but may mask presence of PRF features. Further survey work may be required for buildings only or works may proceed using reasonable precautions (e.g. controlled working methods, under license or supervision of a bat worker).
Negligible	Trees / Buildings / Structures have no potential for bat roost.

A daytime inspection of a site will determine the potential of bat roosts within the survey area. The types of bat roosts are listed in **Table 3.3** below;

ROOST TYPE	DEFINITION	TIME OF SURVEY
Day Roost	A place where individual bats or small groups of males, rest or shelter in the daytime but are rarely found by night in the summer.	Anytime of the year
Night Roost	A place where bats rest or shelter in the night but are rarely found in the day. May be used by a single bat on occasion or it could be used regularly by the whole colony.	Anytime of the year
Feeding Roost	A place where individual bats or a few bats rest or feed during the night but are rarely present by day.	Anytime of the year
Transitional Roost	A place used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.	Outside the main maternity and hibernation periods.

Swarming Site	Where large numbers of males and females gather. Appear to be important mating sites.	Late summer and autumn
Mating Site	Where mating takes place.	Late summer and autumn
Maternity Site	Where female bats give birth and raise their young to independence.	Summer months
Hibernation Site	Where bats are found, either individually or in groups in the winter months. They have a constant cool temperature and humidity.	Winter months in cold weather conditions
Satellite Roost	An alternative roost found in close proximity to the main nursery colony and is used by a few individuals throughout the breeding season.	Summer months

3.2.2 Bat Survey Methodology

Bats use echolocation to hunt and navigate in their environs, echolocation calls are used to identify bat species and therefore bat detectors are the principal tool to aid bat surveys. Bat surveys of the site were carried out in April and May 2024 using an Anabat Walkabout Active Bat Detector with both heterodyne and frequency division. The Anabat Walkabout Active Bat Detector has an additional Anabat Stainless Steel Microphone microphones that enhances the detector and provides greater quality recordings. In addition, a Pulsar Telos XP50 Thermal Imaging Monocular was used to assess buildings, trees and observe bat activity along the River Nore.

- The first survey on the 27th of April 2024 was a dusk survey and commenced at 8.15pm (approx. 35 minutes before sunset) and was approx. two and a half hours in duration, finishing at 10.45pm.

- The second survey was on the 3rd of May 2024 was a dusk survey and commenced at 8.30pm (approx. 30 minutes before sunset) and was approx. two and a half hours in duration, finishing at 11pm.

- The third survey was on the 17th of May 2024 was a dusk survey and commenced at 8.50pm (approx. 30 minutes before sunset) and was approx. two and a half hours in duration, finishing at 11:15pm.

Follow up surveys were conducted in 2026. Weather conditions were warm, calm and dry.

- On the 27th of May 2026 a dusk survey was done and commenced at 9.00pm (approx. 30 minutes before sunset) and was approx. three hours in duration, finishing at midnight.

- On the 20th of June 2026 a dusk survey was done and commenced at 9.30pm (approx. 30 minutes before sunset) and was approx. three hours in duration, finishing at 12:30am.

The proposed development site was assessed during the day for potential bat activity with an emphasis on the mature treelines, the riparian zone, and the River Nore. The outbuilding for demolition and the mature parkland trees along the site boundary with bat roost potential were monitored for emergence of bats during each survey. Weather conditions were suitable for bat

activity during each survey, with calm, partly cloudy or overcast with dry conditions and temperatures of +13°C to +10°C during each dusk surveys. Insect activity was noticeable during each assessment. The surveys in 2026 had temperatures between +17°C to +20°C and assessed the mature trees, outbuilding and activity along the River Nore.

3.3 BIRD SURVEYS

Bird usage of the development site and surrounding area was assessed during each site visit.

3.3.1 GENERAL BIRD SURVEY

Bird usage of the development site was assessed during each site visit. This survey comprises a series of watches from a fixed location to quantify the flight activity of birds at a proposed development site. In addition, while walking the development site, stops were undertaken on a regular basis during which time the area was scanned as far as the terrain or weather conditions allowed. Birds were identified by visual sightings and auditory identification of songs and calls. Birds flying overhead were also included as part of the survey. Birds observed while undertaking habitat and specific fauna surveys were also noted. Priority habitat/features such as trees, dense hedgerows or shrubs, reed beds, or small bodies of water are areas that surveying can concentrate on for shy species with low detection. Disturbance to the site should be kept to a minimum while undertaking a bird survey. Target species will be limited to those species which are afforded a higher level of legislative protection. Some species may also be selected as a result of their behaviour which makes them more likely to be subject to impact from the proposed development. There are three important species lists from which target species may be drawn;

- Annex I of the EC Birds Directive;
- Schedule 1 of the Wildlife Act;
- Red & Amber listed Birds of Conservation Concern.

The banks of the River Nore were assessed for the potential to contain suitable habitat for nesting Kingfisher (*Alcedo atthis*). Kingfishers prefer banks of at least 1-2 metres high, vertical banks and with some fringing vegetation (Cummins et al, 2010). Kingfisher will favour a branch or post from which it plunge-dives to catch small fish and return to perch to kill prey. It prefers slow moving rivers. Nesting occurs in muddy exposed vertical banks that it can burrow into. The burrows can be 15cm long with the nest chamber at the end with no nest material used. They can raise multiple broods over the breeding season (Wilson and Carmody, 2011). The bank of the River Nore was surveyed as per **Figure 3.1** below.

3.3.2 WINTERING BIRD SURVEY

Wintering Bird usage of the development site was assessed for the River Nore and included a series of spot-counts and distribution mapping from vantage points affording good views. These spot counts were supplemented by walkovers of habitats and targeted survey areas. A widely used method for wetland and waterbirds is that described by Bibby (2000) as a 'look-see' approach which is an instantaneous count from one or more (or continuous) viewpoints over a subject waterbody or larger wetland area/site. This method is used for national and international surveys including The Irish Wetland Bird Survey (I-WeBS). Birds were identified by visual sightings and auditory identification of songs and calls. Birds flying overhead were also included as part of the survey.

Professional bird watching equipment was used by Dr Ross Donnelly-Swift during this wintering bird survey. The wintering bird survey area is outlined as **Figure 3.2** below.

3.4 OTTER SURVEY

Otter is a protected species in Ireland, and it is an offence to deliberately capture or kill any otter, or to deliberately disturb this species particularly during the period of breeding. As per the NPWS "*Otter in Ireland*" the otter is a large carnivore with a long slim body, short legs and a tapered tail. Adult males can reach 1m in total length and 10kg in weight. The otter's feet are webbed, and it swims low in the water with only its head showing. However, you need to be lucky to see an otter, and the best way to discover whether otters frequent an area is by looking for tell-tale signs. Otters have two basic requirements: aquatic prey and safe refuges where they can rest. Otters maintain territories and will defend their stretches of riverbank or lake shore from other otters. In lowland rivers and fish-rich lakes otters only need to maintain small territories (1- 2km). An otter usually maintains numerous couches and holts within its territory. Couches are above ground resting places, often on islands, or hidden in extensive reed beds, or in dense scrub, brambles or nettles. Holts are underground and can take many forms such as among falls of rocks, in caves, excavated tunnels in peat banks, or within root systems of mature bank-side trees. Holts and couches may be found some distance from freshwater, but most are within the immediate area of riparian vegetation. In general otters exploit a narrow strip of habitat at the aquatic / terrestrial interface. With natal holts situated some distance from normal activity. The otter is an opportunistic predator with a broad and varied diet. In freshwater areas a variety of fish from sticklebacks to salmon and eels will be taken, while crayfish and frogs can be important locally or seasonally. Terrestrial prey is taken infrequently, with birds occurring in just 3% of spraints, and mammals occurring even more rarely. Otter cubs may be born at any time of year. They are born in natal holts. These tend to be especially well hidden, usually far from other otter traffic to avoid potential aggression. Otters mark their territories with their droppings which are known as spraints. These spraints are normally left in prominent places such as on rocks, ledges under bridges, mounds or short tufts of grass in prominent positions. Otter spraints are usually dark greenish, slimy and full of fish bones, scales and crayfish parts. These deposits are a form of messaging among the otters in the area as well as a way of claiming territory or resources resting sites) advertising to other otters that are not local or in the social group established within a given range of the rivers and related habitats (NPWS, 2012).

The presence / absence of otter and other fauna was surveyed through the detection of field signs such as tracks, markings, feeding signs, and droppings as well as by direct observation. In addition, the study area was surveyed for the presence of otter holts. There were no active or inactive holts observed at the locations examined along the site boundary or within the riparian woodland. The site was assessed for signs of otter activity during each site visit by walking the riverbank and along boundary and looking for any otter activity. The surveys were conducted on a dry and calm days. The River Nore was not in flood. During this assessment a Bushnell Trail Camera was fitted to a tree within the riparian zone at two separate locations. The locations of the trail camera and the area surveyed on foot is indicated by the blue line in **Figures 3.1.1** and **3.1.2** below. The weir was assessed from the canal walkway and the bank along the hotel was assessed from the canal walkway (below Kilkenny Castle) and St John's Bridge with binoculars. The trail camera was left out for one week and moved to the second location for an additional two weeks. The area assessed for a potential otter holt was greater than 150m radius of the proposed pontoon. See **Figure 3.2** below. Disturbance of otter can

be up to 150m for some construction related activities. The river banks were also assessed from November 2024 to March 2025, with a Trail Camera also monitoring the river bank at the proposed pontoon location (See **Table 3.1**). The Trail Camera was place along the riparian zone in 2026 to update fauna activity at the site.

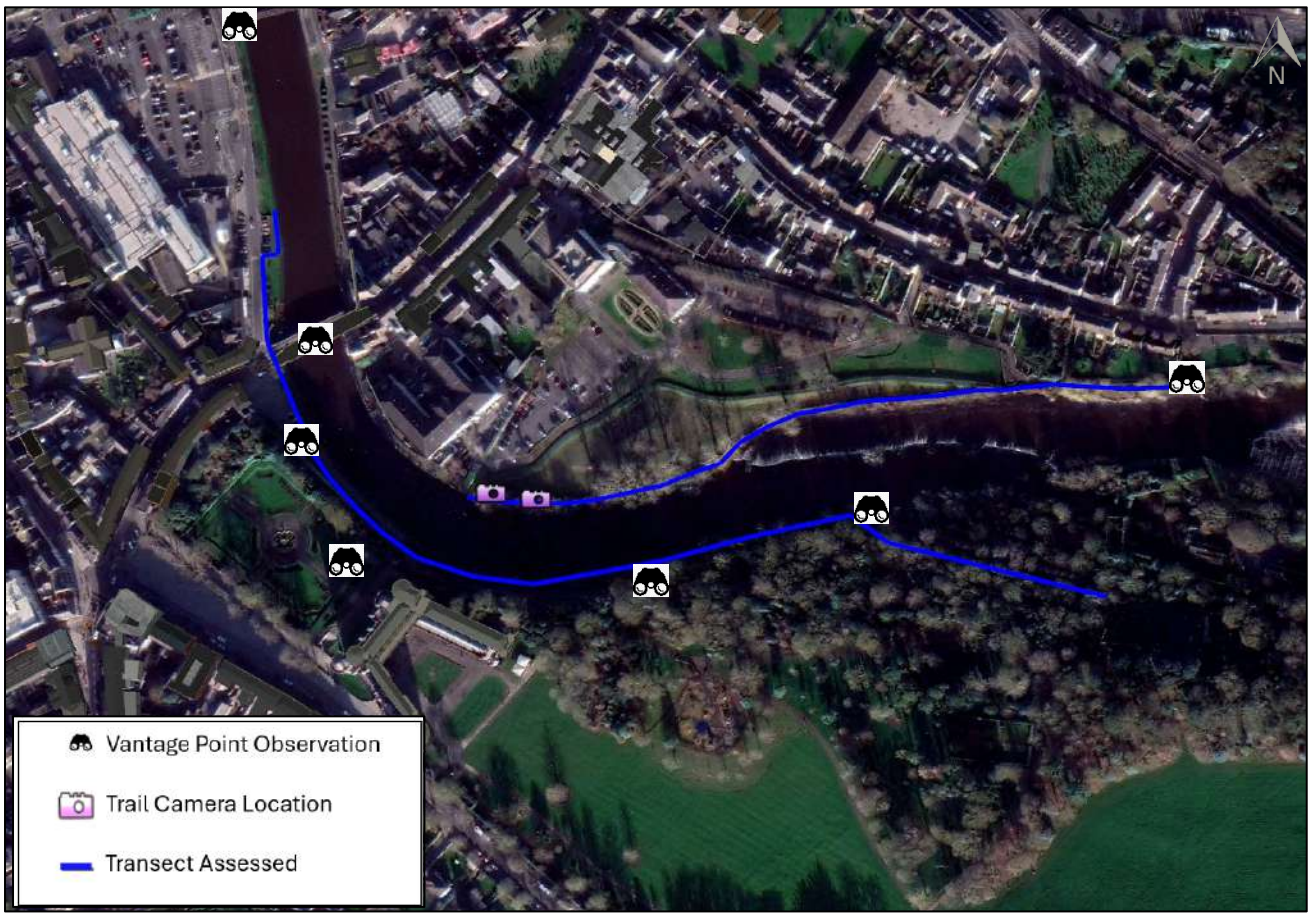


Figure 3.1.1: Survey of the River Nore banks April – May 2024 **(Google Images ©)**



Figure 3.1.2: Survey of the River Nore Nov 2024 – Jun 2026 **(Google Images ©)**

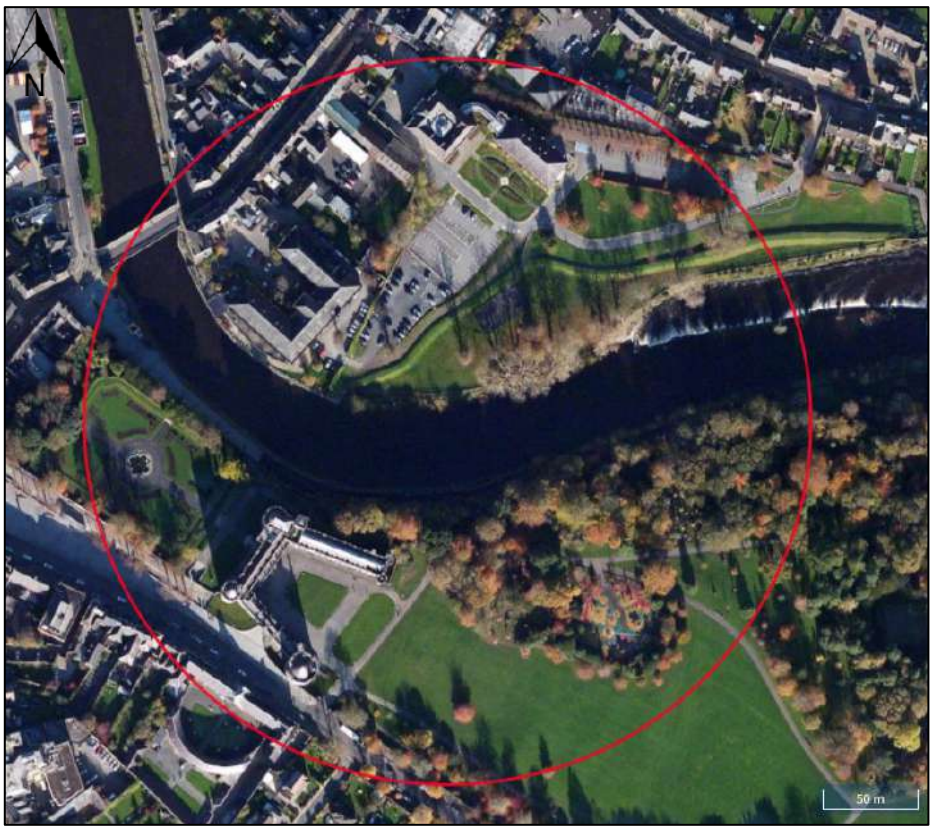


Figure 3.2: 150m radius (approx.) from location of proposed Pontoon **(Open Street Map ©)**

3.5 SURFACE WATERBODIES DESKTOP STUDY

The proposed development is located within the Nore_SC_090 sub-catchment, which is part of the Nore Catchment. The closest mapped watercourse to the proposed development site is the River Nore (EPA Code: 15N01 – Order 6) which is located within the site boundary. See **Figure 3.3** below. There are no drainage ditches or other watercourses within the site boundary. The Environmental Protection Agency (EPA) undertakes surface water monitoring along the River Nore. EPA comments on the most recent monitoring results for the River Nore are as follows: "*Only three of the eighteen sites assessed in the main channel of the River Nore were found to be in satisfactory ecological condition in 2025. The other fifteen sites sampled were in unsatisfactory condition including two (0400, 2305) that have further declined from Moderate to Poor condition since 2022 and three which had declined from good to moderate (0080, 0500, 0700). This situation in 2025 compares unfavourably with 2022 when 12 of 19 sites sampled were unsatisfactory and in 2019 when only 4 of 18 sites were deemed unsatisfactory." Table 3.1.1 below shows the Water Framework Directive (WFD) status of the River Nore and two tributaries that flow into the River Nore, the Brownstown (downstream c. 2.7 km) and the Bregagh [Kilkenny] (upstream c. 660 m)".* **Table 3.2** shows the surface waterbodies and the Water Framework Directive (WFD) Status.

TABLE 3.2 SURFACE WATERBODIES AND WFD STATUS

RIVER	CODE	ORDER	WFD STATUS
Nore	190	6	Not At Risk
Brownstown	010	4	At Risk
Bregagh [Kilkenny]	030	4	At Risk



Figure 3.3 Mapped waterbodies within proximity to development site (Google Images ©)

4.0 RESULTS OF ECOLOGICAL SURVEYS AND ASSESSMENTS

There is a mixture of habitats within the site boundary that are largely modified such as buildings and artificial surfaces (**BL3**), amenity grassland (**GA1**). Riparian woodland (**WN5**) and depositing/lowland river (**FW2**) is found along the southern section of the site. Scattered trees and parkland (**WD5**), recolonising bare ground (**ED3**) and flower beds and borders (**BC4**) are found in proximity to the site boundary. There are no protected species on the Flora (Protection) Order 2022 located within or along the boundary of the site. Third Schedule Invasives Species were noted along the riparian zone of the River Nore (downstream of site). The majority of habitats within the boundary are of low ecological value with no flora of conservation significance. The River Nore is of high ecological value. The identified habitats at the proposed development site, as per the Fossitt habitat classification scheme, are summarised in **Table 4.1** below.

Table 4.1: Summary of Habitats Identified at the Proposed Development Site

HABITAT CLASSIFICATION HIERARCHY			
LEVEL 1	**LEVEL 2**	**LEVEL 3**	**PLATE NO**
F Freshwater	**FW** Watercourses	**FW2** Depositing / lowland rivers	**4.7**
G Grassland and marsh	**GA** Improved grassland	**GA2** Amenity grassland	**4.6**
	GS Semi-natural grassland	**GS2** Dry meadows and grassy verges	**4.8**
E Exposed rock and disturbed ground	**ER** Exposed rock	**ED3** Recolonising bare ground	**4.2**
W Woodland and scrub	**WN** Semi–natural woodland	**WN5** Riparian woodland	**4.3**
	WD Highly modified / non- native woodland	**WD5** Scattered trees and parkland	**4.4**
B Cultivated and built land	**BC** Cultivated land	**BC4** Flower beds and borders	**4.5**
	BL Built land	**BL3** Buildings and artificial surfaces	**4.1**

The habitat was resurveyed in 2026. The principal change observed was within the grassland in the grounds of Kilkenny County Council, where the flood defence berm is now subject to less intensive management. As a result, this area is more characteristic of grassy verge habitat, with an increased diversity of flora recorded.

4.1 DETAILED DESCRIPTION OF EACH HABITAT

The following habitats were found at the proposed development site;

Plate 4.1 Buildings and Artificial Surfaces








The buildings, walls, footpaths, railings and areas of hardcore are classified as building and artificial surfaces (**BL3**) habitat. The flora found at the **BL3** habitat was dominated by Ivy (*Hedera helix*) and Virginia Creeper (*Parthenocissus Quinquefolia*) with Dandelion (*Taraxacum* agg.), and Moss (*Bryophyta*). This habitat was unchanged in 2026 see bottom row of **Plate 4.1**.

Plate 4.2 Recolonising Bare Ground





Recolonising bare ground (**ED3**) habitat is found along the southwest boundary wall. The flora are recolonising species such as Couch-grass (*Elytrigia repens*), Dandelion (*Taraxacum* agg.), Buttercup (*Ranunculus* spp.), Clover (*Trifolium* spp.), Daisy (*Bellis perennis*), Broad-leaved Dock (*Rumex obtusifolius*), Groundsel (*Senecio vulgaris*), Hawkweeds (*Hieracium* spp.), Nettle (*Urtica dioica*), Ragwort (*Senecio jacobaea*), Sow-thistle (*Sonchus* spp.), Spear Thistle (*Cirsium vulgare*), Valerian (*Centranthus ruber*) and Willowherb (*Epilobium* spp.). This habitat was unchanged in 2026.

Along the boundary with the River Nore is riparian woodland (**WD5**) habitat. The trees species here are predominantly Willow (*Salix* spp.) with Alder (*Alnus* spp.), Ash (*Fraxinus excelsior*), Sycamore (*Acer pseudoplatanus*). The understory has Bramble (*Rubus fruticosus*), Dogwood (*Cornus sanguinea*), Dog-rose (*Rosa canina* agg.), Butterfly-bush (*Buddleja davidii*), Ivy (*Hedera helix*), Bindweed (*Calystegia* spp.), Cleavers (*Galium aparine*), Sedges (*Carex* spp.), Dock (*Rumex* spp.), Nettle (*Urtica dioica*), Willowherb (*Epilobium* spp.), Cow Parsley (*Anthriscus sylvestris*). In the marginal zone is Water Mint (*Mentha aquatica*), Reeds (*Calamagrostis* spp.), Figwort (*Scrophularia* sp.), Bulrush (*Typha latifolia*), Water-cress (*Rorippa nasturtium-aquaticum*), Bittersweet (*Solanum Dulcamara*), Horsetail (*Equisetum* spp.) and Brooklime (*Veronica beccabunga*). Giant Hogweed (*Heracleum mantegazzianum*) and Indian Balsam (*Impatiens glandulifera*) are found within this habitat downstream of the site boundary as per **Figure 4.9** below. This habitat was unchanged in 2026, see bottom row of **Plate 4.3**.

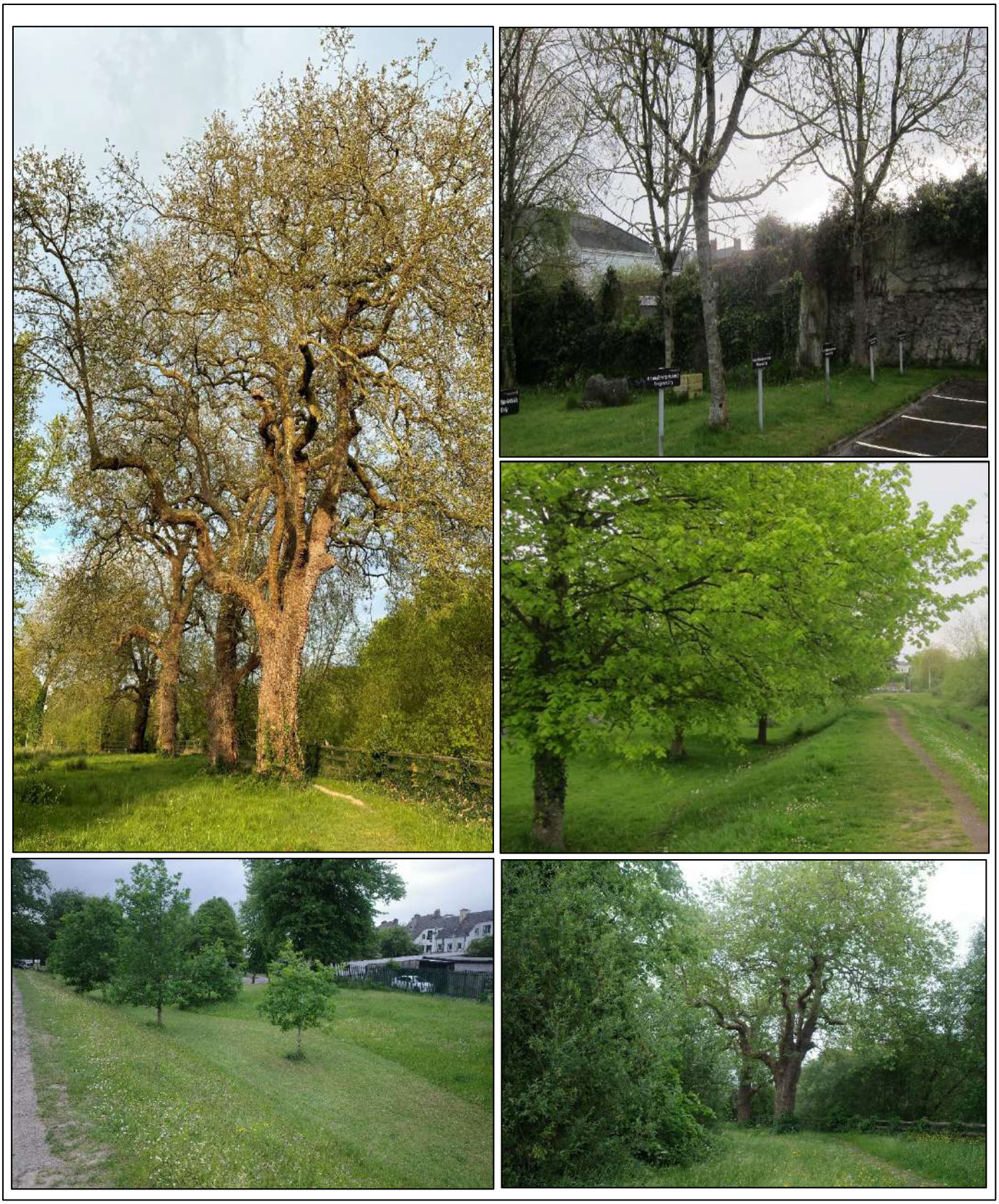
Plate 4.3 Riparian Woodland








Plate 4.4 Scattered trees and parkland



Scattered trees and parkland (**WD5**) habitat is found along the boundary of the site and within the overall parkland around County Hall. The tree species found here are Ash (*Fraxinus excelsior*), Beech

(*Fagus sylvatica*), Lime (*Tilia* spp.), Sycamore (*Acer pseudoplatanus*) and Plane (*Platanus Orientalis*). This habitat was unchanged in 2026, see bottom row of **Plate 4.4**.

Plate 4.5 Flower beds and borders



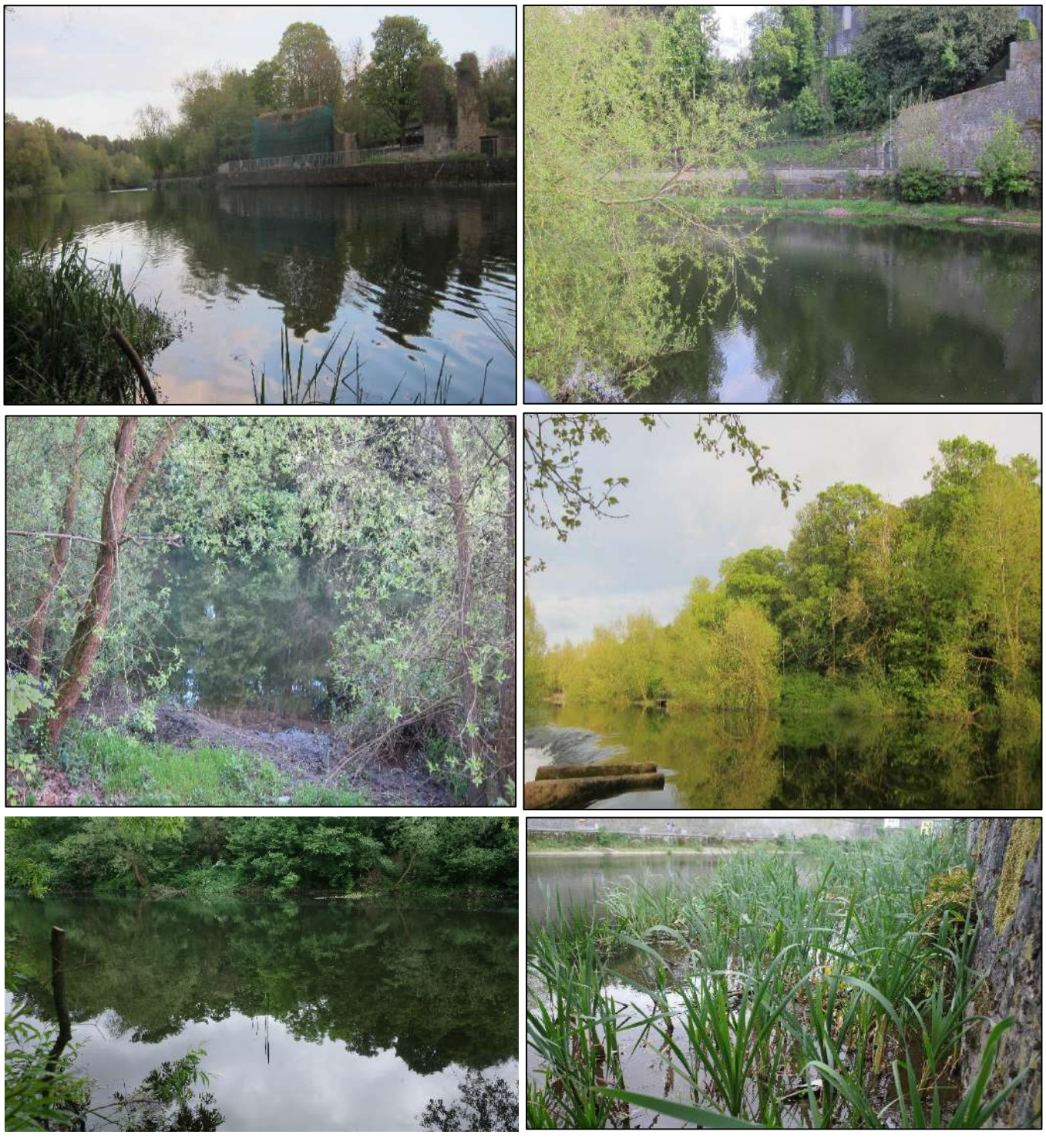
Flower beds and borders (**BC4**) habitat is along the wall boundary and the formal landscaping at County Hall. The flora includes Rose (*Rosa* spp.), Daffodil (*Narcissus*), Lavender (*Lavandula* spp.), Bluebells (*Hyacinthoides*) and Primrose (*Primula vulgaris*). This habitat was unchanged in 2026.

Plate 4.6 Amenity Grassland



Amenity Grassland (**GA2**) habitat is found throughout County Hall parklands. Some areas of grassland are less intensively managed (along the southeast side of the embankment). The flora found here includes Buttercup (*Ranunculus* spp.), Clover (*Trifolium* spp.), Daisy (*Bellis perennis*), Dock (*Rumex* spp.), Ragwort (*Senecio jacobaea*), Silverweed (*Potentilla anserina*), Thistle (*Cirsium* spp.), Speedwell (*Veronica spp.*), Willowherb (*Epilobium* spp.), Dandelion (*Taraxacum* agg.), Bent grasses (*Agrostis* spp.), Ryegrasses (*Lolium* spp.), Soft Rush (*Juncus effusus*) and Meadowgrasses (*Poa* spp.). This habitat changed in sections 2026. See GS2 below.

Plate 4.7 Depositing / lowland rivers



The River Nore is classified as Depositing / lowland rivers (**FW2**) with Pondweed (*Potamogeton nations*), Water starwort (*Callitriche* spp.) with Common Reed (*Phragmites australis*), Bulrush (*Typha* spp.), Water mint (*Mentha aquatica*) along the margins.

Plate 4.8 GS2 Dry meadows and grassy verges

The grassland along the flood defence berm is now less intensively managed and is more characteristic of grassy verge habitat. Species recorded include Cock's-foot (*Dactylis glomerata*), Yorkshire-fog (*Holcus lanatus*), Timothy (*Phleum pratense*), Creeping Bent (*Agrostis stolonifera*), Ribwort Plantain (*Plantago lanceolata*), Buttercup (*Ranunculus* spp.), Yarrow (*Achillea millefolium*), Bird's-foot-trefoil (*Lotus corniculatus*), White Clover (*Trifolium repens*), Red Clover (*Trifolium pratense*), Oxeye Daisy (*Leucanthemum vulgare*), Selfheal (*Prunella vulgaris*), Hogweed (*Heracleum sphondylium*), Hawkweeds (*Hieracium* spp.) and Dock (*Rumex* spp.).





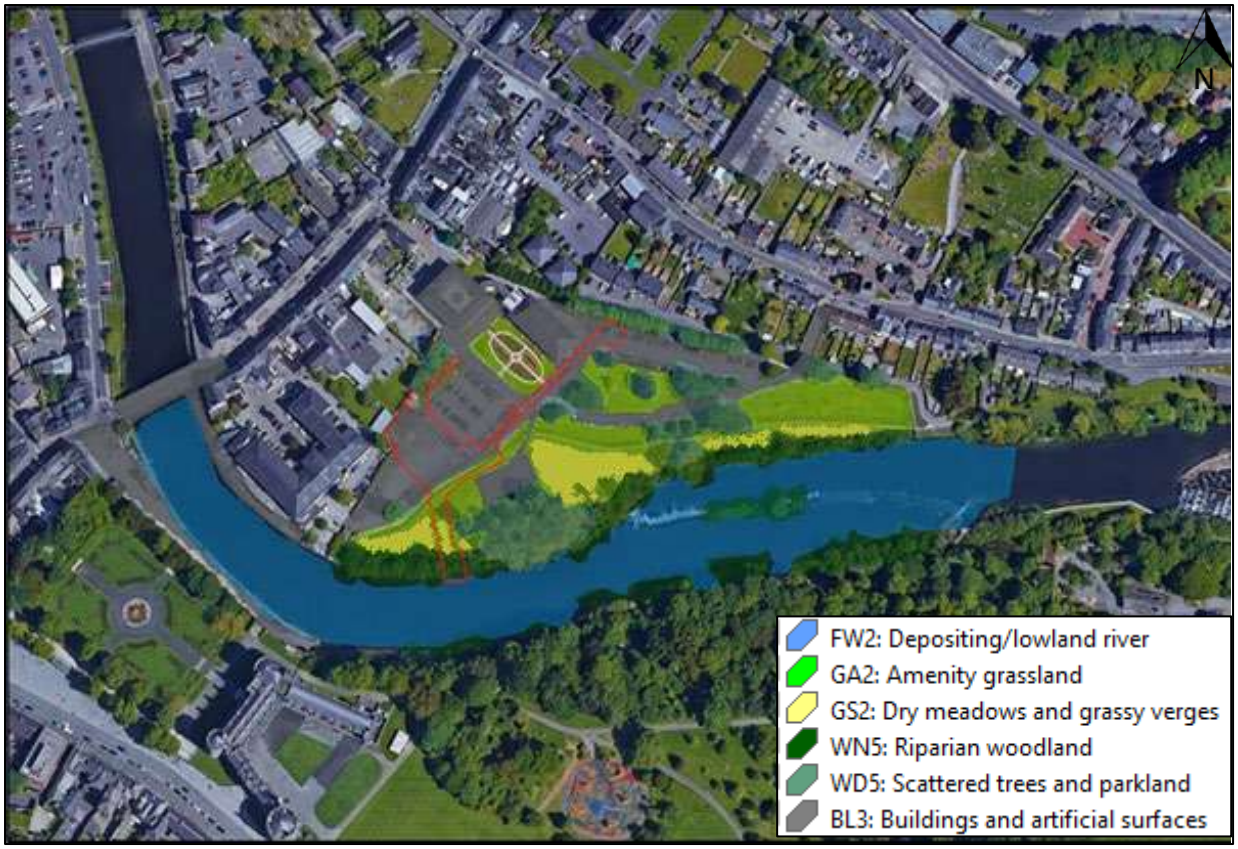


Figure 4.1 Main Habitats Map (Google Earth ©)

Table 4.2 Ecological Value of Identified Habitats at the Proposed Development

HABITAT TYPE	HABITAT RATING	KEY ECOLOGICAL RECEPTOR?
BL3 Buildings and artificial surfaces	Local importance, lower value	No. Artificial surfaces of low ecological value.
BC4 Flower beds and borders	Local importance, lower value	No. Modified habitat of low ecological value.
ED3 Recolonising bare ground	Local importance, lower value	No. Modified habitat of low ecological value.
GA2 Amenity grassland	Local importance, lower value	No. Modified amenity habitat of low ecological value.
GS2 Dry Meadows and Grassy Verges	Local importance, lower value	Yes. Provides floral resources and habitat structure for invertebrates.
WD5 Scattered trees and parkland	Local importance, lower value	Yes. May provide nesting opportunities for birds and foraging opportunities for bats.

HABITAT TYPE	HABITAT RATING	KEY ECOLOGICAL RECEPTOR?
WN5 Riparian woodland	Local importance, lower value	Yes. May provide nesting opportunities for birds, foraging opportunities for bats, and ecological connectivity along the river corridor.
FW2 Depositing / lowland rivers	National importance, higher value.	Yes. Protected aquatic habitat associated with the River Nore and its ecological corridor.

4.2 INVASIVE SPECIES

Under Regulation 49(2) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), save in accordance with a licence granted under paragraph (7), any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place specified in relation to any plant which is included in Part 1 of the Third Schedule shall be guilty of an offence.

Materials containing high impact invasive species are considered "controlled waste", and, as such, there are legal restrictions on their handling and disposal. Under Regulation 49(7) of the European Communities (Birds and Natural Habitats) Regulations 2011, it is a legal requirement to obtain a license to move "vector materials" listed in the Third Schedule, Part 3.

During the site assessment three invasive plant species listed in the Third Schedule of the European Communities Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) were recorded. See **Figure 4.2** for locations and **Table 4.3** for list of species.

Table 4.3 Third Schedule Invasive Species	Inside Site Boundary
Indian Balsam (*Impatiens glandulifera*)	No
Giant Hogweed (*Heracleum mantegazzianum*)	No
Spanish Bluebell (*Hyacinthoides hispanica*)	No

Other invasive species recorded within the site;

Table 4.4 Other Invasive Species	Habitat	Impact
Sycamore (*Acer pseudoplatanus*)	WN5	Medium
Butterfly-bush (*Buddleja davidii*)	WN5	Medium

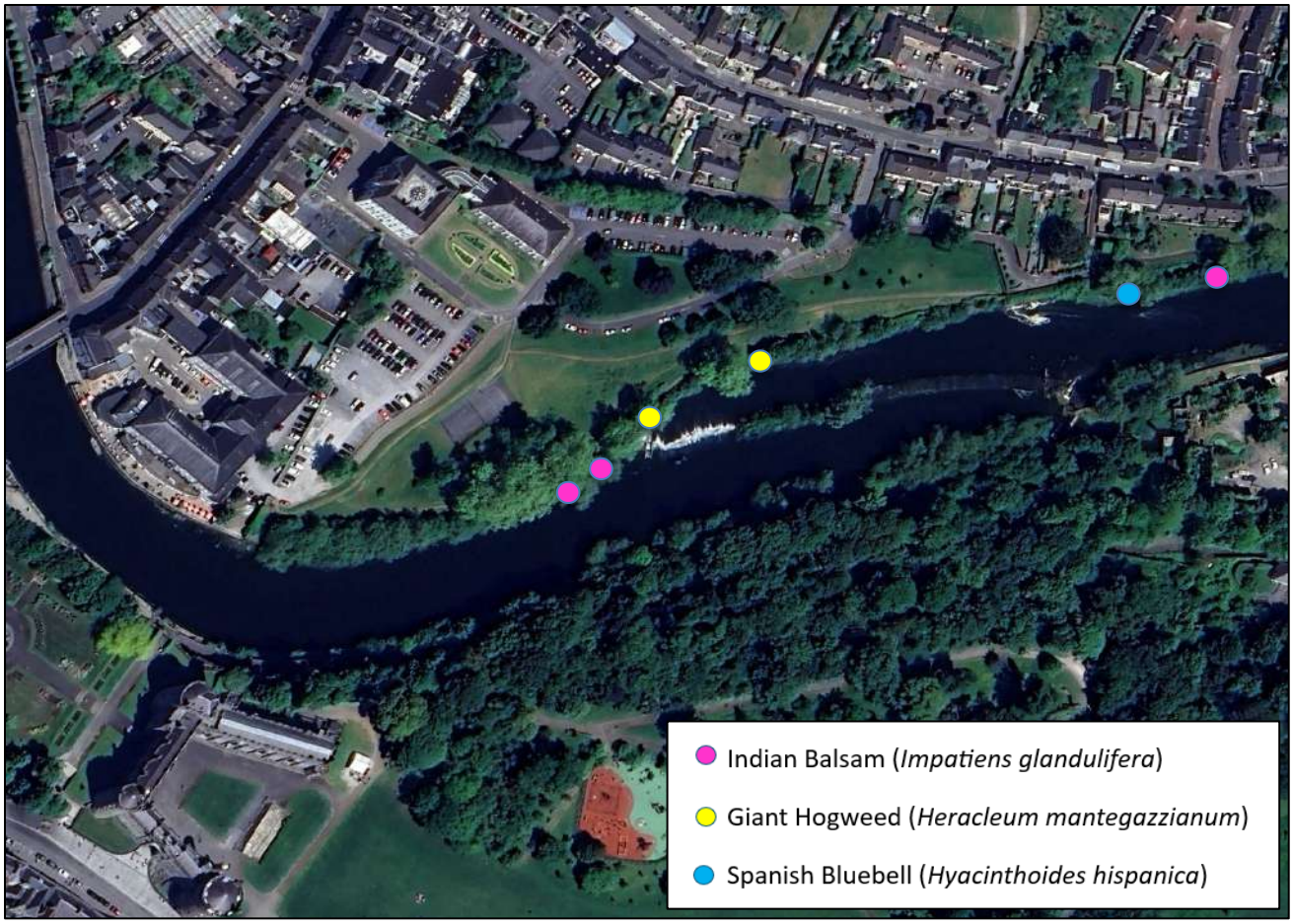


Figure 4.9 Location of observed Third Schedule Invasive Species (Google Images ©) with examples found at site below.



Giant Hogweed



Indian/Himalayan Balsam



Spanish Bluebell

4.3 BIRDS

Given the urban and aquatic features of the surrounding area it would be expected that garden, hedgerow birds and waterfowl would be present in the area. Bird species noted during the site assessments are included in the **Table 4.5** below.

Table 4.5: Birds Observed at Site During Surveys

COMMON NAME	SCIENTIFIC NAME	BTO SPECIES CODES*	APPROX. NUMBERS	ANNEX I	BOCCI** RED LIST	BOCCI** AMBER LIST
Blackbird	*Turdus merula*	B.	6	-	-	-
Blue Tit	*Parus caeruleus*	BT	4	-	-	-
Dunnock	*Prunella modularis*	D.	1	-	-	-
Feral Pigeon	*Columba livia f. domestica*	FP	30	-	-	-
Great Tit	*Parus major*	GT	1	-	-	-
Grey Heron	*Ardea cinerea*	H.	2	-	-	-
Goldfinch	*Carduelis carduelis*	GO	4	-	-	-
Herring Gull	*Larus argentatus*	HG	1	-	-	✓
House Martin	*Delichon urbicum*	HM	15	-	-	✓
House Sparrow	*Passer domesticus*	HS	8	-	-	✓
Jackdaw	*Corvus monedula*	JD	20	-	-	-
Kingfisher	*Alcedo atthis*	KF	1	✓	-	✓
Magpie	*Pica pica*	MG	5	-	-	-
Mallard	*Anas platyrhynchos*	MA	6	-	-	✓
Mute Swan	*Cygnus olor*	MS	1	-	-	✓
Pied Wagtail	*Motacilla alba yarrellii*	PW	2	-	-	-
Robin	*Erithacus rubecula*	R.	3	-	-	-
Rook	*Corvus frugilegus*	RO	10	-	-	-
Song Thrush	*Turdus philomelos*	ST	2	-	-	-
Spotted Flycatcher	*Muscicapa striata*	SF	1	-	-	✓
Starling	*Sturnus vulgaris*	SG	12	-	-	✓
Swallow	*Hirundo rustica*	SL	16	-	-	✓
Swift	*Apus apus*	SI	8	-	✓	-
Woodpigeon	*Columba palumbus*	WP	6	-	-	-
Wren	*Troglodytes troglodytes*	WR	2	-	-	-

**British Trust for Ornithology:* bto_bird_species_codes.pdf
***The BoCCI (Birds of Conservation Concern in Ireland) List classifies bird species into one of three lists (Red, Amber, or Green) based on their conservation status and conservation priority.*

All birds were observed flying over the site, along the treelines or along the River Nore. The crow family were observed on the roofs of buildings. Herring Gull, Spotted Flycatcher, Mute Swan, Mallard, Heron and Kingfisher were observed along the River Nore. Spotted Flycatcher, Swallow, House Martin and Swift were observed foraging in over the general skyline of Kilkenny and over the River Nore. Blackbird, Song Thrush, Robin and Starling were observed on the amenity grassland. Woodpigeon,

Wren, Dunnock, Gold Tit, Magpie, Great Tit and Blue Tit were observed in the trees foraging. Feral Pigeon, House Sparrow, Jackdaw and Pied Wagtail were observed along the castle walkway foraging. Swift is red listed, Herring Gull, House Sparrow, Mallard, House Martin, Mute Swan, Starling, Kingfisher and Swallow are amber listed under the BoCCI classification. Kingfisher is listed under Annex I of the E.U. Birds Directive. There is no suitable nesting habitat for Kingfisher at the proposed pontoon location as the bank is modified from the Flood Relief Scheme. See **Plate 4.3** below.

Bird records for the previous thirty years were reviewed on the NBDC website for the 10km square in which the proposed development is located. Bird species of note recorded within the **S55** Hectad include;

TABLE 4.6 NBDC RECORDS FOR S55

SPECIES	DATASET	BOCCI STATUS
Barn Owl (*Tyto alba*)	Birds of Ireland	Red List
Barn Swallow (*Hirundo rustica*)	Birds of Ireland	Amber List
Black-headed Gull (*Larus ridibundus*)	Birds of Ireland	Red List
Common Coot (*Fulica atra*)	Birds of Ireland	Amber List
Common Kestrel (*Falco tinnunculus*)	Birds of Ireland	Amber List
Common Kingfisher (*Alcedo atthis*)	Birds of Ireland	Amber List
Common Linnet (*Carduelis cannabina*)	Birds of Ireland	Amber List
Common Pochard (*Aythya ferina*)	Birds of Ireland	Amber List
Common Snipe (*Gallinago gallinago*)	Birds of Ireland	Amber List
Common Starling (*Sturnus vulgaris*)	Birds of Ireland	Amber List
Common Swift (*Apus apus*)	Birds of Ireland	Amber List
Eurasian Teal (*Anas crecca*)	Birds of Ireland	Amber List
Eurasian Tree Sparrow (*Passer montanus*)	Bird Atlas 2007 - 2011	Amber List
Eurasian Woodcock (*Scolopax rusticola*)	Birds of Ireland	Amber List
European Golden Plover (*Pluvialis apricaria*)	Birds of Ireland	Red List
Great Black-backed Gull (*Larus marinus*)	Birds of Ireland	Amber List
Great Cormorant (*Phalacrocorax carbo*)	Birds of Ireland	Amber List
House Martin (*Delichon urbicum*)	Birds of Ireland	Amber List
House Sparrow (*Passer domesticus*)	Birds of Ireland	Amber List
Lesser Black-backed Gull (*Larus fuscus*)	Birds of Ireland	Amber List
Little Egret (*Egretta garzetta*)	Birds of Ireland	Green List
Little Grebe (*Tachybaptus ruficollis*)	Bird Atlas 2007 - 2011	Amber List
Mallard (*Anas platyrhynchos*)	Birds of Ireland	Amber List
Mute Swan (*Cygnus olor*)	Birds of Ireland	Amber List
Northern Lapwing (*Vanellus vanellus*)	Bird Atlas 2007 - 2011	Red List

Peregrine Falcon (*Falco peregrinus*)	Bird Atlas 2007 - 2011	Green List
Sand Martin (*Riparia riparia*)	Bird Atlas 2007 - 2011	Amber List
Sky Lark (*Alauda arvensis*)	Birds of Ireland	Amber List
Spotted Flycatcher (*Muscicapa striata*)	Birds of Ireland	Amber List
Stock Pigeon (*Columba oenas*)	Birds of Ireland	Amber List
Tufted Duck (*Aythya fuligula*)	Birds of Ireland	Amber List
Water Rail (*Rallus aquaticus*)	Irish Wetland Birds Survey (I-WeBS) 1994-2001.	Amber List
Yellowhammer (*Emberiza citrinella*)	Birds of Ireland	Red List

4.4 WINTERING BIRDS

Wintering Bird No.1 was undertaken on the 16th of November 2024. Weather conditions were favourable to survey. Temperature: 11°C. Wind: 15km, Cloud Cover: 8 okta – cool dry day, ground conditions damp, visibility clear.

Wintering Bird No.2 was undertaken on the 14th of December 2024. Weather conditions were favourable to survey. Temperature: 7°C. Wind: 10km, Cloud Cover: 8 okta – dry calm and crisp day, visibility clear.

Wintering Bird No.3 was undertaken on the 18th of January 2025. Weather conditions were favourable to survey. Temperature: 10°C. Wind: 22km, Cloud Cover: 5 okta – sunny, cool dry day, visibility clear.

Wintering Bird No.4 was undertaken on the 2nd of February 2025. Weather conditions were favourable to survey. Temperature: 12°C. Wind: 14km, Cloud Cover: 8 okta – overcast, cool calm day, visibility clear.

Wintering Bird No.5 was undertaken on the 20th of March 2025. Weather conditions were favourable to survey. Temperature: 15°C. Wind: 23km, Cloud Cover: 4 okta – bright, sunny, dry day, visibility clear.

TABLE 4.7: BIRD SPECIES DIRECTLY OBSERVED DURING WINTER SURVEYS								
COMMON NAME	**SCIENTIFIC NAME**	**BTO SPECIES CODES**	**BOCCI STATUS**	**NOV 24**	**DEC 24**	**JAN 25**	**FEB 25**	**MAR 25**
Blackbird	*Turdus merula*	B.	Green	✓	✓	✓	✓	✓
Black-headed Gull	*Larus ridibundus*	BH	Red	-	✓	✓	✓	-
Blue Tit	*Parus caeruleus*	BT	Green	✓	✓	✓	✓	✓
Bullfinch	*Pyrrhula pyrrhula*	BF	Green	-	✓	-	✓	✓
Coal Tit	*Periparus ater*	CT	Green	-	✓	-	-	-
Chaffinch	*Fringilla coelebs*	CH	Green	✓	✓	-	✓	✓
Cormorant	*Phalacrocorax carbo*	CA	Amber	-	-	-	-	✓
Dunnock	*Prunella modularis*	D.	Green	✓	✓	-	-	✓
Feral Pigeon	*Columba livia f. domestica*	FP	Green	✓	✓	✓	✓	✓
Great Tit	*Parus major*	GT	Green	✓	✓	-	-	-
Grey Heron	*Ardea cinerea*	H.	Green	✓	✓	-	✓	✓
Grey Wagtail	*Motacilla cinerea*	GL	Red	✓	✓	✓	-	-
Goldcrest	*Regulus regulus*	GC	Amber	✓	-	-	✓	-
Goldfinch	*Carduelis*	GO	Green	-	-	✓	-	-
Hooded Crow	*Corvus cornix*	HC	Green	✓	-	-	-	-
House Sparrow	*Passer domesticus*	HS	Amber	-	-	✓	✓	-
Jackdaw	*Corvus monedula*	JD	Green	✓	✓	✓	✓	✓
Lesser black-backed Gull	*Larus fuscus*	LB	Amber	✓	-	-	-	-
Little Egret	*Egretta garzetta*	ET	Green	-	✓	-	-	-
Long-tailed Tit	*Aegithalus caudatus*	LT	Green	✓	✓	✓	✓	✓
Magpie	*Pica pica*	MG	Green	✓	✓	✓	✓	✓
Mallard	*Anas platyrhynchos*	MA	Amber	✓	✓	✓	✓	✓
Moorhen	*Gallinula chloropus*	MH	Green	✓	✓	✓	-	-
Mute Swan	*Cygnus olor*	MS	Amber	✓	✓	✓	✓	✓
Pied Wagtail	*Motacilla alba yarrellii*	PW	Green	✓	✓	-	✓	-
Robin	*Erithacus rubecula*	R.	Green	-	✓	✓	✓	✓

TABLE 4.7: BIRD SPECIES DIRECTLY OBSERVED DURING WINTER SURVEYS

COMMON NAME	SCIENTIFIC NAME	BTO SPECIES CODES	BOCCI STATUS	NOV 24	DEC 24	JAN 25	FEB 25	MAR 25
Rook	*Corvus frugilegus*	RO	Green	✓	✓	✓	✓	✓
Song Thrush	*Turdus philomelos*	ST	Green	-	✓	-	✓	-
Starling	*Sturnus vulagaris*	SG	Amber	✓	✓	✓	✓	✓
Treecreeper	*Certhia familiaris*	TC	Green	✓	✓	-	-	-
Woodpigeon	*Columba palumbus*	WP	Green	✓	✓	✓	✓	✓
Wren	*Troglodytes troglodytes*	WR	Green	✓	✓	✓	✓	✓



Blackbird (*Turdus merula*)



Bullfinch (*Pyrrhula pyrrhula*)



Goldfinch (*Carduelis carduelis*)



Collared Dove (*Streptopelia decaocto*)



Chaffinch (*Fringilla coelebs*)



Robin (*Erithacus rubecula*)



Mute Swan (*Cygnus olor*)



Mute Swan (*Cygnus olor*)



Mallard (*Anas platyrhynchos*)

TABLE 4.8: PEAK NUMBER RECORDED IN THE SURVEY AREA						
COMMON NAME	SCIENTIFIC NAME	NOV 24	DEC 24	JAN 25	FEB 25	MAR 25
Black-headed Gull	*Larus ridibundus*	-	**6**	**8**	**16**	-
Cormorant	*Phalacrocorax carbo*	-	-	-	-	**1**
Grey Heron	*Ardea cinerea*	**1**	**1**	-	**1**	**1**
Grey Wagtail	*Motacilla cinerea*	**1**	**1**	**1**	-	-
Lesser black-backed Gull	*Larus fuscus*	**2**	-	-	-	-
Little Egret	*Egretta garzetta*	-	**1**	-	-	-
Mallard	*Anas platyrhynchos*	**59**	**48**	**22**	**21**	**22**
Moorhen	*Gallinula chloropus*	**1**	**1**	**1**	-	-
Mute Swan	*Cygnus olor*	**3**	**3**	**3**	**2**	**4**



Mute Swan, Mallard and Black-headed Gull



Cormorant



Mallard

The target species for the wintering bird survey were waterbirds, defined here as birds that are ecologically dependent on aquatic and wetland habitats.

- Mallard is one of the largest duck species recorded in Ireland. Males have a distinctive green head, yellow bill, white neck ring, grey underparts, blue speculum and black rump. Nest sites vary, but are typically located on the ground where concealed by vegetation. The species is resident in Ireland and is also supplemented by winter migrants from Europe. Mallard was recorded along the riparian zone, with birds concentrated close to St John's Bridge. **A peak count of 59 Mallard was recorded in November.**

- Mute Swan is widespread on lakes, ponds and rivers during the winter months (BirdWatch Ireland, 2026). Wild populations of this species are migratory, while European feral populations are largely sedentary. The Mute Swans recorded at St John's Bridge are likely to be resident in this section of the River Nore. **A peak count of four Mute Swans was recorded in March.**

- Moorhen is a common river bird in Ireland. It nests close to water, usually in emergent vegetation or on floating material. The species is widespread throughout the country, although it is absent or rare in some areas of the west. It can occur in freshwater habitats with abundant emergent vegetation, including town canals, muddy ditches and large lakes. Moorhen was mainly observed at St John's Bridge or on the weir. **A peak count of one Moorhen was recorded.**

- Black-headed Gull is one of the most abundant and widespread gull species in Ireland, overwintering at both coastal and inland sites and comprising both resident and migrant populations (Lewis et al., 2019). As with many gull species, it is highly mobile and opportunistic in its foraging behaviour, using a range of habitats including agricultural land. As a result, numbers at any given time or site can be variable. **A peak count of 16 Black-headed Gulls was recorded in February.** Other gull species were occasional; Lesser Black-backed Gull was recorded once, with **a peak count of two Lesser Black-backed Gulls recorded in November.**

- Grey Heron belongs to the family Ardeidae. Grey Herons occur in similar wetland habitats during winter and the breeding season. Birds breeding in Ireland are thought to be largely sedentary, with birds from Britain and Scandinavia joining the resident population during winter (BirdWatch Ireland, 2026). **A peak count of one Grey Heron was recorded.**

- Cormorant belongs to the family Phalacrocoracidae. Lone birds were observed downstream of the weir on a mature Beech tree. Cormorant feeds mainly on fish. Its nest is large and made of twigs, rushes and reeds, and the species may roost in trees (Wilson and Carmody, 2011). **A peak count of one Cormorant was recorded.**

- Little Egret is resident along coasts and rivers throughout Ireland, although it remains scarce in the Midlands and north-west of the country (BirdWatch Ireland, 2025). Outside the breeding season, the species commonly feeds alone or in loose flocks. **A peak count of one Little Egret was recorded.**

- Grey Wagtail inhabits fast-flowing streams and rivers with riffles, exposed rocks and shoals. Outside the breeding season, it may occupy a wider range of habitats, including farmyards, sewage works, forest tracks and urban areas (BirdLife International, 2026). Grey Wagtails feed mainly on insects caught on the ground or in flight. **A peak count of one Grey Wagtail was recorded.**

4.4 BATS

With reference to the latest Article 17 reporting for Ireland, the development site is located outside the mapped current distribution and range of Lesser Horseshoe Bat (*Rhinolophus hipposideros*) [1303], Whiskered Bat (*Myotis mystacinus*) [1330] and Nathusius' Pipistrelle (*Pipistrellus nathusii*) [1317]. The site is within the mapped current distribution and range of Soprano Pipistrelle (*Pipistrellus pygmaeus*) [5009], Daubenton's Bat (*Myotis daubentonii*) [1314], Brown Long-eared Bat (*Plecotus auritus*) [1326], Leisler's Bat (*Nyctalus leisleri*) [1331] and Common Pipistrelle (*Pipistrellus pipistrellus*) [1309]. Natterer's Bat (*Myotis nattereri*) [1322] is outside the mapped current distribution but within the mapped current range for the proposed development area. The NPWS National Lesser Horseshoe Bat Roost Database was consulted in June 2026 for records of Lesser Horseshoe Bat (*Rhinolophus hipposideros*). Lesser Horseshoe Bat is mainly confined to the west of Ireland, with the nearest NPWS database record identified near Limerick City (Grid R6461). NBDC records for bats within the relevant 10 km and 2 km grid squares for the proposed development are presented in **Table 4.9**.

The target species of this survey were categorised as wintering waterbirds, i.e., birds that are ecologically dependent on aquatic and wetland habitats

TABLE 4.9 NBDC RECORDS FOR BATS

SPECIES	10KM
Brown Long-eared Bat (*Plecotus auritus*)	S55
Daubenton's Bat (*Myotis daubentoniid*)	S55
Soprano Pipistrelle (*Pipistrellus pygmaeus*)	S55
Lesser Noctule (*Nyctalus leisleri*)	S55
Common pipistrelle (*Pipistrellus pipistrellus*)	S55
SPECIES	**2KM**
Brown Long-eared Bat (*Plecotus auritus*)	S55C
Daubenton's Bat (*Myotis daubentoniid*)	S55C
Soprano Pipistrelle (*Pipistrellus pygmaeus*)	S55C

In addition, Bat Conservation Ireland's habitat suitability index available to view on the NBDC online mapping portal, classifies the landscape, within which the site is located, as having a low habitat suitability for bats, with a score of **39.33** for the development site and surrounding landscape. The maps are a visualisation of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100 with 0 being least favourable and 100 most favourable for bats. The maps are constructed using spatial units of the OSI National Grid. The index presented is for all species combined, in addition to the individual species' indices (Lundy et al., 2011).

Table 4.10 Bat habitat suitability index for the proposed development site

BAT HABITAT SUITABILITY INDEX	
SPECIES	INDEX
Soprano Pipistrelle (*Pipistrellus pygmaeus*)	48
Brown long-eared Bat (*Plecotus auratus*)	58
Common pipistrelle (*Pipistrellus pipistrellus*)	56
Lesser Horseshoe Bat (*Rhinolophus hipposideros*)	0
Leisler's Bat (*Nyctalus leisleri*)	54
Whiskered Bat (*Myotis mystacinus*)	46
Daubenton's Bat (*Myotis daubentoniid*)	40
Nathusius's Pipistrelle (*Pipistrellus nathusii*)	9
Natterer's Bat (*Myotis nattereri*)	43

Bat call analysis was undertaken using Kaleidoscope software. Kaleidoscope software was used to analyse bat calls recorded during dusk survey. Bat species identification was interpreted using known call parameters (British Bat Calls: A Guide to Species Identification, Jon Russ 2012) and existing literature on the ecology of Irish and UK bat species, including distribution, range, habitat associations and behavioural characteristics, in addition to surveying the flight pattern and foraging. Every attempt was made to identify bats to species level. However, in some instances it is only possible to take the analysis to genus level (distinguishing between certain bat species echolocation calls can be very difficult due to the overlap in call parameters example those species within the *Myotis* genus).

BAT SURVEYS RESULTS

Bat activity levels were very low within the County Hall car park, around buildings and along access road. Activity was high along the River Nore with bats observed foraging from 15 - 20 minutes after sunset. During all three bat surveys there was high bat activity along the River Nore. See **Table 4.11** for summary of results. Bat activity was equally high along Canal Walk below Kilkenny Castel and past the weir. Light pollution did not prevent foraging at this location, and it was possible to visually observe bat activity throughout the duration of the surveys at Area A. See **Figure 4.8** below.

Bats were observed and detected commuting from Area B towards Area A. Bats were not detected in Area B again.

There was limited bat activity at Area C and none at Area D.

- Six Daubenton's Bat (*Myotis daubentoniid*) were detected commuting from the north of County Hall during the 2nd survey.
- Four Daubenton's Bat (*Myotis daubentoniid*) were directly observed and detected foraging at Area A. There was high foraging activity at this location during all surveys.
- The River Nore was monitored with a Thermal Imaging Monocular on the 3rd survey with activity observed in the same locations Area A and B. The calls were analysed as Daubenton's Bat (*Myotis daubentoniid*).
- Soprano Pipistrelle (*Pipistrellus pygmaeus*) was detected at Area C on surveys one and two.
- No bats were observed emerging from the outbuilding for demolition at Area E.

- All trees were assessed for potential bat roosts. No trees with moderate or high potential for a bat roost will be removed as part of the proposed development. Trees were further reassessed during the day for potential bat roosts. Any tree that had the potential to contain a bat roost were monitored at dusk to ascertain if bats were using the tree to roost. None of the trees at the proposed development were in use as a bat roost. The Thermal Imaging Monocular was used to further assess any potential bat roosts features. See **Plate 4.9.1 and 4.9.2** below.
- Light pollution was highest along River Nore below Kilkenny Castle (downstream of St John's Bridge). Light pollution was also high around County Hall and the car parks. See **Figure 4.3** below.
- The Canal Walk went dark after 22:30 with limited light pollution impacting on the river except in the vicinity of St John's Bridge.

The bat survey was repeated in 2026 and recorded very high bat activity along the River Nore. No bats were observed emerging from any mature tree or from the building proposed for demolition. Bat species detected and observed included Daubenton's Bat (*Myotis daubentonii*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Common Pipistrelle (*Pipistrellus pipistrellus*) and Leisler's Bat (*Nyctalus leisleri*).

Daubenton's Bat, with up to six individuals recorded, was active along the river throughout each survey, with the highest levels of activity recorded along the weir. Soprano Pipistrelle, with up to three individuals recorded, was observed foraging among the mature Plane trees and along the river edge. Common Pipistrelle was detected along the treeline, although it did not forage in the area for an extended period. Leisler's Bat was detected and observed commuting high over the site. Daubenton's Bat was also observed along the river below Kilkenny Castle, where the proposed pontoon will be located. This area is well lit at night by commercial buildings, and St John's Bridge, Kilkenny Castle and the castle wall are also lit at night for amenity purposes.



Plate 4.8: Thermal images of bat activity (pink circles) captured along the River Nore in 2026

TABLE 4.11 BAT SURVEY RESULTS – ALL SURVEYS			
SPECIES	ROOSTING	FORAGING	COMMUTING
Soprano Pipistrelle (*Pipistrellus pygmaeus*) **SP**	-	✓	-
Brown long-eared Bat (*Plecotus auratus*)	-	-	-
Common Pipistrelle (*Pipistrellus pipistrellus*) **CP**	-	✓	✓
Lesser Horseshoe Bat (*Rhinolophus hipposideros*)	-	-	-
Leisler's Bat (*Nyctalus leisleri*) **LN**	-	-	✓
Whiskered Bat (*Myotis mystacinus*)	-	-	-
Daubenton's Bat (*Myotis daubentoniid*) **DB**	-	✓	✓
Nathusius's Pipistrelle (*Pipistrellus nathusii*)	-	-	-
Natterer's Bat (*Myotis nattereri*)	-	-	-

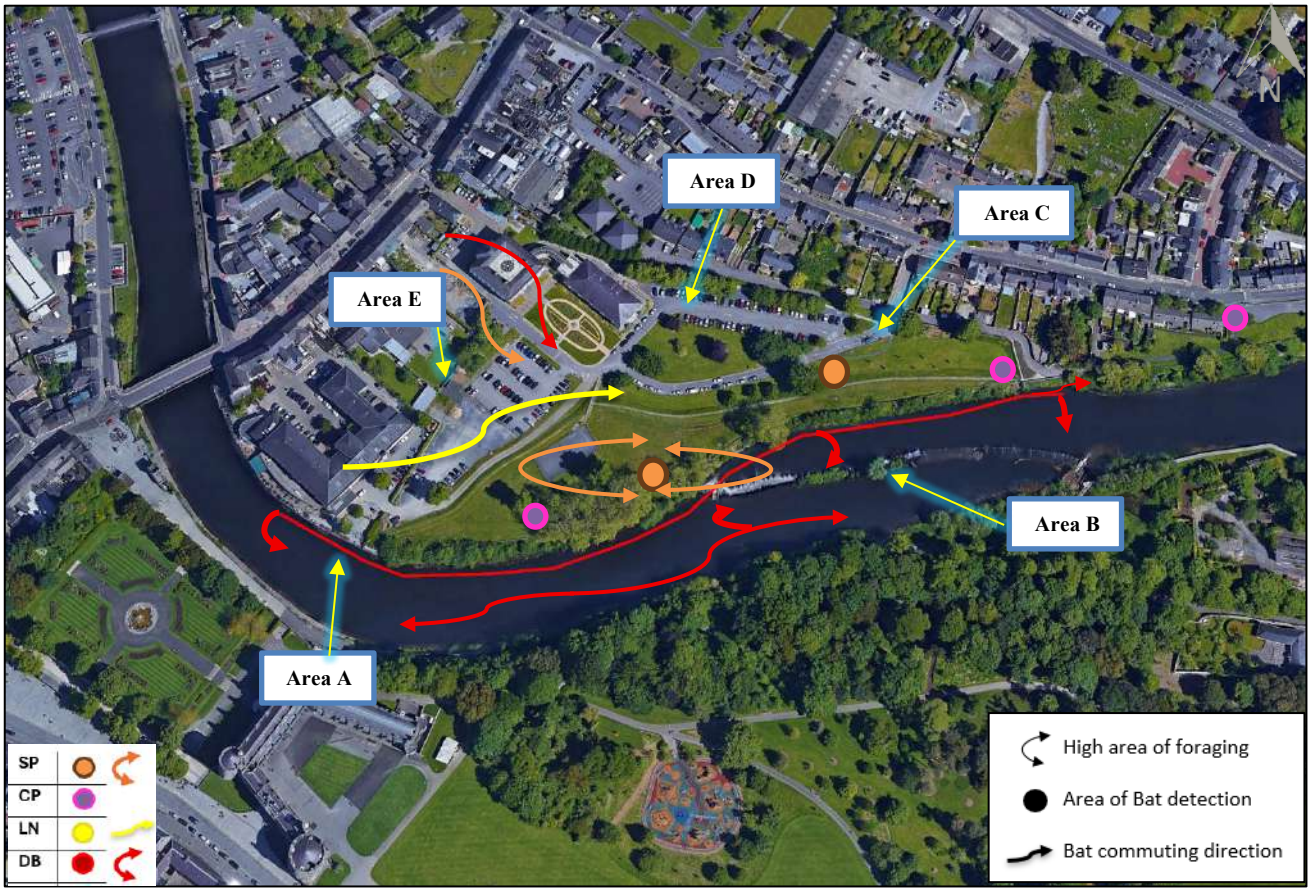


Figure 4.3 Bat Activity at the Proposed Development (Source Google Earth Imagery ©)

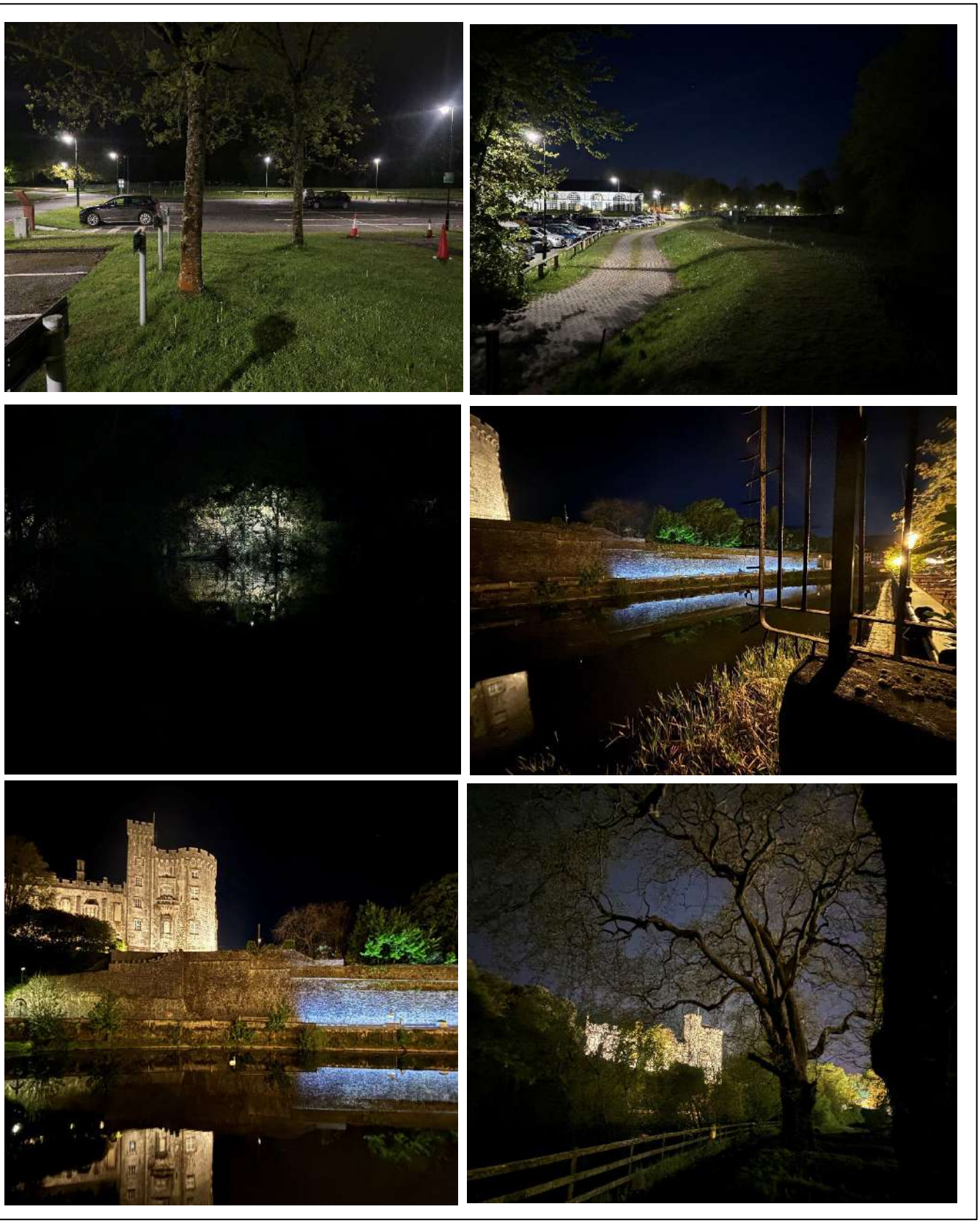


Plate 4.8 Light Pollution at County Hall and along River Nore



Plate 4.9.1 Trees within County Hall parkland with high to moderate bat roost potential. All outside boundary and will not be removed as part of the proposed development.



Plate 4.9.2 Trees within County Hall parkland and along River Nore riparian zone with low to negligible bat roost potential. The trees for removal are Willow, Sycamore and Ash with negligible bat roost potential.

4.5 OTTER & OTHER FAUNA

The majority of the site consisting of grassland and artificial surfaces would not offer habitat for otter (*Lutra lutra*). The River Nore will be in use by otter for both commuting and foraging. Otter is unlikely to be breeding along this section of the River Nore given the lack of suitable habitats and high disturbance along the Canal Walk. Dogs can access the river through gaps in the fence and there are access points opposite the weir. The bank along the proposed pontoon has some riparian cover however this section of the River Nore has been artificially altered as part of the flood relief scheme and has a stone embankment. Therefore, breeding otter will not be impacted within 150m of the proposed pontoon. Spraint was found on a rock along the bank opposite the weir. The trail camera was left in the riparian zone for 1 week from the 27th of April 2024 and again for 2 weeks from the 3rd of May 2024. No otter was captured using this section of the riparian zone of the River Nore. No otter tracks were observed during any of the surveys of the riparian zone along the location of the proposed pontoon. The riparian zone of the pontoon was fully assessed from November 2024 to March 2025 (6 site assessments in total) as part of the Wintering Bird Survey and no direct evidence of otter activity was found or observed. See **Plate 4.3** for examples of riverbanks along this section of the Nore. Otter spraint was observed on a rock approximately 300m downstream. The trail camera was left in the riparian zone for 1 week in November 2024 and again for over 8 weeks (Jan – Mar 2025). No otter activity was captured on this camera during this time. Recreational activities on the river such as canoes and kayaks were captured frequently on the River Nore at this location. In addition to common waterfowl (see Winter bird Survey) such as Mallard, Mute Swan and Heron. In 2026 otter was directly observed foraging along the River Nore during each bat survey and was captured on Trial Camera (See **Plate 4.11**)

There was no evidence of Badger (*Meles meles*) along the riparian zone of the River Nore or within County Hall parkland. Badger is unlikely to forage further than County Hall grounds given the dense urban development along the southwest boundary. The hotel along the northwest boundary does not allow for commuting of the riparian zone. Any badger activity is likely to be within the woodlands around Kilkenny Castle or along the riparian woodland further downstream (past the weirs). Hedgehog (*Erinaceus europaeus*) was observed foraging on the amenity grassland of County Hall during each survey for bats in 2024. It is likely to be living along the riparian zone of the River Nore. See **Plate 4.10**

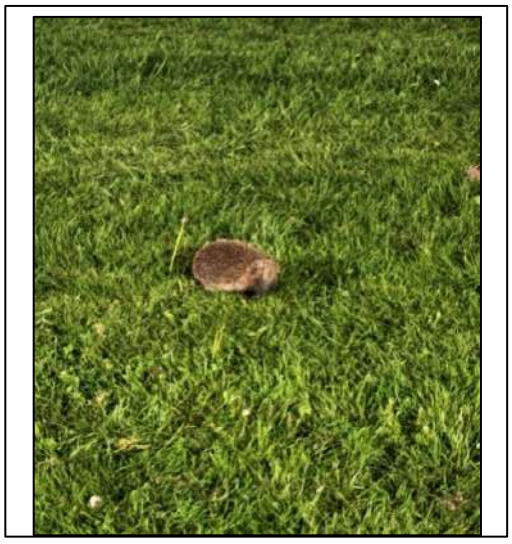


Plate 4.10: Hedgehog at County Hall (2024)



Plate 4.11: Otter captured on trail camera along the bank of River Nore in 2026

Other fauna not observed but would be typically found throughout the rest of Ireland would be present in the wider area of the proposed development. These include the protected Pine Marten (*Martes martes*), Irish Hare (*Lepus timidus hibernicus*), Pygmy Shrew (*Sorex minutus*), Red Squirrel (*Sciurus vulgaris*), Stoat (*Mustela erminea hibernica*) and Wood Mouse (*Apodemus sylvaticus*). Fauna records for the previous thirty years were reviewed on the NBDC website for the tetrad S55C include the following the species Common Frog (*Rana temporaria*), Hedgehog (*Erinaceus europaeus*), Badger (*Meles meles*), Red Squirrel (*Sciurus vulgaris*), Pygmy Shrew (*Sorex minutus*), Pine Marten (*Martes martes*), Red Fox (*Vulpes vulpes*) and Wood Mouse (*Apodemus sylvaticus*).

Table 4.12: Ecological Value of Species of the Proposed Development

SPECIES	SPECIES RATING	RATIONALE
Bats	Local importance, higher value	Yes. There were direct observations of bat activity (foraging) at the site of the proposed pontoon.
Otter	Local importance, higher value	Yes. Directly observed and captured on Trial Camera foraging along the River Nore. Otter is foraging along the River Nore.
Other Terrestrial Fauna	Local importance, low to high value	Yes. Sightings of hedgehog a protected mammal. Site has limited potential to support other protected terrestrial mammal species.
Birds	Local importance, higher value	Yes. All birds, their nests, eggs and young are protected under the Wildlife Act.
Aquatic Fauna	Local importance, lower value	Yes. The River Nore will contain protected aquatic fauna.

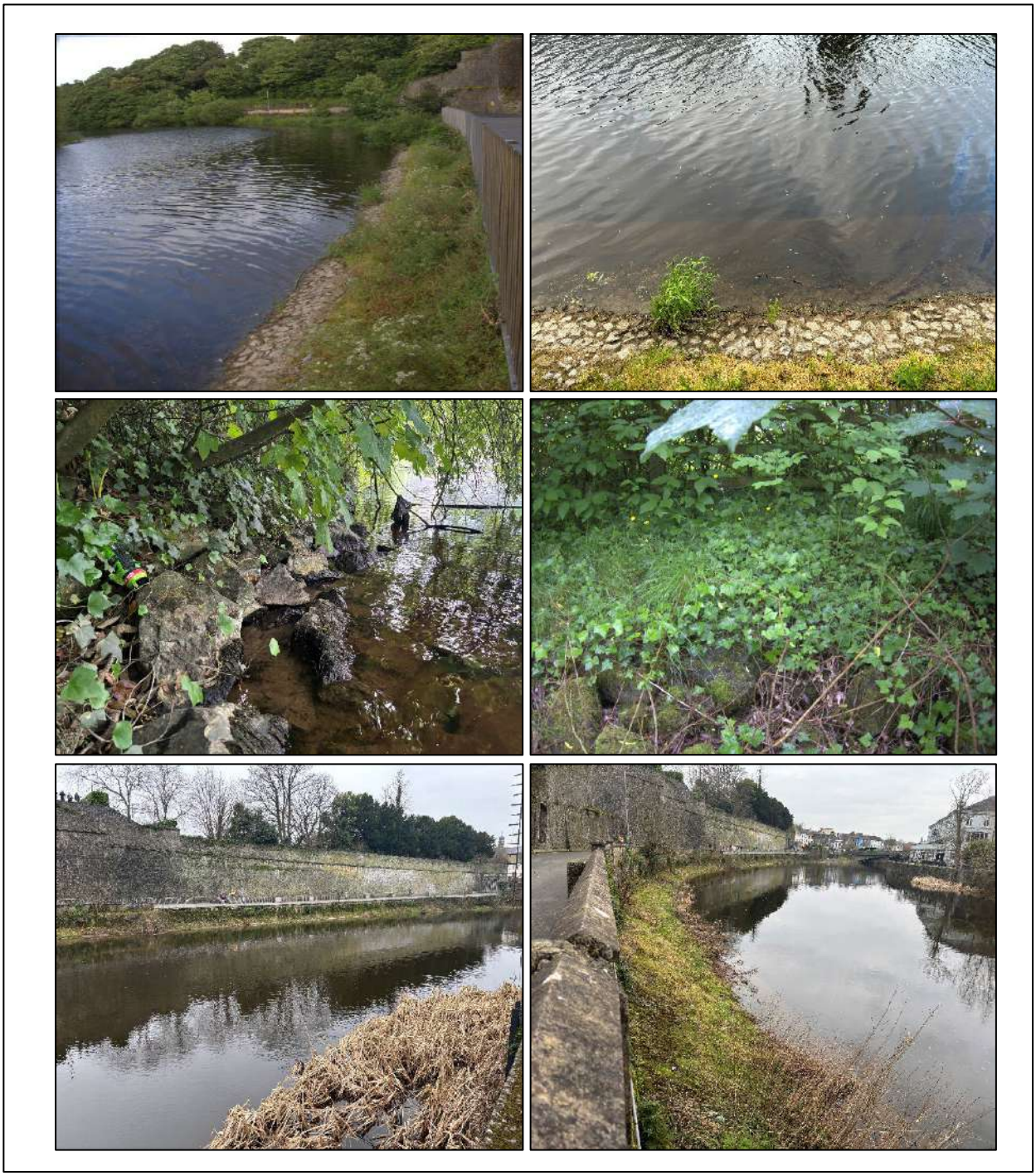


Plate 4.3 Modified banks of the River Nore at the proposed pontoon location and opposite bank

5.0 DESIGNATED SITES

The development site is not located within or adjacent to any designated sites. Indirect impacts can occur if there is a viable pathway between the source (development site) and the receptor (the habitats and species for which a site has been designated). The most common pathway for impacts is surface water, e.g. if a pollutant is washed into a river and carried downstream into a designated site. Other potential pathways are groundwater, air (e.g. airborne dust or sound waves), or land (e.g. flow of liquids, vibration). The zone of effect for hydrological impacts can be several kilometres, but for air and land it is rarely more than one hundred metres.

A Zone of Influence (ZoI) for a project is established on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors within vicinity of the proposed development. The ZoI takes into account the potential for connectivity to ecological receptors through the Source- Pathway-Receptor (S-P-R) model and assesses potential impacts of the proposed development on both immobile and mobile qualifying interests of identified European sites. Functional pathways can include the use of an application site for foraging by a QI/SCI species of an SAC or SPA;

Table 5.1: Natura 2000 Sites

SITE NAME	DESIGNATION	SITE CODE	DISTANCE	S-P-R
River Barrow and River Nore	**SAC**	**002162**	**Within Site Boundary**	**Yes**
River Nore	**SPA**	**004233**	**Within Site Boundary**	**Yes**
Thomastown Quarry	SAC	002252	14.5km SE	No
Seas off Wexford	SPA	004237	59km SE	No
Hook Head	SAC	000764	60.5m SE	No

See accompanying Natura Impact Statement (Document Reference: NIS_RSE_0626) for a complete assessment of the SAC and SPA in ZoI and their qualifying interests.

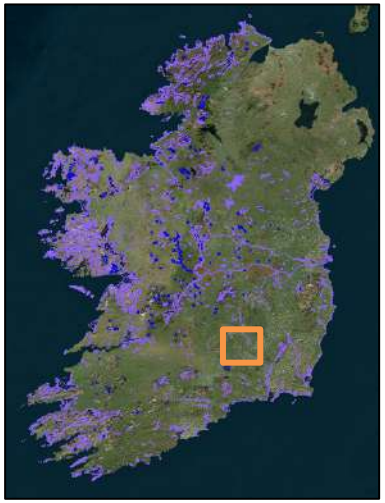
There is no direct connection to any proposed Natural Heritage Area (NHA) within the ZoI with any potential impact on a protected site addressed in the accompanying NIS. See **Figure 5.1** for the location of NHA and proposed NHA. **Figure 5.2** below shows the location of the development site and mapped protected habitats within the wider area. There are no additional habitats of ecological significance found within the site boundary or in close proximity that are not addressed in the NIS (Doc Ref: **NIS_RSE_0626**).

Table 5.2: Natural Heritage Areas

SITE NAME	DESIGNATION	SITE CODE	DISTANCE	S-P-R	FIGURE 5.1
Newpark Marsh	pNHA	000845	1.3km N	No	2
Archersgrove	pNHA	002051	1.66km SE	No	1
Dunmore Complex	pNHA	001859	2km N	No	3
Lough Macask	pNHA	001914	2.1km NW	No	4
Ardaloo Fen	pNHA	000821	7.8km SW	No	5
Inchbeg	pNHA	000836	9.9km NW	No	6
Ballykeefe Wood	pNHA	000400	10km SW	No	7

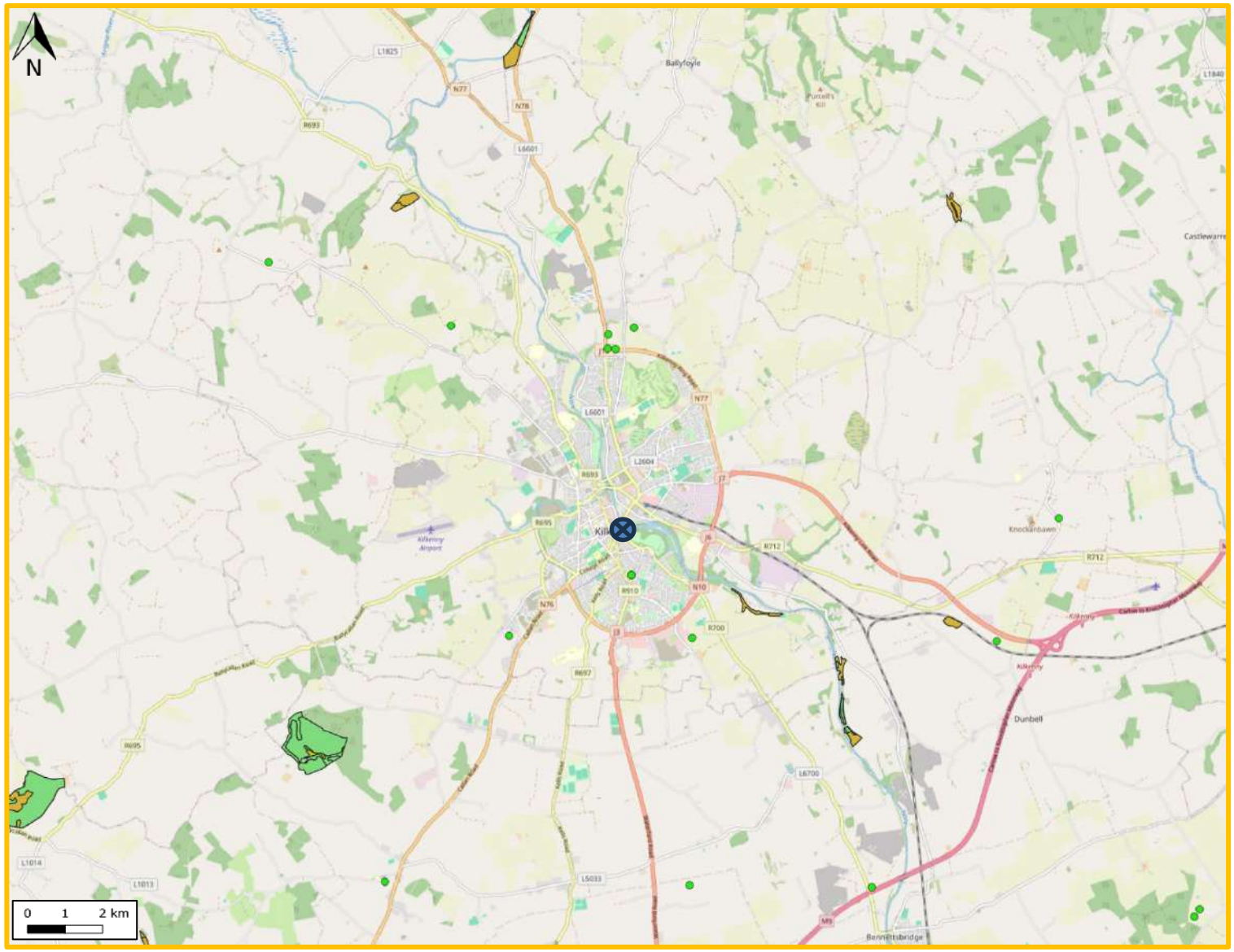


pNHA
NHA
Site Location



Location of proposed development at County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny and the Natural Heritage Sites

Bing Maps Imagery ©



Location of proposed development at County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny and mapped habitats of ecological importance

6.0 ECOLOGICAL IMPACT ASSESSMENT

Developments have the potential to affect terrestrial and aquatic biodiversity through habitat loss, disturbance from noise and dust, the introduction or spread of invasive species, and light pollution. The construction phase of the proposed development will result in the direct and permanent loss of some existing habitats; however, these habitats are of low ecological value. The affected grassland is modified, and the artificial surfaces support only recolonising flora. Therefore, the loss of these habitats is not considered to be significant. The riparian zone and the River Nore are of high ecological value. The proposed pontoon will require the removal of semi-mature Willow. During construction of the pontoon, measures to protect water quality will be implemented. A complete list of water-quality mitigation measures is provided in the accompanying Natura Impact Statement (Document Reference **NIS_RSE_0626**). The riparian zone of the River Nore where the pontoon will be located will be replanted with native and locally appropriate species, such as Water Mint (*Mentha aquatica*), Reeds (*Calamagrostis* spp.), Sedges (*Carex* spp.) and Rushes (*Juncus* spp.). All flora selected must be native and suitable for establishment along the River Nore. Replanting of the riparian zone will aid bank stabilisation. This section of the riverbank and riparian zone will be monitored for invasive species (see **Section 4.2**) to ensure that they do not establish in this area. The riparian woodland along this section of the River Nore is developing into typical riverbank habitat and is considered to be of high ecological value. However, the understory is located on an artificial embankment that was redesigned as part of the Kilkenny City flood defences. The removal of the immature Willow trees required for the proposed works is not considered likely to result in a significant adverse impact on the riparian habitat, provided that appropriate ecological management measures are implemented. These measures should be undertaken in accordance with the accompanying Visitor Management Plan (Document Reference: VMP), including protection of retained riparian vegetation, appropriate reinstatement of disturbed areas and ongoing management to prevent habitat degradation.

Tree removal will not be undertaken between 1 March and 31 August inclusive, in order to avoid disturbance to nesting birds. Birds are likely to nest within the riparian zone of the River Nore and in mature parkland trees. Waterfowl were recorded foraging along the riparian zone, with direct observations and tracks recorded in riparian mud. Waterfowl were also recorded foraging on the trail camera during the surveys. If an active nest is found, consultation with NPWS should be undertaken to confirm the appropriate procedure, including whether works should be delayed until chicks have fledged. Kingfisher was not observed during the wintering bird survey and is not considered likely to breed along this section of the River Nore at the proposed pontoon location, or along the Canal Walk, due to the absence of suitable vertical earthen banks. The waterfowl recorded during the wintering bird survey were common species likely to be present due to local feeding activity, and no Annex I waterbird species were recorded. Mallard and Mute Swan were the main waterfowl species observed along the riverbank. Mallard was recorded in relatively high numbers, likely due to feeding by members of the public along the Canal Walk, which was directly observed during each survey. Other species, including Little Egret and Cormorant, were recorded in low numbers downstream of the weir.

Some species recorded along the River Nore, including Sycamore, Butterfly-bush (*Buddleja davidii*) and Traveller's-joy (*Clematis vitalba*), are of low ecological value and include species

classed as medium-impact invasive plants. These species may provide nesting habitat for birds. Root protection measures will be implemented to protect mature trees within the construction zone. Willow along the banks of the River Nore is expected to recover relatively quickly if cut back (Hickie, 2002). No bat roost was observed within the site boundary. No trees with bat roosting potential will be removed as part of the proposed development. The trees proposed for removal are considered to have negligible bat roosting potential. No bats were observed emerging from the outbuilding during the bat activity assessments. The building is considered to have low bat roosting potential and is unlikely to be used by bats as a maternity roost or for hibernation. Dust emissions may arise during construction activities, particularly during demolition works. Dust has the potential to affect flora by interfering with photosynthesis, respiration and transpiration through the blocking of leaf stomata, and may also cause temporary nuisance or disturbance to fauna. Given the transient nature of the construction works and the small scale of the demolition works, the potential impact on flora and fauna is not considered significant, provided that appropriate environmental protection measures are implemented during the construction phase. The landscape plan will include the species listed in **Tables 6.1.1–6.1.4** below. The ecological value of each species has been assessed, with reference to the relevant pollinator guidance issued by the NBDC.

TABLE 6.1.1 ORNAMENTAL PLANTING NO 1		
SPECIES	**ECOLOGICAL NOTE**	**INVASIVE**
Mexican feathergrass (*Stipa tenuissima*)	Leaves can be left overwinter; can provide invertebrate habitat	No
Shuttlecock fern (*Matteuccia struthiopteris*)	Grows in shaded, moist areas	No
New Zealand satin flower (*Libertia chilensis*)	Provides nectar and pollen for bees and other types of pollinating insects	No
Common yarrow (*Achillea millefolium*)	Native Species. Provides nectar and pollen for bees and other types of pollinating insects. NBDC recommended pollinator species.	No
Dragon Heart (*Geranium Dragon Heart* (*'Bremdra'*))	Provides nectar and pollen for bees and other types of pollinating insects.	No
Purple Coneflower (*Echinacea purpurea*)	Provides nectar and pollen for bees and other types of pollinating insects. NBDC recommended pollinator species.	No
Hemp-agrimony (*Eupatorium cannabinum*)	Native Species. Provides nectar and pollen for bees and other types of pollinating insects.	No
Macedonian scabious (*Knautia macedonica*)	Provides nectar and pollen for bees and other types of pollinating insects	No
Masterwort (*Astrantia major*)	Provides nectar and pollen for bees and other types of pollinating insects	No
TABLE 6.1.2 ORNAMENTAL PLANTING NO 2		
SPECIES	**ECOLOGICAL NOTE**	**INVASIVE**
Mexican feathergrass (*Stipa tenuissima*)	Leaves can be left overwinter; can provide invertebrate habitat	No

Shuttlecock fern (*Matteuccia struthiopteris*)	Grows in shaded, moist areas	No
Mayflower (*Geranium macrorrhizum*) 'White-Ness	Provides nectar and pollen for bees and other types of pollinating insects	No
Turkish sage (*Phlomis russeliana*)	Provides nectar and pollen for bees and other types of pollinating insects.	No
Common yarrow (*Achillea millefolium*)	Native Species. Provides nectar and pollen for bees and other types of pollinating insects. NBDC recommended pollinator species.	No
Whorled clary (*Salvia verticillate*)	Provides nectar and pollen for bees and other types of pollinating insects. NBDC recommended pollinator species.	No
Whirling Butterflies (*Gaura lindheimeri*)	Provides nectar and pollen for bees and other types of pollinating insects. NBDC recommended pollinator species.	No
Masterwort (*Astrantia major*)	Provides nectar and pollen for bees and other types of pollinating insects	No

TABLE 6.1.3 ORNAMENTAL PLANTING NO 3		
SPECIES	**ECOLOGICAL NOTE**	**INVASIVE**
Feather reed grass (*Calamagrostis x acutiflora* 'Karl Foerster)	Leaves can be left overwinter; can provide invertebrate habitat	No
Mexican feathergrass (*Stipa tenuissima*)	Leaves can be left overwinter; can provide invertebrate habitat	No
Purple Coneflower (*Echinacea purpurea*)	Provides nectar and pollen for bees and other types of pollinating insects. NBDC recommended pollinator species.	No
Whorled clary (*Salvia verticillate*)	Provides nectar and pollen for bees and other types of pollinating insects. NBDC recommended pollinator species.	No
Big-root cranesbill (*Geranium macrorrhizum*)	Provides nectar and pollen for bees and other types of pollinating insects.	No

TABLE 6.1.4 CLIMBING PLANTS AND TREES		
SPECIES	**ECOLOGICAL NOTE**	**INVASIVE**
Star jasmine (*Trachelospermum jasminoides*)	Evergreen can provide cover, berries and pollination.	No
Common honeysuckle (*Lonicera periclymenum*)	Native Species. Provides nectar and pollen for bees and other types of pollinating insects such as moths at night. Fruits in the autumn.	No
Silver birch (*Betula pendula*)	Native Species. NBDC Biodiversity-friendly listed Tree; Birch supports 229 insect species and 126 lichens. In spring, its growth of seed-rich yellow-brown catkins attracts birds.	No

6.1 BATS

Potential Impacts

Artificial lighting during the construction and operational phases has the potential to affect bat species by altering roost emergence behaviour, commuting routes and foraging areas. The proposed works also have the potential to affect bats through disturbance, tree removal, modification of foraging habitat and disturbance to potential roosting features. Roost occupation by bats in trees and buildings can be transient; therefore, the absence of direct evidence during a survey does not necessarily confirm absence at all times. Mature broadleaved trees within the parkland and along the River Nore may provide occasional roosting or resting opportunities for individual bats or small numbers of bats. However, the trees at the pontoon location and in the north-eastern corner of the site boundary are considered to have low to negligible bat roosting potential. The outbuilding has low bat roosting potential, and no direct evidence of bat use was recorded during the daytime inspection or activity surveys. Lighting can cause avoidance of otherwise suitable commuting and foraging areas and can reduce foraging activity, particularly for light-sensitive species such as *Myotis* bats. The assessment and mitigation measures below have therefore been informed by current best practice, including the NPWS *Bat Mitigation Guidelines for Ireland – V2* (Marnell et al., 2022) and ILP/BCT *Guidance Note 08/23: Bats and Artificial Lighting at Night* (Institution of Lighting Professionals and Bat Conservation Trust, 2023).

Control Measures

Artificial lighting during the construction phase:

- Construction works during the hours of darkness, when bats are active (April to October), will be kept to a minimum.
- Lighting of treelines, buildings, walls and the riparian corridor will be avoided where possible.
- No construction lighting will be directed towards the River Nore after 22:30.
- Where lighting is required during construction, it will be positioned at the lowest practicable height, without compromising safe working conditions, to minimise light spill. Timers or motion sensors will be used where practicable.
- Directional lighting will be used where possible, with louvres, shields or equivalent cowls fitted to luminaires to reduce light spill.
- Where mature trees require felling, felled material will be left in place for 48 hours where safe and practicable to allow any night-roosting bat to disperse.

Lighting specifications will follow the mitigation hierarchy set out in ILP/BCT Guidance Note 08/23. Light levels will be kept to the minimum required for safety and security; luminaires will not include UV elements; metal halide and compact fluorescent light sources will not be used; and LED fittings will be selected for their optical control, dimming capability and ability to minimise spill. A warm white light source of 2700 K or lower will be used where practicable, and light sources should feature peak wavelengths above 550 nm to reduce the blue-light component most disruptive to bats.

Artificial lighting during the operational phase:

A lighting plan has been prepared for the site to minimise potential impacts on local bat populations and the River Nore corridor. The lighting design should be implemented in accordance with the project lighting drawings and should follow the principles of ILP/BCT

Guidance Note 08/23, including avoidance of unnecessary illumination, minimisation of light spill, use of appropriate spectral characteristics and provision of part-night lighting where feasible. Luminaires should feature peak wavelengths above 550 nm and warm white light sources of 2700 K or lower should be used where practicable. Lux levels for the proposed development are provided by **Ronan Meally Consulting Engineers**.

Eav	5.43
Emin	1.89
Emax	8.60
Emin/Emax	0.22
Emin/Eav	0.35

The lighting design by Ronan Meally Consulting Engineers will include the following design measures:

- Lighting will be directed only to where it is required.
- Lighting of treelines and the riparian corridor will be avoided where possible.
- Building, car park and site entrance lighting will be angled away from treelines and the River Nore.
- All lanterns will be installed with 0° tilt to avoid upward light spill.
- Lighting column heights will be selected to minimise light spill and glare, while maintaining safe use of the amenity areas.
- Warm white LED lighting of 2700 K or lower will be used where practicable, with no UV component and with optical control to reduce spill.
- Lighting at the River Nore pontoon will turn off at 22:30, consistent with the lighting approach for the Canal Walk.

Residual Impacts

Given the urban context of the site and the existing level of public lighting in the surrounding area, the main building area is unlikely to support significant bat foraging or roosting activity. Bat activity has been recorded along the River Nore, including at the proposed pontoon location, within an existing lit urban environment. Provided that the proposed lighting design is implemented as described above, including part-night switch-off at 22:30, directional control of luminaires, avoidance of unnecessary lighting of treelines and the river corridor, and use of warm white, low-spill LED lighting, residual impacts on bats are not considered likely to be significant. The proposed sympathetic lighting design will retain opportunities for light-tolerant bat species to commute and forage in the area post-construction, while reducing potential disturbance to more light-sensitive species.

6.2 BIRDS

The proposed development is not anticipated to result in significant impacts on birds during the construction or operational phases, provided that the mitigation and management measures outlined below are implemented. The proposed development does not contain suitable nesting habitat for Kingfisher due to the absence of suitable vertical earthen banks at the proposed pontoon location and along the Canal Walk. However, Kingfisher may use the River Nore corridor for foraging and commuting, and this has been taken into account in the assessment. Bird activity at the proposed pontoon monitored from 2024 to 2026 with a site-

specific wintering bird survey has shown at this location the majority of birds including waterfowl are predominately common species and are accustomed to human activity along the canal walkway.

Control/Monitoring Measures

No tree removal will take place during the bird breeding season, which runs from 1 March to 31 August inclusive, unless otherwise agreed with the NPWS following confirmation that no active nests would be affected. Stormwater from the proposed development will comprise clean rainwater run-off and will be directed to the drainage network and attenuation system within the proposed development. The accompanying Visitor Management Plan will outline operational management measures for the River Nore pontoon and associated visitor activity, including measures to manage potential disturbance to birds using the riparian corridor for nesting, roosting, foraging or commuting.

Residual Impacts

The riparian zone will be replanted with native species and will be managed sensitively during the operational phase in accordance with the accompanying Visitor Management Plan. Waterfowl using this section of the River Nore are likely to be accustomed to existing urban influence, including public access, lighting and recreational activity. The operational use of the pontoon is not considered likely to cause significant disturbance to nesting, roosting or foraging birds, provided that the Visitor Management Plan is implemented. Mallard and Mute Swan were the principal waterfowl species recorded along the riverbank at the proposed pontoon location, and these species are expected to continue using the area following construction. Kingfisher was not recorded during the wintering bird survey, and no suitable nesting banks are present at the proposed pontoon location; however, the River Nore may continue to provide foraging and commuting habitat for Kingfisher. Operational controls set out in the Visitor Management Plan will therefore include measures to avoid unnecessary disturbance to the riparian corridor and to maintain the ecological function of the river margin for birds. Lighting at the River Nore pontoon will turn off at 22:30, consistent with the lighting approach for the Canal Walk, which will reduce potential disturbance to roosting birds and other fauna using the river corridor.

6.3 OTTER

Potential Impacts

Otter activity was recorded along the River Nore, with individuals observed foraging at dusk and during the night. The proposed development site does not contain an otter holt; however, the River Nore and associated riparian corridor provide foraging and commuting habitat for otter. The proposed development is not anticipated to result in significant impacts on otter during the construction or operational phases, provided that the mitigation, monitoring and visitor management measures outlined below are implemented.

Control/Mitigation/Monitoring Measures

Vegetation removal within the riparian zone of the River Nore will be limited to that required for the proposed works. Disturbed riverbank areas will be replanted with native species. Where required, coppicing of Willow along this section of the riverbank can provide dense cover. No construction works will be undertaken within the River Nore or along the riparian zone between dusk and dawn, defined for this assessment as the period from two hours

before sunset to two hours after sunrise. Otter-proof fencing will be used where required to prevent otter entering the active construction area. An Ecological Clerk of Works (ECoW) will be present during works associated with construction of the pontoon and will inspect the site regularly throughout the construction phase to confirm that mitigation measures for the River Nore, riparian zone and otter are in place and functioning effectively. No operational recreational activities will take place at the River Nore pontoon between dusk and dawn. The accompanying Visitor Management Plan will outline operational controls for visitor access and pontoon use, including dusk-to-dawn restrictions, measures to avoid disturbance to foraging and commuting otter, and procedures for responding to any otter activity recorded during operation.

Residual Impacts

The riparian zone will be replanted with native species and managed sensitively during the operational phase in accordance with the accompanying Visitor Management Plan. Otter activity has been recorded at dusk and during the night along the River Nore; therefore, the timing and management of recreational use is an important mitigation measure. Operational water-based activities and use of the pontoon will not take place between dusk and dawn, when otter activity is expected to be higher. Lighting at the River Nore pontoon will turn off at 22:30, reducing potential disturbance to foraging or commuting otter in this location. The Visitor Management Plan will outline the operational restrictions, visitor-management measures and monitoring requirements needed to minimise disturbance to otter and maintain the ecological function of the riparian corridor. With these measures in place, residual impacts on otter are not considered likely to be significant.

6.4 OTHER TERRESTRIAL FAUNA

Potential Impacts

The proposed development is not anticipated to result in significant impacts on other terrestrial fauna during the construction or operational phases, provided that the mitigation and monitoring measures outlined below are implemented. Measures to protect hedgehog during the construction phase will be put in place where required.

Control/Monitoring Measures

Vegetation removal along the riparian zone of the River Nore will be limited to that required for the proposed works. Disturbed riverbank areas will be replanted with native species. No construction works will be undertaken within the River Nore or along the riparian zone between dusk and dawn, defined for this assessment as the period from at least one hour before dusk until at least one hour after sunrise. Otter-proof fencing will be used where required to prevent otter but will also prevent other fauna from entering the active construction area. An Ecological Clerk of Works will be present during works associated with construction of the pontoon and will monitor the implementation of ecological protection measures. A pre-construction ecological survey will be carried out to confirm that no protected fauna are breeding or hibernating within the construction zone. If a hibernating hedgehog is found, works in the immediate area will stop and advice will be sought from the local NPWS Conservation Ranger before any further action is taken. Open holes, pits, ditches, ponds and drains will be covered overnight or fitted with appropriate escape ramps. No operational recreational activities will take place along the River Nore between dusk and dawn, in accordance with the accompanying Visitor Management Plan.

Residual Impacts

The riparian zone will be replanted with native species and managed sensitively during the operational phase in accordance with the accompanying Visitor Management Plan. Operational water-based activities and use of the pontoon will not take place between dusk and dawn, reducing the potential for disturbance to nocturnal fauna. Hedgehog was recorded foraging within managed grassland subject to existing light spill and is likely to continue using suitable areas of the site for nocturnal foraging following construction. With the mitigation and management measures outlined above in place, residual impacts on other terrestrial fauna are not considered likely to be significant.

6.5 AQUATIC FAUNA

Potential Impacts

The proposed development has the potential to affect aquatic fauna during the construction phase through sediment release, accidental pollution, temporary disturbance within the riparian corridor, and the potential spread of aquatic invasive species or pathogens. Significant impacts on aquatic fauna are not anticipated during the construction or operational phases, provided that the mitigation, water-quality protection and biosecurity measures outlined below are implemented.

Control/Mitigation/Monitoring Measures

Daily visual inspections of the River Nore and adjacent works area will be undertaken during the construction phase. Silt mats will be placed on any manholes or drains located within the site boundary or access road, inspected daily, and removed only when there is no significant risk of sediment entering the drainage network. Silt fencing, comprising porous filter fabric designed to retain sediment, will be installed along the boundary of the site and the construction contractor's compound and will remain in place until construction works are complete.

For works associated with the River Nore pontoon, any temporary working area requiring dewatering will be isolated using double-bagged sandbags, a berm or a cofferdam of sufficient height to accommodate changes in water level. Pumped water will pass through an appropriate filter or settlement system to prevent aquatic fauna from entering the pump and to minimise the release of suspended sediment. Pumping operations will be supervised at all times and undertaken under the supervision of the Ecological Clerk of Works.

Silt fencing will be installed adjacent to stockpiled soil and retained until excavated material has been reused in reinstatement works or removed off site by a licensed waste contractor. All silt-control measures will be inspected daily and maintained as required. Additional measures, such as an absorbent boom securely anchored along the River Nore, will be used where required. No works will be undertaken within the River Nore or riparian zone where there is a risk of flooding. Weather conditions will be monitored daily and, where flooding is forecast or likely, the site will be secured, and potential pollutants will be removed from areas at risk of inundation. Any woody scrub or riparian vegetation clearance will be undertaken outside the bird breeding season where possible. Where clearance is required during the breeding season, the area will be inspected by the Ecological Clerk of Works, who will advise on the appropriate course of action. To minimise potential impacts on salmonid fish, in-channel or bankside works will be undertaken between July and September where possible, thereby avoiding the salmonid spawning season. If works are required outside this period,

they will only proceed following prior agreement with Inland Fisheries Ireland. Biosecurity measures to prevent the spread of Crayfish plague and other aquatic invasive species or pathogens will be implemented throughout the construction and operational phases. All equipment, footwear, ropes, absorbent materials, sandbags, boats and other items used in or near water will be checked, cleaned, disinfected and dried before use in the River Nore and before moving between watercourses. Disinfection will be undertaken away from watercourses using an approved disinfectant. Clothing previously used at another watercourse will be washed at 65°C and/or disinfected before use. Sandbags, absorbent booms or other absorbent materials previously used in another watercourse will not be used in the River Nore unless they have been disinfected and fully dried before use.

Residual Impacts

During the operational phase, surface water from the site will not discharge directly to the River Nore and will instead be attenuated on site. The drainage design includes a green roof, which will contribute to surface-water management and provide additional habitat value. Green roofs comprise roof or podium-deck areas where vegetation is established and can include extensive, intensive, semi-intensive, biodiverse, brown-roof and amenity roof types. They can provide habitat for invertebrates and birds and can reduce the rate and volume of surface-water run-off. The drainage network has been designed with regard to the Greater Dublin Strategic Drainage Study (GDSDS). A designated wash-down area will be provided for users to clean boats and equipment before and after use of the River Nore. This will comprise an external contained impermeable surface area where wash water will be collected by a surface channel drain and discharged to a precast concrete gravity-flow silt chamber. Run-off from the contained wash-down area will first be treated with a proprietary aquatic disinfectant, such as Virkon Aquatic or similar, before being discharged to the silt chamber for further settlement and dilution and then treated by ultraviolet filtration/disinfection as tertiary treatment. This system is designed to prevent pathogens such as Crayfish plague (*Aphanomyces astaci*) from entering the River Nore during the operational phase. The accompanying Visitor Management Plan will outline operational biosecurity procedures, including requirements for boat and equipment wash-down, use of the disinfectant treatment system, ultraviolet filtration/disinfection, visitor information point, inspection and maintenance of the wash-down area, and procedures for responding to any biosecurity incident or failure of the treatment system. With the water-quality, drainage, biosecurity and Visitor Management Plan measures outlined above in place, residual impacts on aquatic fauna are not considered likely to be significant.

6.6 INVASIVE SPECIES

During construction and operation, there is potential for invasive alien species, including invasive plants, aquatic invasive species and pathogens, to be introduced to or spread within the site and the River Nore corridor through the movement of soil, stone, plant material, machinery, footwear, boats, paddles, ropes and other equipment. The riparian location of the proposed works increases the importance of robust biosecurity controls, particularly in relation to the prevention of aquatic invasive species and pathogens such as Crayfish plague (*Aphanomyces astaci*).

Mitigation/Monitoring Measures

Measures to prevent the introduction or spread of invasive species will be implemented throughout the construction phase. The works will be undertaken with regard to the relevant

requirements of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, including Regulation 49 and the Third Schedule, and with reference to current invasive-plant management guidance, including TII guidance on the management of invasive alien plant species. Regular site inspections will be undertaken by the contractor and, where required, the Ecological Clerk of Works to confirm that invasive species are not establishing within the works area, site compound, access routes or riparian zone. Imported soil, stone, fill, planting material and other landscaping materials will be sourced from reputable suppliers and will be confirmed to be free from invasive plant material before being brought to site. Machinery, plant, tools, footwear and other equipment will be inspected and cleaned before arrival on site and before leaving the site, with particular attention given to mud, plant fragments and damp material. All relevant construction personnel will receive toolbox-talk training on invasive species identification, biosecurity procedures and reporting requirements, with particular emphasis on the species of concern identified in **Section 4.2**. If a species listed under the Third Schedule of the 2011 Regulations is identified within or adjacent to the works area, works in the immediate vicinity will stop until the species has been assessed by a suitably qualified ecologist and appropriate control, treatment, containment and disposal measures have been implemented by competent personnel. Any contaminated material will be handled, transported and disposed of in accordance with the relevant legal requirements and accepted invasive-species management practice.

Residual Impacts

The proposed development will include a landscape plan that prioritises native species and, where ornamental species are proposed, only non-invasive species will be used. Planting will be selected to provide ecological and pollinator value without creating a risk of displacement of native vegetation or contributing to the spread of invasive species. It is an offence to plant, disperse, allow or cause to disperse, spread or otherwise cause to grow certain invasive plant species listed in the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended. If an invasive species of concern is identified during the operational phase, an Invasive Species Management Plan will be prepared and implemented. The riparian zone at the proposed pontoon location will be monitored to confirm that invasive species do not establish following construction or reinstatement works. Operational biosecurity measures for river users, including Check-Clean-Dry procedures, boat and equipment wash-down, use of the disinfectant treatment system and ultraviolet filtration/disinfection, will be set out in the accompanying Visitor Management Plan. The proposed centre can also function as an information and training point for the prevention of invasive species, with particular emphasis on aquatic invasive species, Crayfish plague, responsible river use and protection of the River Nore's biodiversity. Educational material provided through the Visitor Management Plan will include practical examples for visitors and river users, such as avoiding contact with Giant Hogweed (*Heracleum mantegazzianum*) because of the risk of skin injury from its sap, and not picking or disturbing Himalayan Balsam (*Impatiens glandulifera*) because handling can contribute to seed dispersal and further spread along river corridors. With the construction controls, operational biosecurity procedures, landscape-species selection, monitoring, visitor education and Visitor Management Plan measures in place, residual impacts associated with invasive species are not considered likely to be significant.

7.0 CUMULATIVE IMPACTS

The residual impact of the proposed development is anticipated to be minor at the local level. In accordance with CIEEM (2024), cumulative effects can arise where individually minor or insignificant effects combine with other plans, projects or activities to generate a greater overall effect on ecological features.

Given the nature and scale of the proposed development within an existing urban setting, the potential for significant cumulative impacts on biodiversity is limited. The majority of habitats within the site boundary are modified habitats of low ecological value. The works within the riparian zone of the River Nore will be short term, approximately 15 weeks in duration, and will not significantly alter the modified riverbank at this location. With the implementation of construction-phase mitigation, including water-quality protection, riparian protection measures, biosecurity controls and ECoW oversight, significant cumulative effects on aquatic, riparian or terrestrial ecological receptors are not anticipated.

Significant cumulative habitat loss or fragmentation is not anticipated during either the construction or operational phases. The proposed development will primarily affect modified habitats of low ecological value, and the landscape plan will take account of the urban setting while incorporating native and ecologically appropriate planting where possible. The River Nore, which is the principal ecological receptor of higher value in the vicinity of the site, will not be significantly affected, provided that the construction mitigation measures, riparian reinstatement, operational timing restrictions, Visitor Management Plan and biosecurity measures are implemented. Potential cumulative lighting impacts have been addressed through the lighting design and control measures set out in this report, including directional lighting, minimisation of light spill, warm white lighting where practicable, and part-night switch-off at the River Nore pontoon. Therefore, significant cumulative effects associated with habitat loss, fragmentation, disturbance or artificial lighting are not anticipated.

During the operational phase, cumulative effects associated with water quality and invasive aquatic species will be managed through the site drainage design, attenuation measures, green roof, rain garden, permeable surfacing, boat and equipment wash-down area, disinfectant treatment system, ultraviolet filtration/disinfection, visitor education and biosecurity procedures set out in the accompanying Visitor Management Plan. Surface water will be attenuated on site and will not discharge directly to the River Nore. Foul water will discharge to the Kilkenny City and Environs Wastewater Treatment Plant. With these measures in place, the proposed development is not considered likely to contribute to significant cumulative effects on the River Nore, aquatic fauna, riparian habitats, otter, bats, birds or other ecological receptors.

A summary of the potential ecological impacts associated with the proposed development, together with the proposed avoidance, mitigation, monitoring and management measures, is provided in **Table 7**. The table also identifies the predicted residual significance of each impact following implementation of the mitigation measures. This summary should be read in conjunction with the detailed assessment sections above and the accompanying Visitor Management Plan, which will set out the operational management, biosecurity and visitor-control measures for the River Nore corridor.

TABLE 7: SUMMARY OF POTENTIAL ECOLOGICAL IMPACTS, MITIGATION MEASURES AND RESIDUAL EFFECTS					
IMPACT	**DEVELOPMENT PHASE**	**SIGNIFICANCE BEFORE MITIGATION**	**CONTROL / MITIGATION MEASURES**	**RESIDUAL SIGNIFICANCE**	**RESIDUAL IMPACT TYPE**
Habitat loss and modification	Construction and operation	Slight adverse	• Landscape design will reflect the urban setting and will incorporate native and pollinator-friendly species where appropriate. • Disturbed riparian areas will be reinstated and replanted with native, locally appropriate species suitable for the River Nore corridor, including marginal and riverbank species such as Water Mint, reeds, sedges and rushes where appropriate. • Reinstatement will be designed to support bank stabilisation, rapid vegetation establishment and the recovery of riparian habitat structure following construction. • The reinstated riparian zone will be monitored for successful establishment and for the presence of invasive species, with remedial planting or invasive-species control undertaken where required. • Tree and root protection measures will be implemented to protect retained mature trees and riparian vegetation within and adjacent to the construction zone. • Riparian vegetation will be managed in accordance with the accompanying Visitor Management Plan (VMP).	Not significant	Neutral to minor beneficial
Introduction or spread of invasive species and pathogens	Construction and operation	Moderate adverse	• Construction plant, machinery, footwear and equipment will be inspected and cleaned before arrival on site and before leaving the site. • Regular inspections will be undertaken for invasive species within the works area, compound, access routes and riparian zone. • If a Third Schedule invasive species is identified, works in the immediate vicinity will stop until appropriate assessment, control, containment and disposal measures are implemented. Operational biosecurity, Check-Clean-Dry procedures, boat and equipment wash-down, disinfectant treatment, ultraviolet filtration/disinfection and visitor education will be set out in the VMP. • The VMP will include inspection and maintenance requirements for the wash-down area, disinfectant treatment system and ultraviolet	Not significant	Neutral

TABLE 7: SUMMARY OF POTENTIAL ECOLOGICAL IMPACTS, MITIGATION MEASURES AND RESIDUAL EFFECTS					
IMPACT	**DEVELOPMENT PHASE**	**SIGNIFICANCE BEFORE MITIGATION**	**CONTROL / MITIGATION MEASURES**	**RESIDUAL SIGNIFICANCE**	**RESIDUAL IMPACT TYPE**
			filtration/disinfection system, together with response procedures for any biosecurity incident or treatment-system failure. • Operational biosecurity, Check-Clean-Dry procedures, boat and equipment wash-down, disinfectant treatment, ultraviolet filtration/disinfection and visitor education will be set out in the VMP.		
Disturbance to birds, bats, otter and other fauna	Construction and operation	Moderate adverse	• No tree removal will take place during the bird breeding season unless agreed following ecological inspection and confirmation that no active nests would be affected. • Construction works along the River Nore, and riparian zone will not be undertaken between dusk and dawn. • ECoW oversight will be provided during pontoon works and ecological protection measures will be monitored. • The River Nore corridor will be maintained as foraging and commuting habitat for Kingfisher, with operational controls to avoid unnecessary disturbance to the river margin. • Otter foraging was recorded at dusk and during the night; the VMP will include dusk-to-dawn restrictions and measures to minimise disturbance to foraging and commuting otter. • Operational controls in the VMP will include dusk-to-dawn restrictions, avoidance of unnecessary disturbance to the riparian corridor and procedures for responding to protected fauna activity.	Not significant	Neutral
Fauna mortality or entrapment	Construction	Moderate adverse	• A pre-construction ecological survey will be undertaken to confirm that protected fauna are not breeding or hibernating within the construction zone. • Otter-proof fencing will be used where required to prevent fauna entering the active construction area. • Open holes, pits, trenches, drains and excavations will be covered overnight or fitted with escape ramps.	Not significant	Neutral

TABLE 7: SUMMARY OF POTENTIAL ECOLOGICAL IMPACTS, MITIGATION MEASURES AND RESIDUAL EFFECTS					
IMPACT	**DEVELOPMENT PHASE**	**SIGNIFICANCE BEFORE MITIGATION**	**CONTROL / MITIGATION MEASURES**	**RESIDUAL SIGNIFICANCE**	**RESIDUAL IMPACT TYPE**
			• If protected fauna are encountered, works in the immediate area will stop and advice will be sought from the ECoW and/or NPWS as appropriate.		
Artificial lighting effects on bats, otter, birds and riparian fauna	Construction and operation	Moderate adverse	• Construction lighting will be minimised, directional and not directed towards the River Nore after 22:30. • Operational lighting will follow ILP/BCT Guidance Note 08/23 principles, including avoidance of unnecessary illumination, low spill, 0° tilt and warm white LED lighting of 2700 K or lower where practicable. • Lighting of treelines and the riparian corridor will be avoided where possible. • Pontoon lighting will switch off at 22:30, consistent with the Canal Walk lighting approach.	Not significant	Neutral
Dust emissions affecting flora and fauna	Construction	Slight adverse	• Dust-generating activities, including demolition and material handling, will be managed to minimise dust emissions. • Exposed surfaces, stockpiles and haul routes will be dampened or otherwise controlled where required during dry or windy conditions. • Stockpiles will be located away from sensitive riparian habitats where practicable and managed to prevent wind-blown dust. • The contractor will implement good-practice environmental controls during construction to reduce temporary nuisance or disturbance to flora and fauna.	Not significant	Neutral
Surface-water quality deterioration	Construction and operation	Moderate adverse	• Silt mats, silt fencing, stockpile protection, settlement/filter systems and daily inspections will be implemented during construction. • Works will not be undertaken within the River Nore or riparian zone where there is a risk of flooding. • Fuel, oil, concrete and other potential pollutants will be stored and handled appropriately, with spill kits available.	Not significant	Neutral

TABLE 7: SUMMARY OF POTENTIAL ECOLOGICAL IMPACTS, MITIGATION MEASURES AND RESIDUAL EFFECTS					
IMPACT	**DEVELOPMENT PHASE**	**SIGNIFICANCE BEFORE MITIGATION**	**CONTROL / MITIGATION MEASURES**	**RESIDUAL SIGNIFICANCE**	**RESIDUAL IMPACT TYPE**
			• In-channel or bankside works will be scheduled between July and September where practicable, to avoid the salmonid spawning season; any works required outside this period will only proceed following prior agreement with Inland Fisheries Ireland. • Surface water will be attenuated on site and will not discharge directly to the River Nore. Operational wash-down water will pass through disinfectant treatment, settlement/dilution and ultraviolet filtration/disinfection before discharge to the drainage treatment system. • The wash-down area, disinfectant dosing system and ultraviolet filtration/disinfection system will be inspected and maintained in accordance with the Visitor Management Plan, which will also set out response procedures for any biosecurity incident or treatment-system failure. • Operational wash-down water will pass through disinfectant treatment, settlement/dilution and ultraviolet filtration/disinfection before discharge to the drainage treatment system.		
Ecological education, biosecurity awareness and river stewardship	Operation	Minor beneficial	• The VMP will include visitor information, ecological education and biosecurity training to promote responsible use of the River Nore. • Education material will raise awareness of aquatic habitat sensitivity, invasive species, Crayfish plague and the importance of protecting the River Nore's biodiversity. • Practical guidance will include examples such as avoiding Giant Hogweed to prevent injury.	Minor beneficial	Beneficial

8.0 CONCLUSION

This Ecological Impact Assessment has considered the potential construction and operational phase effects of the proposed development on habitats, protected and notable species, aquatic fauna, invasive species and the ecological function of the River Nore corridor. The site is located within an existing urban setting and the majority of habitats within the site boundary are modified habitats of local importance and lower ecological value. The River Nore and associated riparian corridor are the principal ecological receptors of higher value in the vicinity of the proposed works. The proposed development will not result in the loss of any confirmed bat roost, otter holt, Kingfisher nesting habitat or other confirmed breeding or resting place for protected fauna. Kingfisher may use the River Nore corridor for foraging and commuting, and otter activity, including foraging at dusk and during the night, has been recorded along the river corridor. These receptors have therefore been considered in the assessment and in the mitigation and operational management measures proposed.

Provided that the avoidance, mitigation, monitoring and management measures set out in this report are implemented in full, significant residual ecological effects are not anticipated. Key measures include protection of retained trees and riparian vegetation, reinstatement and native replanting of disturbed riverbank areas, seasonal restrictions for vegetation clearance, ECoW oversight during pontoon works, water-quality protection measures, salmonid-sensitive timing of in-channel or bankside works where practicable, construction and operational lighting controls, dusk-to-dawn restrictions on pontoon use, biosecurity measures for river users, and the implementation of the accompanying Visitor Management Plan. The lighting design will minimise unnecessary illumination of treelines and the River Nore corridor, include directional and low-spill luminaires, and provide for part-night switch-off at the pontoon, thereby reducing potential disturbance to bats, otter, birds and other riparian fauna.

The proposed drainage strategy incorporates SuDS and surface-water management measures, and surface water from the site will not discharge directly to the River Nore. Operational biosecurity will be managed through the designated boat and equipment wash-down area, disinfectant treatment, ultraviolet filtration/disinfection, inspection and maintenance procedures, and response measures for any biosecurity incident or treatment-system failure. These measures will reduce the risk of sediment release, accidental pollution, aquatic pathogen transfer, Crayfish plague and the introduction or spread of invasive species. The assessment has also considered cumulative effects. Given the nature, scale and urban context of the proposed development, and subject to implementation of the mitigation and Visitor Management Plan measures identified, the proposed development is not considered likely to give rise to significant cumulative effects on the River Nore, riparian habitats, aquatic fauna, otter, bats, birds or other ecological receptors.

In addition to avoiding and reducing potential adverse effects, the proposed facility provides an opportunity to deliver positive ecological outcomes through evidence-based environmental awareness, biosecurity training and responsible recreational practice. Through the Visitor Management Plan, the facility can help users understand the sensitivity of the River Nore, the risks associated with invasive species and aquatic pathogens, and the importance of protecting the river's habitats and species. On this basis, and subject to full implementation

of the mitigation, monitoring, biosecurity and Visitor Management Plan measures set out in this EcIA, the proposed development is not predicted to result in significant adverse residual effects on ecological receptors and may provide a minor beneficial operational effect through improved education, stewardship and responsible use of the River Nore corridor.

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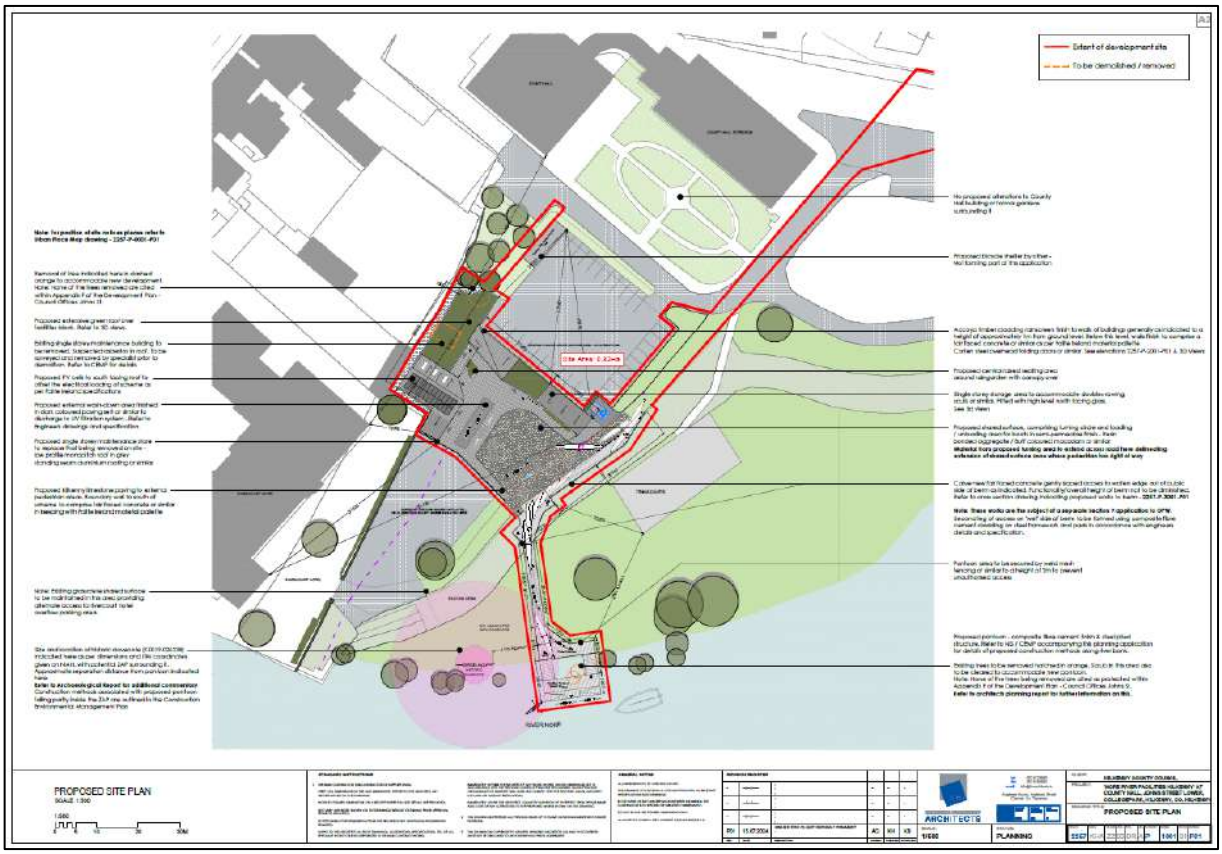
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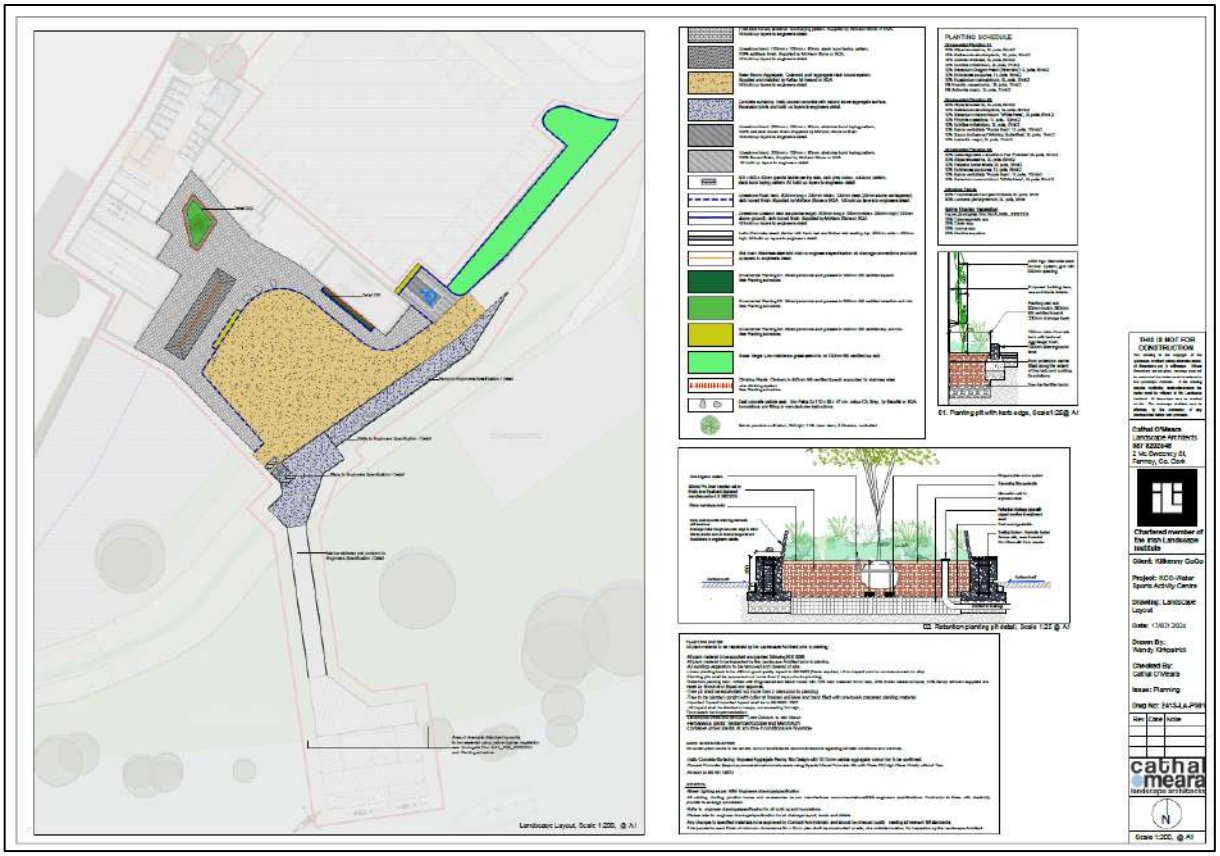
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APPENDIX – SITE LAYOUT & LANDSCAPE LAYOUT





Appendix J – Construction Environment Management Plan (Ross Swift Ecology Ltd)

ROSS SWIFT ECOLOGY LTD.

ECOLOGICAL AND ENVIRONMENTAL CONSULTANCY

Nore River Facilities Kilkenny

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

DOCUMENT CONTROL SHEET	
CLIENT	KILKENNY COUNTY COUNCIL
DEVELOPMENT LOCATION	COUNTY HALL, JOHNS STREET LOWER, COLLEGEPARK, KILKENNY, CO. KILKENNY
DOCUMENT TITLE	CEMP_RSE_0626
DATE OF ISSUE	22ND JUNE 2026
REPORT NO.	CEMP_010626

DOCUMENT AUTHOR	
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1.0 INTRODUCTION

Ross Swift Ecology (RSE) Ltd. was commissioned to prepare a Construction Environmental Management Plan (CEMP) for the proposed development within the grounds of County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny.

DESCRIPTION OF DEVELOPMENT

The proposed development will consist of the construction of a riverside facilities centre comprising: demolition of an existing single-storey maintenance store; removal of selected on-site vegetation to facilitate the works; construction of a single-storey facilities block with a flat, intensive green roof build-up, containing toilets, a universally accessible bathroom, changing places facility, showering / changing cubicles, cleaner's store, outdoor showers, an external plant area, storage lockers, wash trough and drying room; construction of a single-storey adjoining community block with an asymmetrical pitched roof containing a community room, associated kitchenette and a plant room / central information point; an adjoining external covered terrace area with a flat intensive green roof build-up; a single-storey storage block with an asymmetrical pitched roof containing equipment storage, dragon-boat / rowing boat storage and a maintenance store; and a single-storey adjoining block with a mono-pitched roof containing a boat / general storage area. The development will also include a hard landscaped pedestrian central space with raised central planter / seating, planted areas, a boat wash-down area and associated surface water UV filtration system; a proposed shared surface including a central set-down / vehicular turning area for boat loading / unloading and pedestrian use generally; an access route to the river over the berm comprising a sloped access path with associated retaining wall, steps, landings, balustrading and handrails; a raised walkway from the top of the berm to the pontoon with associated balustrading / handrails; and a part fixed / part floating access pontoon within the river. The works will further comprise site services connections and drainage works, including connection to the existing public foul and stormwater system; a universally accessible parking bay and covered bicycle parking area; public lighting to all pedestrian, vehicular and parking areas; associated archaeological investigations, including test excavations and underwater surveys; and all necessary landscaping, site boundary and site development works.

The proposed development will take approximately 18 months to complete. The pontoon will take approximately 15 weeks to complete and will be moored off driven steel piles. The piles will be driven from a rig on a floating barge. The underside of the bank seat will be above the existing water level, with the bank seat comprising precast concrete blocks anchored to the ground with screw anchors / driven piles. This will be undertaken at the same time as the pontoon supports. All works will be undertaken in accordance with *The Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters* (IFI, 2016).

1.1 PURPOSE OF THE CEMP

The purpose of this CEMP is to communicate the key environmental obligations that apply to all site personnel, subcontractors and visitors during construction of the proposed development. The CEMP defines the approach to environmental management at the

proposed development site and outlines the work practices, construction procedures and responsibilities to be implemented during the construction phase. Compliance with the CEMP, including its procedures, work practices and controls, is mandatory for all personnel and subcontractors employed during the construction phase. The CEMP outlines the control measures required to avoid, minimise or mitigate potential effects on the environment and surrounding area. This document has been prepared based on information provided during the planning stage by the applicants and their representatives in respect of the proposed development.

1.2 CEMP FORMAT

The CEMP is a live document and will be updated throughout the project lifecycle. It provides a framework for environmental management and clearly identifies the management processes to be implemented on site, while also seeking to ensure compliance with relevant environmental legislation, local authority planning conditions and government policy objectives. This document provides a detailed overview of key environmental management considerations for the project at this stage, while allowing for further refinement as the project progresses through the construction phase. The CEMP also provides a mechanism for monitoring and auditing environmental management performance and compliance for the duration of the project. The appointed Contractor will further develop this CEMP if new relevant environmental issues or considerations are identified. The CEMP must be reviewed and updated as necessary throughout the construction phase.

1.3 COMMUNICATION

Following planning approval, the applicants must appoint a construction works contractor for the proposed development. This CEMP must be communicated to all site personnel during site inductions and briefings. All site personnel are responsible for undertaking their work in an environmentally sustainable manner and should be encouraged to provide feedback and comments on environmental performance at the site, including suggestions for improvement. The construction works contractor must appoint a Project Manager for the proposed development. Any environmental issues, accidents or incidents must be reported to the Project Manager as soon as possible, who must in turn inform the applicants.

2.0 PROJECT DETAILS

2.1 LOCATION

The proposed development is located within the grounds of County Hall, Johns Street Lower, Collegepark, Kilkenny, Co. Kilkenny, as shown in **Figure 2.1** below. Part of the site is located within the River Nore, which is designated as part of the River Barrow and River Nore SAC and River Nore SPA. The River Nore is located along the southern boundary of the site and is the location of the proposed pontoon. The site can be accessed from Maudlin Street via the internal road of County Hall. Maudlin Street operates as a one-way system. The County Hall entrance is approximately 235m from Johns Street Upper and 280m from the Dublin Road; this road connects to the Kilkenny Ring Road approximately 870m further east.

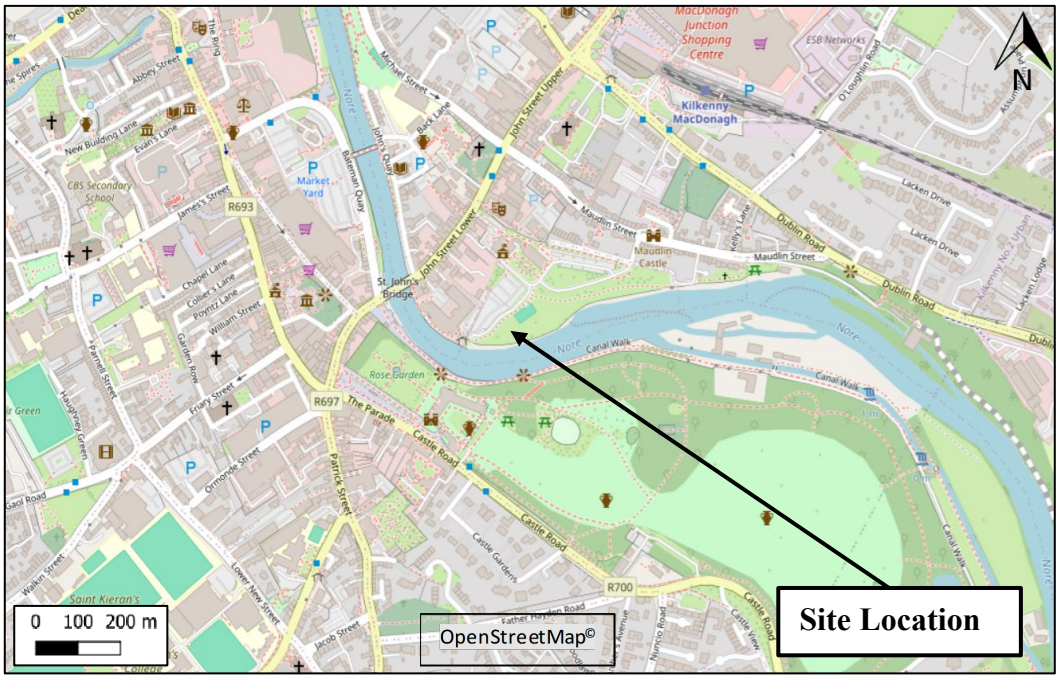


Figure 2.1: Location of Development Site at County Hall, Collegepark, Kilkenny, Co. Kilkenny.

2.2 PLANNING CONTEXT

The proposed development comprises a riverside facilities centre, pontoon, services, landscaping and all associated works. As good environmental practice, this CEMP has been prepared to ensure that construction works are undertaken in an environmentally sensitive manner, in particular works within and adjacent to the River Nore.

The CEMP is designed to apply to all works under the control of the contractor and any subcontractors. The main objectives of the CEMP are as follows:

- Provide a reference document for the management of environmental issues during the construction stage of the proposed riverside facilities centre development.
- Describe the proposed works and the existing environment. Identify potential receptors that may require the implementation of environmental control measures.

- Describe and explain how the proposed development will interact with the existing infrastructure and ground conditions.
- Briefly outline the proposed construction elements and phasing.
- List and outline the roles and responsibilities of project personnel with respect to the required environmental management on-site.
- Outline how complaints will be managed and how project-based environmental auditing will be structured.
- Record environmental risks and identify how they will be managed during the construction period.
- Explain how environmental legislation, planning consent conditions, policy requirements, good practice guidance and the requirements of environmental regulatory authorities and relevant third parties will be adhered to.
- Provide a directory of environmental control measures that will be utilised during the construction phase of the project.
- Summarise the protocols for the management and response to environmental incidents during the construction phase.
- Identify potential external bodies with which the management team may need to liaise during the course of the project.

The contractor will, as necessary, further develop this CEMP following appointment and before commencing works on site. Implementation of the CEMP will ensure that disruption and nuisance are kept to a minimum.

2.3 ENVIRONMENTAL BASELINE

The proposed development site, measuring approximately 0.24ha, is located within Kilkenny City in close proximity to the River Nore. The surrounding land use is predominantly urban, with public amenities, residential housing, commercial developments and historical sites. Refer to the accompanying **Archaeological Desktop Assessment** prepared by **Archaeological Management Solutions**.

2.3.1 Biodiversity

As part of the site assessments, the ecological context of the development site was examined by systematically walking the site and its boundaries and identifying the habitats present. This was undertaken by Dr Ross Donnelly-Swift in 2024, 2025 and 2026. Refer to the accompanying Ecological Impact Assessment for survey dates and detailed findings. The habitat survey was undertaken in accordance with the standard methodologies outlined in Fossitt's *A Guide to Habitats in Ireland* and the Heritage Council guidance, *Best Practice Guidance for Habitat Survey and Mapping* (Smith et al., 2011). The habitats identified at the proposed development site and within the vicinity of the site, in accordance with the Fossitt habitat classification scheme, are summarised in Table 2.3 below. Refer to the accompanying **Ecological Impact Assessment** (Document Reference: **EcIA_RSE_0626**) for a photographic log of the site assessment.

INVASIVE SPECIES

Under Regulation 49(2) of the European Communities (Birds and Natural Habitats) Regulations 2011, except in accordance with a licence granted under paragraph (7), any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow, in any place, any plant included in Part 1 of the Third Schedule shall be guilty of an offence. Materials containing invasive species are considered controlled waste and, as such, there are legal restrictions on their handling and disposal. Under Regulation 49(7) of the European Communities (Birds and Natural Habitats) Regulations 2011, it is a legal requirement to obtain a licence to move vector materials listed in the Third Schedule, Part 3. Three invasive plant species listed in the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) were recorded during the site assessment:

- Himalayan Balsam (*Impatiens glandulifera*) - High Impact Invasive – **Main Concern**
- Giant Hogweed (*Heracleum mantegazzianum*) - High Impact Invasive – **Main Concern**
- Spanish Bluebell (*Hyacinthoides hispanica*) - Invasive Species

Refer to the Ecological Impact Assessment (Document Reference: **EcIA_RSE_0626**) for the locations and details of these invasive species.

Other Invasive Species of High Concern for the River Nore are:

- Japanese Knotweed (*Fallopia japonica*).
- Curly-leaved Waterweed (*Lagarosiphon major*)
- New Zealand Pigmyweed (*Crassula helmsii*)
- Zebra Mussel (*Dreissena polymorpha*)
- Asian Clam (*Corbicula fluminea*)
- Signal Crayfish (*Pacifastacus leniusculus*)
- American Mink (*Mustela vison*)

DESIGNATED SITES

Table 2.4: Protected Sites and Distance from Development Site

SITE NAME	DESIGNATION	SITE CODE	DISTANCE	S-P-R
River Barrow and River Nore	**SAC**	**002162**	**Within Site Boundary**	**Yes**
River Nore	**SPA**	**004233**	**Within Site Boundary**	**Yes**
Thomastown Quarry	SAC	002252	14.5km SE	No
Seas off Wexford	SPA	004237	59km SE	No
Hook Head	SAC	000764	60.5km SE	No

Refer to the accompanying **Natura Impact Statement** (Document Reference: **NIS_RSE_0626**) for details of the Qualifying Interests and the assessment of potential impacts from the proposed development. The Natura Impact Statement also contains information on the water quality of the River Nore in the context of the Water Framework Directive.

2.4 CONSTRUCTION PROJECT DESCRIPTION

Construction of the proposed development will be undertaken on behalf of the developer by an appointed construction works contractor. The construction works contractor must establish designated areas for waste and materials storage within the development site boundary, located away from manholes, drainage systems and the flood zone of the River Nore. Appropriate measures must be implemented to prevent potential runoff to the River Nore during construction works.

2.4.1 Construction Schedule

Following approval of the CEMP by the competent authority, the construction schedule will be finalised at detailed design stage. The proposed development is expected to include the following main construction activities:

Site Preparation
▪ Completion of any required archaeological testing prior to construction. See accompanying **Archaeological Report** by Cultural Resource Management and Planning Ltd. ▪ Mobilisation of personnel and equipment to site. ▪ Site inductions and relevant training. ▪ Erection of health and safety / construction works signage. ▪ Installation of external lighting as required. ▪ Site clearance, including any vegetation removal. ▪ Asbestos survey of the outbuilding / maintenance store. ▪ Demolition of the outbuilding / maintenance store.
Remediation Works at Proposed Site and Associated Works
▪ Excavation and earth-moving activities. ▪ Stockpiling of material for use in site reinstatement activities. ▪ Installation of silt control features where appropriate, such as silt fencing. ▪ Protection of the drainage network along the access road using silt mats. ▪ Works to facilitate access to the site. ▪ Pouring of concrete.
Works at River Nore
▪ Erection of health and safety / construction works signage. ▪ Site clearance, including any vegetation removal. ▪ Excavation and earth-moving activities. ▪ Stockpiling of soils for use in site reinstatement activities. ▪ Installation of silt control features where appropriate, such as silt fencing. ▪ Installation of the water quality controls. ▪ Securing site to ensure no fauna can access the construction area. ▪ Installation of otter proof fencing. ▪ Ensure that appropriate biosecurity measures are put in place.

Reinstatement and Completion of Construction Works
▪ Reseeding of riparian zone with suitable vegetation. See **Ecological Impact Assessment** and **Landscape Plan** by Cathal Meara Landscape Architecture. ▪ Finishing of proposed development site. ▪ Removal from site of any excess materials remaining following reinstatement works. ▪ Removal of any control features once stabilisation has taken place. ▪ Removal of any temporary stockpiles of excavated materials.

2.4.2 Main Stages of Construction

Site Compound

The construction compound will be established early in the project to provide site offices, staff welfare accommodation and a controlled area for the delivery and storage of materials. Temporary foul water storage will be provided at this stage to manage wastewater generated from the compound. The compound will also serve as a secure materials staging area for raw materials and construction materials required during the construction phase and may be used for the temporary storage of excess spoil where appropriate. Facilities within the compound will include office space, meeting rooms, a canteen area, a drying room and sanitary provisions.

Site Clearance and Excavations

During site clearance works, any excess material generated at the site must either be stored temporarily for reuse in construction or reinstatement activities, where suitable, or removed to an appropriately licensed waste facility. During excavation works, subsoil and topsoil must be temporarily stored for reuse in reinstatement where practicable. Any excess material that cannot be reused on site must be transported off site by a licensed contractor for recovery or disposal at a suitably licensed facility. Alternatively, where excess excavated material or soil is classified as a by-product under Article 27 of the European Communities (Waste Directive) Regulations 2011, and where the proposed end use satisfies the requirements of those regulations, the material may be directed for appropriate local reuse. The storage of excavated material on site must be temporary and must only continue for as long as required to support construction and site reinstatement activities.

Hazardous Waste Survey

A hazardous waste survey must be carried out by a competent and licensed contractor before demolition works commence. Any hazardous waste identified, including asbestos-containing materials, must be removed by specialist contractors and disposed of at a suitably licensed waste facility. The principal risk associated with asbestos is the potential release of fibres from asbestos-containing materials into the air, where they may be inhaled. Inhalation of asbestos fibres can lead to asbestos-related diseases, including an increased risk of lung cancer, asbestosis and mesothelioma. Asbestos cement products, floor tiles and bitumen felt tiles are generally considered lower-risk asbestos-containing materials, as they are less likely to release fibres under normal conditions. All asbestos-containing materials must be sent to a licensed waste facility for appropriate disposal and treatment. Laboratory test results should

be submitted with the waste material to enable the waste facility to apply appropriate management, acceptance and disposal procedures.

Demolition of Building

The contractor will consider: (i) the age of the structure; (ii) its previous use; (iii) nearby buildings or structures; (iv) the weight of removed material; (v) the type of construction; (vi) materials must be removed from the site in a timely manner and not stockpiled for long periods of time; (vii) the demolition plan should identify the sequence required to prevent accidental collapse of the structure; (viii) deliberate controlled collapse with safe zones and restricted access; and (ix) installing protective cladding and lining to limit dust and noise during works.

Provision / Upgrade of Services & Drainage

Following site clearance and excavations, works must commence on the installation / upgrade of underground utilities required for water supply, wastewater, electricity and telecommunications. Wastewater from the proposed development will be discharged to the existing sewer line after upgrading the connection. The drainage system will be SuDS compliant and will include attenuation systems on site. Operational facilities will include a UV filtration system and biosecurity wash-down area. See the accompanying **Engineering Reports** and site layout by DRA Consulting Engineers (Document Reference **22175-Civil Eng Report-240418**).

Construction of Development

Following site clearance, excavations and the installation or upgrade of services, construction of the proposed development will commence. The pouring of concrete foundations must be supervised at all times. The pontoon will be supported by steel piles driven into the riverbed. The depth of pile installation will provide a stable foundation for the pontoon and will help ensure that the structure remains secure during flood events.

Site Reinstatement and Landscaping

Landscaping works will be undertaken in accordance with Cathal Meara Landscape Architecture Drawing No. **2413-LA-P001**. The works will include removal of hardcore surfaces where required, removal of stockpiled excavation material, removal of construction plant, equipment and signage, reseeding/replanting of exposed soil and planting of trees and ornamental flora.

2.4.3 Construction Working Hours

It is anticipated that construction works must be undertaken during standard construction hours, as follows:

Start	Finish	Days
8am	6pm	Monday – Friday
8am	1pm	Saturday

No works will take place on Sundays or Bank Holidays. It should be noted that there may be times where it is necessary to undertake construction works outside of the times mentioned above, for example concrete pours. In such cases, notification must be given where necessary to the relevant bodies and any potentially affected local residents in good time and prior to specified works commencing.

Works within the riparian zone and River Nore must finish at least one hour before sunset and must not commence until at least one hour after sunrise.

2.4.4 Construction Plant and Equipment

The construction plant and equipment likely to be used during the construction phase of the project are included in the table below. It should be noted that this list is not exhaustive.

Table 2.5: Plant and Equipment for Works in or at the River Nore

Works Activity	Indicative Plant / Equipment
Site set-up and pre-start checks	Survey equipment, temporary fencing, signage, toolbox-talk materials, spill kits and exclusion-zone markers.
Riverbank access and temporary working areas	Ground protection mats, temporary access surfacing, small excavator, dumper, hand tools and banksman-controlled plant.
Barge mobilisation and river access	Floating barge, workboat / pioneer boat, mooring lines, fenders, anchors, lifting equipment and life-saving equipment.
Pontoon pile installation	Barge-mounted piling rig, vibratory hammer, side-grip rig, steel piles, guide frames, lifting slings and survey equipment.
Bank seat and bank-side support works	Precast concrete units, screw anchors or driven piles, small tracked plant, lifting equipment, edge protection and hand tools.
Silt control and dewatering	Silt fencing, silt curtains or blankets where suitable, double-bagged sandbags, geotextile, settlement tank / skip, screened pump and discharge hoses.
Water-quality and ecological monitoring	Turbidity / suspended-solids monitoring equipment, field meter, sampling bottles, camera, inspection sheets and ECoW monitoring equipment.
Fuel, oil and spill-response equipment	Bunds, drip trays, plant nappies, spill kits, absorbent booms / pads and hydraulic-hose inspection materials.
Biosecurity	Check-Clean-Dry station, disinfectant, brushes, clean water supply, trays, waste bags and biosecurity inspection log.
Fauna protection and site lighting	Otter-proof fencing where required, mammal escape ramps, trench covers, temporary low-level directional lighting and warning signage.
Reinstatement	Hand tools, small tracked plant, native riparian planting, erosion-control matting, biodegradable coir products and watering equipment.

Piles and equipment will be stored on the pontoon for installation in accordance with the maximum permitted deck load detailed in the stability calculations and as required to trim

the barge. Piles can be self-loaded by the side grip rig from the storage location once the rig is on the barge. The barge can be self-propelled however a pioneer workboat can be on site to assist with manoeuvring particularly where access is tight to reduce the potential risk of any collisions.

2.4.5 Security Arrangements

The construction works contractor must ensure the proposed development site is secured, to provide the safety of all potentially affected parties, including staff, contractors, traffic, pedestrians, and wildlife. Only authorised personnel must be allowed onto the development site. The site must be secured by construction fencing, hoarding or another suitable site barrier system to protect against unauthorised entry. The construction works contractor must implement the appropriate security arrangements, including signing in / out procedures, signage and out-of-hours security.

2.4.6 Health and Safety

All activities undertaken at the proposed development site during the construction phase shall be in accordance with the requirements of the Safety, Health, and Welfare at Work Act 2005, as amended, and the Safety, Health and Welfare at Work (Construction) Regulations, 2013. As required by the 2013 (with amendments in 2019 and 2021) regulations, a Health and Safety Plan must be prepared by the construction works contractor, which must address health and safety issues from the design stages through to the completion of construction works. This plan must be updated and reviewed as required as the proposed development progresses. Prior to works commencing onsite, all site personnel, including sub-contractors, must receive induction training that must incorporate health and safety requirements and good practice. Site induction must be mandatory for all employees, sub-contractors, and visitors to the development site. Specific training must be provided, where necessary.

All construction personnel, contractors and visitors to the site must always wear the following appropriate Personal Protective Equipment as a minimum:

- Safety helmet.
- Hi-visibility clothing (coat or vest).
- Safety boots.
- Eye protection as identified for specific activities.

Regular site safety audits must be undertaken throughout the construction phase to ensure the rules and regulations established for the site are always complied with.

As the proposed development site is predominantly artificial surfaces and amenity grassland, it is considered unlikely that the site will contain contaminated material. However, in the unlikely event that contaminated material is encountered during construction works, appropriate measures must be undertaken in compliance with relevant waste legislation. The relevant authorities must be notified where required.

2.4.7 Construction Signage and Labelling

Environmental signage and labelling must be used to inform site personnel of environmental requirements and restrictions with regard to construction activities, in addition to promoting environmental good practice at the development site. The construction works contractor must erect the appropriate signage and label all relevant areas and receptacles. Examples must include designated storage areas for potentially polluting materials and waste and site environmental rules.



Figure 2.3: Examples of Signage and Fencing to Secure Construction Site

2.4.8 Construction Method Statement (CMS)

Prior to works commencing, the construction works contractor must prepare and provide to the clients a detailed CMS, which must address all construction works required for the proposed development. The construction works contractor must maintain a register of all method statements for the project, in addition to a register of all site personnel trained.

2.5 Pest Control

The development contractor will ensure the prevention of pests or vermin and facilitate regular disposal of food and material attractive to pests. If infestation occurs, the contractor will take appropriate action to eliminate it and prevent further occurrence, including the contracting of a pest control contractor and the establishment of a pest baiting programme, where required.

3.0 ENVIRONMENTAL MANAGEMENT

3.1 ENVIRONMENTAL MANAGEMENT SYSTEMS

An Environmental Management System (EMS) must be put in place by the construction works contractor. The EMS must take account of any planning conditions imposed for the construction phase and must be appropriate to the scale and nature of the works. The construction works contractor must implement environmental management procedures, including, but not limited to, the following:

- Awareness and Training.
- Environmental Emergency Response.
- Record Keeping, Auditing and Monitoring.
- Environmental Complaints Procedure.
- Protection of Flora and Fauna.
- Protection of Soil, Groundwater and Surface Water Quality.
- Chemical and Hazardous Material Management.
- Noise Management.
- Dust Management.
- Waste Management.

The CEMP must be updated as necessary to ensure that all measures identified within the environmental management procedures are incorporated and implemented.

3.2 KEY ROLES AND RESPONSIBILITIES

The Construction Works Contractor (CWC) must appoint an experienced construction management team. The Project Manager will have overall responsibility for environmental management at the proposed development site. The indicative roles and responsibilities for relevant site personnel are outlined below.

Project Manager

The Project Manager's responsibilities are as follows:

Role	Primary Responsibilities	Reporting / Interface
Project Manager	Overall project delivery; implementation and updating of the CEMP; monitoring performance; maintaining records/registers; coordinating the team; managing public queries/complaints; ensuring induction, training and Pollution Incident Response Plan implementation.	Reports to Client; coordinates Contractor team, EHS Officer and specialists.
Resource and Waste Manager	Manage RWMP/CWMP requirements; appoint specialist environmental resources; manage construction impacts; liaise with authorities; schedule monitoring; complete audits and corrective actions; chair toolbox talks; maintain supporting environmental documents.	Reports to Project Manager; liaises with local authorities/statutory bodies.

Site Engineer	Ensure works comply with CEMP; manage materials procurement; coordinate temporary works; support programme/planning and health and safety implementation; maintain site records.	Reports to Project Manager.
EHS Officer	Implement Health and Safety Plan and CEMP; ensure contractors understand the Pollution Incident Response Plan; update CEMP as required; manage inductions/training; investigate incidents and near misses; undertake audits.	Reports to Project Manager.
All Staff and Sub-contractors	Follow CEMP requirements; cooperate with the Project Manager and EHS Officer; support inspections/audits; report incidents, accidents and near misses.	Report to site management.
Archaeological Contractor	Obtain required licences/consents; undertake archaeological testing, monitoring and reporting; brief the contractor; advise on protection, stop-work and mitigation procedures.	Liaises with Contractor, National Monuments Service, National Museum and relevant authorities.
Ecological Clerk of Works	Supervise ecological surveys; oversee mitigation; monitor protected habitats/species controls; maintain the ecological monitoring file; provide specialist advice and stop-work direction where required.	Liaises with Contractor, Client, NPWS and IFI as required.

Archaeological Contractor

The Archaeological Contractor must be a suitably qualified, competent and licence-eligible archaeologist. The role is to obtain all required archaeological licences/consents, advise the contractor on archaeological constraints and mitigation, supervise relevant investigations or monitoring, and ensure that archaeological requirements are incorporated into the construction method statements and site briefings.

The Archaeological Contractor's responsibilities are summarised below:

Stage / Topic	Archaeological Requirement
Pre-construction	Review the Archaeological Impact Assessment, test-excavation strategy, underwater archaeological assessment, geophysical survey results and any conditions attached to National Monuments Service approvals. Obtain all required Section 14 Ministerial Consent, Section 26 excavation licences, dive survey licences, detection-device consents or other approvals before relevant works commence.
CEMP and method statements	Provide project-specific archaeological requirements for inclusion in the CEMP, construction method statements, temporary works designs and construction drawings. Identify areas requiring archaeological testing, monitoring, exclusion, protection or controlled excavation.
Known constraints	Advise the contractor on the archaeological sensitivity of the site, including the Zone of Archaeological Potential for Kilkenny City, the projected line of the medieval town defences, the recorded dovecote/circular masonry structure,

	previous River Nore flood-relief discoveries, the recorded fish weir and geophysical anomalies within the proposed development site.
Briefings and supervision	Provide pre-start briefings to relevant site personnel and supervise archaeological testing, monitoring, underwater survey, controlled excavation or other agreed mitigation where required.
Unexpected discoveries	Implement a stop-work procedure if archaeological features, deposits, objects, waterlogged material or suspected human remains are encountered. Protect the affected area and notify/consult the National Monuments Service, National Museum of Ireland, coroner and An Garda Síochána, as appropriate.
Mitigation	Advise on appropriate mitigation, which may include preservation in situ, preservation by record, design avoidance, archaeological monitoring, controlled excavation, specialist analysis, environmental sampling, finds conservation, secure storage, reporting and archiving.
Records and reporting	Maintain monitoring records, survey data, trench records, context sheets, photographs, drawings, finds and sample registers, consultation records and agreed mitigation records. Incorporate these into the required preliminary, final and archive reports for the National Monuments Service and National Museum of Ireland.

Ecological Clerk of Works

The contractor must appoint a suitably experienced and competent Ecological Clerk of Works (ECoW) to supervise all pre-construction ecological surveys, oversee the implementation of ecological mitigation measures, and ensure that site activities are carried out in accordance with the planning permission insofar as it relates to ecological matters. This includes, in particular, any works that could affect protected habitats or species. The ECoW must have training, experience and knowledge appropriate to the role, including an NFQ Level 8 qualification, or equivalent acceptable qualification, in ecology or environmental biology, together with demonstrable experience in the protection of European sites. In carrying out their role, the ECoW must maintain a monitoring file, which must be made available for inspection or audit by the Client, NPWS or IFI at any time.

3.3 REGULATIONS AND REQUIREMENTS

3.3.1 Legislative Context

The following list of Acts and regulations is not exhaustive. The construction works contractor must comply with all relevant legislation throughout the proposed project, including, but not limited to, the following:

- Wildlife Acts 1976–2023 — Wildlife Act 1976 and Wildlife (Amendment) Act 2000, as amended by the 2010 and 2023 Acts.
- European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/2011), as amended by S.I. 355/2015 and S.I. 233/2021.
- Flora (Protection) Order 2022 (S.I. 235/2022).
- Habitats Directive 92/43/EEC (as amended).
- Birds Directive 2009/147/EC.
- Fisheries (Consolidation) Act 1959, as amended.

- Fisheries (Amendment) Act 1999.
- Quality of Salmonid Waters Regulations 1988 (S.I. 293/1988).
- Environmental Objectives (Surface Waters) Regulations 2009 (S.I. 272/2009), as amended by S.I. 327/2012, S.I. 386/2015 & S.I. 77/2019.
- Water Framework Directive 2000/60/EC.
- Environmental Objectives (Groundwater) Regulations 2010 (S.I. 9/2010), as amended by S.I. 366/2016.
- Air Pollution Act 1987.
- Air Quality Standards Regulations 2011 (S.I. 180/2011), transposing Directive 2008/50/EC.
- EPA Act (Noise) Regulations 1994 (S.I. 179/1994).
- Construction Plant & Equipment Noise Regulations 1988 (S.I. 320/1988), as amended.
- Noise Emission by Equipment for Use Outdoors Regulations 2001 (S.I. 632/2001).
- Landfill Directive 1999/31/EC and Council Decision 2003/33/EC.
- Waste Management Act 1996–2023
- Waste Directive Regulations 2011 (S.I. 126/2011), as amended.
- Waste Collection Permit Regulations 2007 (S.I. 820/2007), as amended.
- Facility Permit & Registration Regulations 2007 (S.I. 821/2007), as amended.
- Waste Licensing Regulations 2000 (S.I. 185/2000), as amended.
- Packaging Regulations 2014 (S.I. 282/2014), as amended.
- Waste Management (Planning) Regulations 1997 (S.I. 137/1997), as amended.
- Landfill Levy Regulations 2015 (S.I. 189/2015), as amended.
- WEEE Regulations 2014 (S.I. 149/2014).
- Batteries & Accumulators Regulations 2014 (S.I. 283/2014), as amended.
- Shipments of Waste Regulations 2007 (S.I. 419/2007), as amended.
- Transfrontier Shipment Regulations 1994 (S.I. 121/1994
- Environmental Protection Agency Act 1992–2023 — as amended.
- Litter Pollution Act 1997, as amended.
- Planning and Development Act 2000–2024 — heavily amended; full consolidation pending under the Planning and Development Bill.

3.3.2 Relevant Guidelines

The following list of guidance documents is not exhaustive. The construction works contractor must consult and apply relevant guidance throughout the proposed project, including, but not limited to, the following:

- Environmental Good Practice on Site Guide, Fifth Edition (CIRIA C811, 2023).
- Control of Water Pollution from Construction Sites: Guidance for Consultants and Contractors (CIRIA, 2001).
- Control of Water Pollution from Construction Sites: Guide to Good Practice (CIRIA, 2002).
- Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads (NRA/TII, 2010).
- Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes (NRA/TII, 2006a).
- Guidelines for the Treatment of Bats during the Construction of National Road Schemes (NRA/TII, 2006c).
- Bat Mitigation Guidelines for Ireland – Version 2 (NPWS, 2023).
- Bats & Lighting: Guidance Notes for Planners, Engineers, Architects and Developers (Bat Conservation Ireland, 2010).

- Guidance on the Assessment of Dust from Demolition and Construction, Version 2.2 (IAQM, January 2024).
- Guidelines for the Treatment of Noise and Vibration in National Road Schemes (NRA/TII; TII Publication PE-ENV-01110, 2004).
- Code of Practice for Noise and Vibration Control on Construction and Open Sites (BS 5228-1:2009 + A1:2014).
- Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction and Demolition Projects (EPA, 2021).

3.4 ENVIRONMENTAL AWARENESS AND TRAINING

Before works commence on site, this CEMP and its contents must be communicated to all site personnel, including subcontractors, as part of induction training. Site induction must be mandatory for all employees, subcontractors and visitors to the development site. The site induction must address the following aspects:

- Organisational structure of the construction team.
- Key environmental roles and responsibilities.
- Communications and contacts.
- Sensitive environmental receptors.
- Incident and emergency response.
- General good environmental practices.

Specific training must be provided, where necessary, to nominated personnel to address incidents or emergencies that could cause environmental pollution. This training must be provided to staff through toolbox talks and may address issues such as the following:

- Water Pollution.
- Spill Control.
- Noise Pollution.
- Dust Pollution.
- Waste Management.

3.5 DOCUMENT REVIEW AND UPDATES

To ensure that the CEMP remains fit for purpose, it must be reviewed and updated as necessary throughout the construction phase. This will ensure that it continues to support the efficient and effective delivery of the project's environmental commitments and the protection of the environment.

The CEMP must be reviewed to address, for example, the following:

- Any recommendations, comments or observations received by the competent authority following the submission of the CEMP for approval.
- Any requirements or issues highlighted by prescribed bodies such as the NPWS and IFI.
- Ensuring that the CEMP reflects best practice at the time of construction.
- Incorporating findings from previous inspections and audits undertaken by the construction works contractor.
- Incorporating findings and recommendations arising from site meetings between the construction works contractor and the clients.

The Project Manager and EHS Officer will be responsible for reviewing the CEMP and ensuring that any revisions are effectively communicated to relevant site personnel and subcontractors.

3.6 ENVIRONMENTAL COMMITMENTS

The clients recognise that construction works have the potential to adversely affect the environment and must therefore ensure that the construction works contractor is committed to the effective implementation of the CEMP. Compliance with the CEMP, including all procedures, work practices and controls, is mandatory for all personnel and subcontractors employed during the construction phase. The CEMP outlines the control measures required to avoid, minimise or mitigate potential effects on the environment.

The Project Manager, Quality Manager and EHS Officer will be responsible for implementing the CEMP throughout the construction works. The Project Manager will be responsible for monitoring CEMP performance and maintaining records to demonstrate compliance, with support from the EHS Officer.

3.7 COORDINATION WITH EXTERNAL ENTITIES

In the event of an environmental incident at the site, the construction works contractor must follow the Emergency Management Plan, as appropriate. The construction works contractor must also liaise with relevant third parties where required, which may include the following:

- Emergency services.
- National Parks and Wildlife Service.
- Environmental Protection Agency
- Inland Fisheries Ireland.

4.0 ENVIRONMENTAL IMPACTS

4.1 AIR QUALITY IMPACTS

Construction activities have the potential to generate construction dust, which is generally the primary air quality concern during site preparation and earthworks. Dust generation typically arises from excavation, earth moving, materials handling, and vehicle movements, particularly during dry or windy conditions. The quantity of dust produced depends on the material type (e.g. soils, sands, gravels, silts) and the nature and intensity of the activity.
Dust dispersion is influenced by local meteorological conditions, including wind speed, wind direction, and rainfall. Vehicle movements transporting sand, gravel, concrete or aggregates can further increase the potential for dust nuisance along local roads.

Dust is generally defined as particulate matter in the 1–75 µm size range, with particles <1 µm classified as smoke or fumes. Particles >10 µm are most associated with public perception and nuisance. Dust occurs naturally in the atmosphere at varying concentrations and originates from both natural and anthropogenic sources, including:

- Combustion products from fires, power stations and motor vehicles
- Mechanical handling of minerals and similar materials
- Industrial activities

Dust particles disperse through suspension and entrainment in airflow. Their behaviour depends on particle size, shape, density, and climatic conditions. Smaller particles remain airborne for longer, disperse over greater distances, and settle more slowly.

Main Potential Sources of Airborne Dust During Construction

- Construction vehicles and haul routes
- Excavation and earth-moving activities
- Materials handling, storage and stockpiling

Construction dust control is a standard component of construction environmental management. With the implementation of established best-practice measures, the impact of construction activities on air quality—particularly dust—should not be significant.

4.2 SURFACE WATER, GROUNDWATER, AND SOIL IMPACTS

During construction works, the main potential impacts on surface water quality, groundwater quality and soils would arise from the release of suspended solids during soil disturbance works and the release of potentially polluting substances, such as hydrocarbons, fuels, oils and uncured concrete. Suspended solids could become entrained in surface water runoff and affect aquatic habitats through deposition. Increased sediment levels have the potential to affect fish by damaging gravel beds required for spawning, smothering fish eggs and, in extreme cases, interfering with fish gills. Increased suspended solids can also reduce water clarity, which may affect light penetration and certain aquatic fauna behaviours, such as foraging success. Aquatic flora and fauna could also be affected by increased nutrients bound to suspended solids. A significant increase in nutrients can result in eutrophication, leading to deoxygenation of waters and subsequent asphyxia of aquatic species.

Another potential source of surface water contamination during construction works is the release of uncured concrete. If uncured concrete were to enter surface water, it could locally alter pH, potentially affecting aquatic flora and fauna and altering the waterbody substrate.

As part of the site is located at the River Nore, construction works have the potential to affect surface water quality if not appropriately controlled. However, significant effects on water quality are not anticipated where relevant guidelines, regulations and mitigation measures are strictly implemented. Measures to protect groundwater will also be implemented during the construction phase.

A further potential source of chemical contamination is the release of hydrocarbons from construction plant and equipment. Hydrocarbons can affect water quality and may result in toxic and / or deoxygenating conditions for aquatic flora and fauna. Pollution could occur through spillages, inappropriate storage, handling and transfer of oils or chemicals, or refuelling of vehicles.

With regard to the stripping of soils and subsoils at the development site, excavated subsoils and soils will be reused in the reinstatement process where possible. Therefore, no significant impact on soils is anticipated as a result of excavation activities. Specialist machinery will be used during construction works to minimise potential compaction of soils and subsoils. Control measures must be implemented to ensure that construction of the proposed development does not result in deterioration of watercourses.

4.3 TERRESTRIAL BIODIVERSITY IMPACTS

Construction activities have the potential to affect terrestrial biodiversity through habitat loss, disturbance from noise and dust, the potential introduction or spread of invasive species, and light pollution. The construction phase of the development is not expected to result in the direct and permanent loss of any habitat of significance. The main development site comprises artificial surfaces and grassland. Works associated with the pontoon will be temporary, and the riparian zone will be replanted with native species. The River Nore is of high ecological value, and the pontoon works are located at this river. The majority of flora recorded within the site are not of conservation concern or high ecological value.

Dust emissions may arise during construction activities, particularly during earth-moving works. Dust has the potential to affect photosynthesis, respiration and transpiration in plants by blocking leaf stomata, and may also cause nuisance to fauna. Given the transient nature of construction works and the scale of the development, potential effects on flora and fauna are not considered significant. Construction works also have the potential to disturb fauna through construction noise. However, construction noise is not considered to pose a significant risk to fauna, owing to the transient nature of the works and the use of standard noise-suppression measures, including mufflers on vehicles where possible. Piling will be undertaken using a vibratory hammer to limit noise impacts on the receiving environment. As the site is located beside a built-up area with nearby residential and commercial uses, fauna in the vicinity are likely to be accustomed to elevated noise levels typical of urban settings. Where possible, no construction works will be undertaken outside normal working hours, thereby reducing potential disturbance to nocturnal species.

The principal sensitive-species disturbance receptors for the proposed works are otter and kingfisher, given the location of the works within and adjacent to the River Nore corridor and the designation of the River Nore SPA for kingfisher. No kingfisher nesting sites are present along this section of the river; therefore, the assessment and mitigation for kingfisher relate to disturbance of birds using the river corridor for foraging, commuting and perching. Disturbance may arise from piling, vibration, excavation, temporary bank works, vegetation clearance, installation of temporary fencing, operation of plant on the riverbank or barge, artificial lighting, increased personnel presence and temporary changes to bankside cover. For otter, the main risks relate to disturbance or temporary obstruction of foraging areas, resting places, slides and commuting routes along the river corridor. For kingfisher, the main risks relate to disturbance of birds foraging, commuting or perching along the river corridor.

Disturbance effects on otter and kingfisher are considered avoidable where works are planned, timed and supervised by the ECoW; where pre-construction checks confirm the status of otter resting places along the affected section of river and where works are undertaken within agreed daylight, lighting, noise and vibration constraints. All measures must be implemented in accordance with the EcIA, NIS, planning conditions, statutory obligations under the Wildlife Acts and European Communities (Birds and Natural Habitats) Regulations, NRA/TII otter guidance, NPWS requirements and the River Nore SPA conservation objectives for kingfisher.

During construction works, there is potential for invasive species to be introduced to the site through the movement of materials, such as soil and stone, and through the arrival of construction plant and equipment from areas where invasive species are present. Materials containing invasive species such as Japanese Knotweed (*Fallopia japonica*) or Himalayan Balsam (*Impatiens glandulifera*) are considered controlled waste and are subject to legal restrictions on handling and disposal. Under Regulation 49(7) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), a licence is required to move vector materials listed in the Third Schedule, Part 3. Under Regulation 49(2) of the same regulations, it is an offence to plant, disperse, allow or cause to disperse, spread or otherwise cause to grow any plant listed in Part 1 of the Third Schedule.

Artificial lighting has the potential to negatively affect nocturnal species, particularly bats, as illumination can affect roosting sites, commuting routes and foraging areas. While some bat species, such as Leisler's bat (*Nyctalus leisleri*), may exploit prey that concentrates around light sources, other bat species are sensitive to lighting and avoid artificially lit areas. Otter may also be affected by artificial light. Measures outlined in **Section 5.3** will therefore be implemented by the construction works contractor to reduce potential light pollution impacts. Potential impacts on aquatic flora and fauna associated with deterioration in water quality are discussed in **Section 4.2** above.

4.4 NOISE IMPACTS

Construction noise, while inherently noisy and potentially disruptive, will be temporary in duration. It is anticipated that construction of the proposed development will take approximately 18 months to complete. Works involving heavy machinery, such as excavation, preparation of building foundations and construction traffic movements, are typically the activities most likely to cause disturbance to nearby residents.

Generally, the type of works involved at this development site will include the following:

- Excavation/Levelling: Excavator, dump truck & dozer.
- Foundations: Excavations, cement mixers & concrete vibrators and piling.
- General Construction: Masonry construction, services, drainage and surfacing etc.

There are currently no specific Irish statutory construction noise limits for projects of this type. However, the National Roads Authority, now Transport Infrastructure Ireland, published *Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes* in 2014. This document provides a useful reference for assessing construction noise associated with the proposed development. The NRA considers that the noise levels provided in the table below are typically acceptable.

Table 4.1: NRA Acceptable Noise Levels

DAYS / TIMES	LAEQ (1HR) DB	LPA (MAX)SLOW DB
Monday to Friday (07:00 to 19:00hrs)	70	80
Monday to Friday (07:00 to 22:00hrs)	60	65
Saturday (08:00 to 16:30hrs)	65	75
Sundays and Bank Holidays (08:00 to 16:30hrs)	60	65

4.5 TRAFFIC IMPACTS

Construction works have the potential to affect local traffic volumes, which may in turn influence the generation of noise and dust emissions.

Traffic impacts may arise from the following:

- Delivery of construction plant and equipment to the site.
- Delivery of raw materials to the site.
- Vehicle movements from staff, sub-contractors and site visitors travelling to and from the site.
- Vehicle movements associated with waste removal at the site.

4.6 WASTE MANAGEMENT IMPACTS

The following categories of waste are anticipated to be generated during construction of the project:

Table 4.2: Categories of Waste Generated During Construction

WASTE TYPE	EWC CODE	ORIGIN
Concrete	17 01 01	Waste concrete may arise due to surplus concrete from pouring activities.
Wood	17 02 01	Wood waste may arise during construction works, including building and shuttering works, due to damaged / defected wood, off-cuts, and surplus wood.
Glass	17 02 02	Glass waste may arise due to damaged / defected glass and accidental breakages.
Plastic	17 02 03	Plastic waste may arise due to damaged / defected products.
Metals (including alloys)	17 04 01 - 07	Waste metal may arise due to damaged / defected metal, off-cuts, and surplus metal.
Soils and Stones	17 05 04	Excavated soils and stones waste would arise during site excavations and earth-moving activities.
Insulation materials and asbestos containing construction materials	17 06	Waste may arise due to damaged / defected insulation panels and off-cuts.
Biodegradable waste	20 02 01	Green waste would arise during site clearance works, with the removal of existing vegetation at the site.

Other waste materials that may arise in small volumes during construction works include:

- Waste Oils and Liquid Fuels – EWC 13 02 and EWC 13 07.
- Waste from Electrical and Electronic Equipment – EWC 16 02.
- Cables – EWC 17 04 11.
- Paints – EWC 20 01 28.
- Wood Preservatives – EWC 03 02.
- Batteries – EWC 16 06.

Waste fractions under LoW codes 03 02, 13 02, 13 07, 16 02 and 16 06 may be hazardous. Throughout the construction phase, waste generated must be managed by the construction works contractor in accordance with the order of priority set out in Section 21A of the Waste Management Act 1996, as amended, and the waste hierarchy shown below.

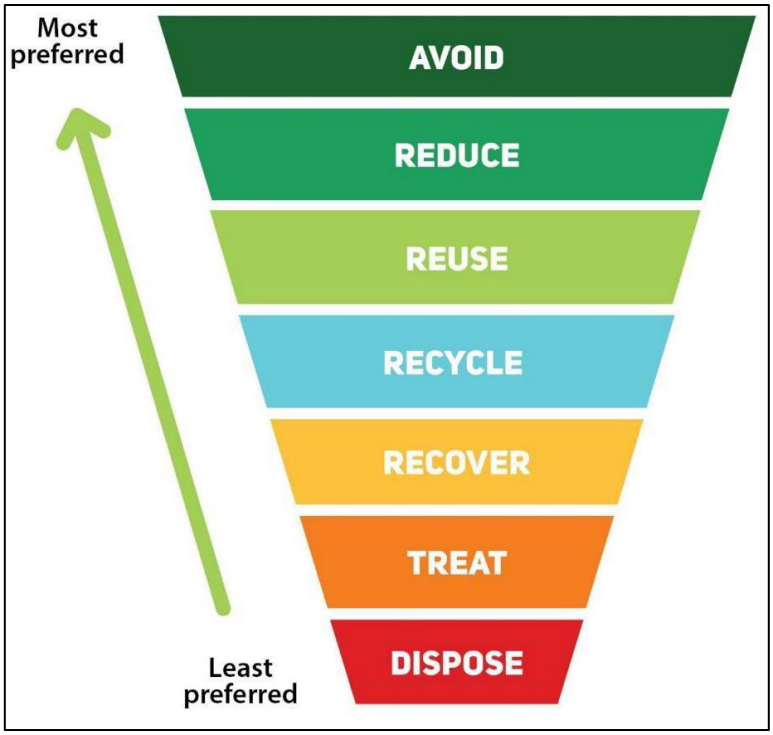


Figure 4.1: The Waste Hierarchy; The most preferred option is to prevent waste, and the least preferred choice is disposal in landfill sites.

4.6.1 WASTE STORAGE

A designated waste storage area must be established within the proposed development footprint at County Hall. This area must be located away from drainage infrastructure and managed to avoid any potential impact on the River Nore.

Suitable waste receptacles / skips must be provided by the appointed waste contractor(s) during the construction phase. Skips / bins must be allocated to specific waste streams to avoid contamination and must be appropriately labelled. Waste receptacles will be located in the front open area of the site.

Where waste fuels and oils are generated, they must be stored within a bunded container within the designated waste storage area.

Any hazardous materials must be stored separately from non-hazardous waste and must be stored within bunded containers / upon a bund where appropriate.

The removal of waste from the site must be undertaken on a regular basis, preventing large volumes of waste accumulating onsite.









4.6.2 WASTE CONTRACTORS

The waste contractor(s) appointed for the project must have experience in construction waste management and must be appropriately licensed, holding the relevant waste collection permit and/or waste licences for the types of waste anticipated to be generated during construction works. Waste from the site must be recycled, recovered or disposed of at suitably licensed waste facilities. The Contractor must ensure compliance with the **Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction and Demolition Projects** (EPA, 2021; ISBN 978-1-80009-007-1). All waste removed off site will be recorded on the waste dispatch log. A copy of all waste permits and licences should be provided to the Resource Manager before works commence and held throughout the construction phase. The Resource Manager must ensure that copies of all waste contractors' collection permits and licences are available for inspection, as discussed in the "Record Keeping" section below.

4.6.3 RECORDS

For each waste movement and for each type of waste, the construction works contractor must obtain a signed waste docket from the waste contractor. For each waste load exported off site, the construction works contractor must record the time and date of transfer, waste type, LoW code and description, tonnage collected, haulage contractor details, waste collection permit number, truck registration, haulage ticket or docket number, receiving facility name and address, relevant waste permit or licence number, proposed treatment route, and confirmation of waste acceptance where required for soil and stones.

5.0 ENVIRONMENTAL CONTROL MEASURES

5.1 DUST MANAGEMENT AND AIR QUALITY CONTROLS

The construction works contractor must implement the following dust management and air quality control measures for the duration of the construction phase:

Control Area	Measures	Monitoring / Responsibility
Good practice and planning	Apply IAQM 2024 dust guidance; establish a dust-management policy; assign management responsibilities; implement documented dust-control procedures.	Contractor / EHS Officer before and during works.
Materials and stockpiles	Locate stockpiles to minimise wind exposure; avoid prolonged storage; cover fine or dusty materials where required; dampen exposed soils and stockpiles during dry or windy conditions.	Contractor, inspected regularly.
Vehicle movements and roads	Cover vehicles transporting materials where practicable; avoid overloading; apply site speed limits; restrict unsurfaced routes to essential traffic; inspect and clean roads; use road sweeper where required.	Contractor / EHS Officer daily or as required.
Wheel wash and site exit	Install wheel-wash facilities at the site exit where required and clean wheels of trucks leaving the site.	Contractor during haulage periods.
Exposed soils and stabilisation	Coordinate topsoil stripping with phasing; limit exposed subsoil to active work areas; reseed and plant exposed areas promptly to stabilise soils.	Contractor / ECoW during earthworks and reinstatement.
Dust suppression	Use water misting plant, bowsers, sprays or wetting agents during dry, windy or dusty activities; use water suppression for cutting, grinding, drilling and similar activities.	Contractor as conditions require.
Plant emissions	Maintain plant and vehicles; avoid unnecessary idling; use low-emission fuels where practicable; switch off plant when not in use.	Contractor through maintenance and site checks.
Inspections and complaints	Undertake regular boundary inspections, monitor dust-control performance and maintain procedures for responding to dust-related complaints.	EHS Officer / Project Manager throughout works.

5.2 SURFACE WATER, GROUNDWATER AND SOIL CONTAMINATION CONTROL

Control Area	Key Measures	Inspection / Responsibility
Permits, guidance and toolbox talks	Implement management and auditing procedures; deliver toolbox talks; comply with CIRIA water-pollution guidance and IFI guidance for works in and adjacent to waters.	Contractor / EHS Officer before and during relevant works.

Timing of river works	Pontoon works should, where practicable, be undertaken July–September to avoid salmonid spawning. Works outside this period require prior agreement with IFI.	Contractor / ECoW / IFI before pontoon works.
Working area dewatering	Pump water from the enclosed river working area using a filtered pump intake. Direct sediment-laden water to a settlement pond, tank or silt-treatment system. Do not discharge sediment-laden water to the River Nore or drainage network.	Contractor supervised during pumping.
Silt and flood controls	Use double-bagged sandbags, geotextile or impermeable barriers, silt fencing, silt blankets and other controls as required. Inspect silt controls daily and maintain them.	Contractor / EHS Officer daily.
Weather and water-level monitoring	Record River Nore water levels daily and monitor weather forecasts/rainfall radar. Cease works and remove contaminants if flood risk or significant rainfall is forecast.	Contractor / EHS Officer daily during river works.
Water quality monitoring	Monitor suspended solids in the River Nore throughout the construction phase. If deterioration is suspected, stop works, investigate the cause and notify NPWS and IFI where required.	ECoW / Contractor during works.
Concrete and wet trades	Restrict wet concrete in the riparian zone; prioritise precast concrete; undertake concrete pouring, joint sealing, waterproofing and curing-agent works in dry weather only.	Contractor during concrete works.
Runoff and drainage protection	Direct runoff from stripped areas to settlement tanks/tankers; protect manholes and gullies; inspect access roads daily; prevent silt-laden runoff leaving the site or entering drainage systems.	Contractor / EHS Officer daily or as required.
Stockpiles and spoil	Locate topsoil/spoil away from drains and river flow paths; cover or grade stockpiles to prevent ponding and saturation; store spoil temporarily only.	Contractor during earthworks.
Hydrocarbons and spill control	Maintain plant; establish and inspect hydrocarbon storage; provide spill kits; train personnel in spill prevention and response.	Contractor / EHS Officer throughout works.
Riparian reinstatement	Limit vegetation removal; replant riparian vegetation with appropriate native species; use bank-protection materials, biodegradable matting and planting systems where required to prevent erosion.	Contractor / ECoW during reinstatement.
Soil protection	Use tracked machinery where practicable; segregate and reuse topsoil/subsoil where possible; source imported fill from approved reputable sources.	Contractor during earthworks.

5.3 BIODIVERSITY PROTECTION PROTOCOL

Implementation of the controls and measures outlined in Sections 5.1 to 5.8 will reduce potential adverse impacts on biodiversity in the surrounding area. The following measures must be implemented for all works within and adjacent to the River Nore to avoid or minimise disturbance of species such as otter and kingfisher. These measures must be read together with the EcIA, NIS, planning conditions, Wildlife Acts, European Communities (Birds and Natural Habitats) Regulations, NRA/TII otter guidance, NPWS requirements, IFI guidance for works in and adjacent to waters, and the River Nore SPA conservation objectives for kingfisher.

Measure	Requirement	Responsibility / Timing
Pre-construction survey	The ECoW must survey for otter holts, couches, slides, spraints, feeding remains, resting places, foraging areas and commuting routes; record kingfisher foraging, commuting and perching activity; confirm that no kingfisher nesting sites are present along the affected section of river; and check for nesting birds, bat activity features, badger, hedgehog, mammal refuges and other sensitive fauna within and adjacent to the works footprint.	ECoW before works within or adjacent to the River Nore and before site clearance.
Pre-start confirmation	No works may commence in the riparian zone, riverbank or River Nore working area until the ECoW confirms that working areas, access routes, barge access, fencing, stockpiles and lighting positions will not disturb an active otter breeding/resting place or unnecessarily disturb kingfisher use of the river corridor.	ECoW / Contractor before mobilisation.
Otter exclusion and licensing	If an active or potentially active holt, couch or breeding/resting place is identified, works must stop, an ECoW-defined exclusion zone must be established, and any required consultation, mitigation or derogation licensing must be completed before works recommence.	ECoW / Contractor / NPWS as required.
Kingfisher disturbance control	As no kingfisher nesting sites are present along this section of river, mitigation must focus on avoiding disturbance to foraging, commuting and perching birds by retaining riparian cover where practicable, controlling personnel access to the river edge, avoiding unnecessary plant idling, preventing visual disturbance outside the active works footprint and maintaining quiet zones where practicable.	Contractor under ECoW supervision during river works.
Tree and root protection	Root protection zones must be established for retained trees. No mature protected parkland trees will be removed. Material storage, plant movement and works must be prohibited within root protection zones unless agreed. Tree protection must have regard to BS	Contractor / Landscape Architect / ECoW before and during works near retained trees.

	5837:2012 and NRA/TII tree, hedgerow and scrub protection guidance.	
Planting and landscape reinstatement	Plant material must comply with BS 3936 and be inspected by the Landscape Architect and ECoW before planting. Topsoil and planting media must comply with the landscape specification, including BS 3882 where applicable. Topsoil heaps must not exceed 2m. Planting must be timed appropriately for deciduous trees/shrubs, herbaceous plants and container-grown plants.	Contractor / Landscape Architect / ECoW during reinstatement and planting.
Vegetation clearance and nesting birds	Vegetation removal should, where possible, be scheduled outside 1 March to 31 August. Where clearance is required during the breeding season, the ECoW must undertake checks immediately before works. If an active nest is found, an exclusion zone must be established until the ECoW confirms the nest is no longer active.	Contractor / ECoW before and during vegetation clearance.
Bats and tree works	Works must avoid disturbance to roosting bats. If felling of trees with moderate bat roost potential is required, it should only be undertaken from late August to late October/early November, following ECoW or bat specialist advice. Felled trees should be left for 48 hours where required to allow any potential bats to disperse.	Contractor / ECoW / bat specialist where required before and during tree works.
Badger, hedgehog and other fauna	No badger sett or evidence of badger was found during the site assessment; however, a pre-construction protected-fauna survey must be completed before site clearance. If badger, hedgehog, roosting bats or other protected/sensitive fauna are found, works must stop and the ECoW must advise on consultation, licensing or mitigation before works recommence.	ECoW / Contractor before site clearance and throughout works.
Working hours and river works	Works at the River Nore must be confined to daylight hours and must not commence until at least one hour after sunrise or continue later than one hour before sunset, unless otherwise agreed with the ECoW and relevant statutory bodies. No pontoon works within the River Nore may take place before dawn or after dusk.	Contractor / ECoW during river and riparian works.
Lighting	No artificial lighting may be directed towards the River Nore, riverbank, riparian vegetation, otter routes, holts/couches, bat commuting features or kingfisher foraging/perching areas. Any temporary lighting must be low-level, directional, shielded/cowled and switched off when not required. Timers or motion sensors should be used where practicable.	Contractor throughout construction, particularly April–October and during river works.
Noise and vibration	Piling, breaking, excavation, bank works and prolonged plant operation near the riverbank must be programmed to avoid sensitive periods where practicable and monitored by the ECoW. Vibratory piling must be used in preference to percussive piling where practicable.	Contractor / ECoW during high-disturbance works.

Access, fencing and entrapment prevention	Plant, materials and fencing must not obstruct otter or other mammal commuting routes unless an ECoW-approved alternative safe passage or temporary exclusion arrangement is in place. Otter-proof fencing, where required, must be inspected daily. Open excavations, trenches, pits and temporary voids must be covered or fitted with safe escape ramps outside working hours.	Contractor daily during relevant works.
Riparian cover and reinstatement	Vegetation clearance, bank works and enabling works must retain as much riparian cover as practicable for otter, kingfisher, bats, birds and other fauna. Any unavoidable removal must be limited to the minimum required, supervised by the ECoW where necessary, and followed by native riparian reinstatement.	Contractor / ECoW during clearance, bank works and reinstatement.
Development footprint	All construction works must be confined as far as possible to the development footprint to minimise habitat disturbance and prevent unnecessary encroachment into retained habitats.	Contractor throughout works.
Stop-work procedure	Works must stop if otter, kingfisher or other protected/sensitive fauna are encountered within the works area, if disturbance indicators are observed, or if protected-fauna resting places, roosts, active nests or other constraints are identified. Works may only recommence when the ECoW confirms that it is appropriate and any required consultation, mitigation or licensing has been completed.	ECoW / Contractor throughout works.
Records and reporting	The ECoW must record ecological inspections, survey findings, exclusion zones, toolbox talks, lighting checks, fencing inspections, fauna incidents, stop-work events and any consultation with NPWS or IFI. Records must be retained in the CEMP monitoring file.	ECoW / Contractor throughout works.

5.4 INVASIVE SPECIES CONTROL AND BIOSECURITY MEASURES

The following invasive species control and biosecurity measures must be implemented throughout the construction phase:

Control Area	Requirement	Responsibility / Timing
Pre-start invasive species check	The ECoW must complete a pre-start invasive species assessment of the works area, including the riparian zone and river access areas. Locations of Himalayan balsam (*Impatiens glandulifera*), Giant hogweed (*Heracleum mantegazzianum*) and any other invasive species must be identified, demarcated and communicated to site personnel.	ECoW before site clearance and river works.
Inspections and training	Regular inspections must be undertaken to confirm that no new invasive species growth or spread has occurred.	ECoW / Contractor throughout works.

	Relevant construction personnel must be trained in identification, reporting and control measures for the main invasive species of concern.	
Imported material and soil control	Imported soil, stone, fill or landscaping material must not be accepted if invasive species, contaminated soil or vector material is suspected. Particular attention must be given to Himalayan balsam, Giant hogweed, Japanese knotweed and aquatic invasive species.	Contractor before import and delivery.
Plant, equipment and vehicle hygiene	All plant, equipment, tools, boots and vehicles must be inspected and cleaned before arriving at site and before leaving the site where invasive species or river works are involved.	Contractor before mobilisation, demobilisation and movement between works areas.
Invasive Species Management Plan	If invasive flora are found within the works area or riparian zone, an Invasive Species Management Plan must be prepared or updated before works proceed in the affected area. The plan must follow relevant NRA/TII and species-specific best-practice guidance.	ECoW / Contractor before works in affected areas.
Herbicide use	Herbicide application must only be undertaken by suitably trained and competent operators in accordance with the product label, health and safety requirements and the European Communities (Sustainable Use of Pesticides) Regulations 2012, as amended. Herbicide must not be used in or adjacent to watercourses unless specifically justified, targeted and agreed for invasive species control.	Qualified contractor / ECoW as required.
Himalayan balsam control	Hand pulling or cutting below the first node should be used where practicable and must be undertaken before seed dispersal. Uprooted plants may be left to dry and decompose on a non-permeable membrane where appropriate. Bare soil must be stabilised and reseeded/replanted promptly. Monitoring and follow-up treatment must continue until the seed bank is exhausted.	ECoW / Contractor during growing season and follow-up monitoring.
Giant hogweed safety and control 	**WARNING:** Giant hogweed sap can cause severe skin burns and photosensitivity when exposed to sunlight. Do not touch, cut, strim or handle Giant hogweed without specialist instruction, full protective PPE and ECoW approval. Giant hogweed must only be controlled by competent professionals. A construction exclusion zone must be established around affected plants. Control may include targeted glyphosate treatment before flowering, weed wiping, digging out small infestations and follow-up treatment. Flowering plants must not be cut or strimmed.	Specialist contractor / ECoW during appropriate treatment window.

Crayfish plague and aquatic invasive species biosecurity	Check, Clean, Disinfect and Dry must apply to all equipment, plant, boats, ropes, pumps, hoses, footwear, clothing, sandbags, absorbent booms and other materials used in or near the River Nore. Plant and animal matter must be removed before leaving and before entering a watercourse.	Contractor / ECoW before and after river works.
Disinfection and drying	Disinfection must be undertaken away from watercourses using an approved disinfectant. Items difficult to soak must be sprayed or wiped. Equipment must be drained, disinfected and completely dried for at least 48 hours where practicable before reuse in a watercourse.	Contractor before reuse or transfer between watercourses.
Materials previously used in watercourses	Sandbags, ropes, absorbent materials, booms, pumps and similar items must not be transferred from another watercourse to the River Nore unless disinfected and dried. Clothing used at another watercourse must be washed at 65°C and/or disinfected before reuse.	Contractor before use in the River Nore.
Records	The contractor must retain records of invasive species inspections, toolbox talks, treatment areas, herbicide application, waste/vector material handling, biosecurity checks and equipment disinfection.	Contractor / ECoW throughout works.

5.5 NOISE AND VIBRATION CONTROL

The following noise and vibration control measures must be implemented by the construction works contractor for the duration of the construction phase:

Control Area	Requirement	Responsibility / Timing
Guidance and compliance	Follow NRA/TII noise and vibration guidance, BS 5228-1 and CIRIA C811. Plant and machinery must comply with applicable construction plant and outdoor equipment noise regulations.	Contractor before and during works.
Working hours	Construction activities must generally take place between 8:00am–6:00pm Monday to Friday and 8:00am–1:00pm on Saturdays. Any necessary works outside these hours must be notified to relevant bodies and potentially affected residents in advance.	Contractor / Project Manager throughout works.
Public nuisance	No plant used on site may cause an ongoing public nuisance due to noise. Screens or barriers must be used where required to shield particularly noisy activities.	Contractor / EHS Officer as required.
Piling and vibration	Piling in the River Nore must use a vibratory hammer where practicable to reduce noise and ground vibration. High-disturbance activities must be monitored where required.	Contractor / ECoW during piling and river works.

Deliveries and unloading	Deliveries must be organised during daytime working hours where practicable. Materials must be lowered, not dropped, where safe and practicable.	Contractor / suppliers during deliveries.
Plant maintenance	All construction equipment, machinery and vehicles must be maintained in good working order and operated in accordance with manufacturer instructions. Engine and machinery covers must remain closed when equipment is in use.	Contractor throughout works.
Silencing and low-noise plant	Mechanical plant must, where practicable, be fitted with effective exhaust silencers. Pneumatic tools must use mufflers or silencers. Compressors must be silenced, sound-reduced or fitted with acoustic enclosures.	Contractor during plant selection and operation.
Plant operation	Plant must be selected for low noise potential where possible, switched off or throttled back when not in use, and operated without unnecessary revving.	Contractor / site personnel throughout works.
Defective equipment	Site personnel must notify the Project Manager if equipment or plant becomes defective and causes high noise emissions. Defective plant must be taken out of service until repaired.	All site personnel / Project Manager as required.

5.6 IMPORTED FILL

Imported fill, aggregate and topsoil must be sourced, transported and stored in a controlled manner to prevent contamination, invasive species transfer, sediment runoff and unnecessary stockpiling on site.

Control Area	Requirement	Responsibility / Timing
Source selection	The source of aggregate, fill material and topsoil imported to site must be carefully selected and vetted to ensure that it is from a reputable origin and is clean, suitable and will not contaminate the environment.	Contractor before procurement and import.
Procurement controls	Project contract and procurement procedures must ensure that aggregate, fill material and topsoil are acquired from reputable sources with suitable environmental management systems and regulatory/legal compliance.	Contractor during procurement.
Stockpile limits	No large or long-term stockpiles of fill material may be held on site. Fill stored on site must be limited to the amount required in the immediate vicinity of the active work area.	Contractor during works.
Stockpile protection	Smaller stockpiles of fill, where required, must be protected to prevent sediment-laden runoff entering existing surface water drains. Stockpiles must be located to avoid double handling.	Contractor / EHS Officer during storage.

5.7 TRAFFIC CONTROL

The appointed Construction Works Contractor will develop a Traffic Management Plan (TMP) outlining measures to manage construction traffic and minimise disruption to the local area. At a minimum, the TMP will be required to include the following measures:

Traffic Control Area	Measure	Responsibility / Timing
Delivery planning	Stagger deliveries to avoid trucks queuing at the site compound and coordinate ancillary, maintenance and site vehicle movements so they do not coincide with deliveries.	Contractor / TMP coordinator daily.
Delivery timing	Schedule deliveries during construction hours and avoid peak background traffic periods, including morning rush hour and local school closure times where practicable.	Contractor / suppliers.
Haul routes	Use predetermined haul routes and brief haulage contractors on appropriate routes and traffic-management principles.	Contractor before deliveries.
Road cleanliness	Provide wheel-wash facilities where required; inspect and clean local roads; use road sweeping to keep roads clear of mud and debris.	Contractor daily or as required.
Dust and containment	Use dust suppression, sheeting and covers on delivery vehicles where required.	Contractor / hauliers during deliveries.
Pedestrian and vehicle safety	Provide safe passage for pedestrian and vehicular traffic and minimise impacts on local roads and communities.	Contractor throughout works.
Material timing	Materials must not be delivered until required to avoid unnecessary congestion and storage.	Contractor / suppliers.
Sustainable travel	Promote travel by sustainable modes of transport for personnel where practicable.	Contractor throughout works.

5.8 WASTE MANAGEMENT CONTROL

Waste must be managed in accordance with the waste hierarchy, relevant waste legislation and the EPA Best Practice Guidelines for Resource and Waste Management Plans for Construction and Demolition Projects. The following controls apply throughout the construction phase:

Waste Control Area	Requirement	Records / Responsibility
Storage area	Establish a designated waste storage area away from drainage channels and manholes. Provide appropriately labelled skips/bins allocated to specific waste streams.	Contractor / Waste Manager before waste generation.
Hazardous waste and oils	Store waste fuels, oils and hazardous materials separately in bunded containers or on bunds where appropriate.	Waste Manager; inspected regularly.
Waste removal	Remove waste regularly to prevent large volumes accumulating onsite.	Waste Manager throughout works.

Waste contractors	Use authorised waste hauliers and suitably licensed/permitted facilities. Retain copies of collection permits and facility licences.	Waste Manager before removal and throughout works.
Waste minimisation	Order materials efficiently; sequence deliveries; store materials correctly; keep vulnerable materials covered and raised; handle materials carefully; return surplus uncured concrete where possible; reuse shutters and excavated soils/topsoil where suitable.	Contractor / Waste Manager during procurement and works.
Waste streams	Segregate, classify and manage waste in accordance with the waste hierarchy and applicable LoW/EWC codes. Reuse inert materials where suitable and legally permissible.	Waste Manager throughout works.
Soils and stones	Reuse suitable soils and stones in reinstatement where possible. Test potentially contaminated soil and isolate/export it to appropriately permitted/licensed facilities where required.	Contractor / Waste Manager / specialists as required.
Article 27 by-product route	Where local reuse is proposed and regulatory requirements are met, investigate classification of excavated soils as a by-product under Article 27.	Waste Manager before off-site reuse.
Waste records	Obtain signed waste dockets for each waste movement, including weight, material type, destination and recycling/recovery/disposal route. Retain contractor permits and licences on file.	Waste Manager throughout construction.

5.9 CHEMICAL AND HAZARDOUS MATERIALS MANAGEMENT

Chemical and hazardous materials must be managed to prevent pollution of soil, groundwater, surface water and the River Nore. The following controls apply throughout the construction phase:

Control Area	Requirement	Responsibility / Timing
Concrete	Use precast concrete where practicable. Supervise all concrete deliveries and pours. Avoid pouring during heavy rainfall. Pour directly into shuttered formwork where possible. Do not permit ready-mix truck washout on site or anywhere that could discharge to surface water. Return surplus uncured concrete to the batching plant where practicable.	Contractor during concrete works.
Hydrocarbon storage	Store fuels, oils and chemicals in a designated bunded area. Bunds must contain at least 110% of the largest container or 25% of the total stored volume, whichever is greater. Inspect storage areas regularly.	Contractor / EHS Officer throughout works.
Plant and refuelling	Maintain plant, vehicles and equipment in good working order. Supervise fuel/oil deliveries. Handle fuels carefully. Use drip trays for small plant where appropriate. Remove leaking or defective plant from service until repaired.	Contractor / site personnel throughout works.

Spill prevention and response	Keep stocked spill kits, booms and absorbent pads readily available. Train relevant personnel in spill response. Dispose of contaminated spill-clean-up materials through an authorised waste contractor.	Contractor / EHS Officer throughout works.
Waste fuels and oils	Collect waste fuels and oils in bunded containers within the designated waste area and remove them using an authorised waste contractor.	Waste Manager / Contractor as required.
Excavated materials and spoil	Store spoil temporarily only in a designated area away from drains, manholes and watercourses. Cover or grade spoil to prevent ponding, saturation and wind exposure. Use silt fencing where required.	Contractor during earthworks.
Reuse and reinstatement	Reuse suitable spoil in reinstatement where practicable. Undertake reinstatement as soon as possible after excavation and earth-moving works.	Contractor during reinstatement.
Imported fill	Source imported fill from approved sources. Fill must be certified, fit for purpose, visually assessed and confirmed inert before importation. Fill from non-licensed or non-permitted facilities requires prior Article 27 authorisation where applicable.	Contractor before importation.

5.10 EMERGENCY MANAGEMENT PLAN

Emergency Area	Requirement	Responsibility / Timing
Emergency Response Plan	The contractor must prepare an Emergency Response Plan covering environmental risks including fire, explosion, accidents, spills and leaks.	Contractor before works commence.
Training	Designated personnel must be trained as first aiders and fire marshals. Relevant staff must receive training in environmental emergency response, including spill response.	Contractor / EHS Officer before and during works.
Incident response	Incidents must be contained, reported and managed in accordance with the Emergency Response Plan and Pollution Incident Response procedures.	All site personnel; Project Manager / EHS Officer as required.

5.11 MONITORING AND AUDITING

REPORTING AND RECORD KEEPING

Monitoring, auditing, reporting and non-compliance management must be undertaken throughout the construction phase as summarised below.

Topic	Requirement	Responsibility / Frequency

Records	Maintain records of works, inspections, audits, waste movements, incidents, complaints, Safety Data Sheets, statutory inspections and relevant construction activity records. Provide copies to the local authority where requested.	Project Manager / EHS Officer throughout works.
Environmental incidents	Report incidents with potential to cause environmental pollution, including fire, water pollution, hydrocarbon or chemical spills, excessive noise or excessive dust. Notify the client and relevant third parties as required.	Project Manager as soon as practicable.
Complaints and incident registers	Record complaints and incidents, including follow-up actions and close-out status.	Project Manager throughout works.
Safety monitoring	The EHS Officer must be present during working hours to support safe working practices.	EHS Officer during working hours.
Environmental monitoring	Undertake regular environmental inspections and audits, including checks of access roads, neighbouring properties, chemical/hydrocarbon storage, waste storage and spoil areas.	EHS Officer at least weekly.
Monitoring register	Maintain a register of environmental monitoring and communicate site environmental performance during site meetings.	EHS Officer throughout works.
Non-compliance reporting	Where CEMP requirements are breached, raise a non-compliance report recording the issue, corrective action, prevention measures, verification and close-out.	EHS Officer / Project Manager as required.
Review and corrective action	Review inspections, audits and non-compliances; investigate issues immediately; notify the client and relevant third parties where required; discuss open non-compliances at fortnightly meetings.	Project Manager throughout works.
CEMP updates	Revise the CEMP where required to prevent recurrence of non-compliance and communicate changes to site personnel and subcontractors.	Project Manager / EHS Officer as required.

6.0 CONCLUSION

This outline CEMP has been submitted to demonstrate the client's commitment to Construction and Environmental Management of the proposed project. This CEMP has outlined the environmental principles that will be adopted to ensure that potential environmental impacts and health and safety issues associated with the construction processes are effectively managed, minimised and / or eliminated. The plan details the roles and responsibilities of the applicant, the site manager, project manager and site workers and how these controls are to be implemented.

The CEMP will be adopted by the appointed main contractor in due course and shall be expanded and updated to suit and to take account of any particular planning conditions that may be imposed. The CEMP is considered a "live" document and must be reviewed and

updated as appropriate upon approval by the competent authority and as necessary as construction works progress.

The CEMP will require regular monitoring throughout the development programme to ensure potential risks are adequately managed throughout the construction works, as is the normal process. The nature of the construction of the proposed riverside facilities centre and associated site works is conventional in nature; however, specific environmental controls are required for works within and adjacent to the River Nore and the associated European sites. Subject to implementation of this CEMP and any planning conditions, the project is considered capable of being completed as outlined.

7.0 REFERENCES

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APPENDIX A

Note: Appendix A is provided as a Resource and Waste Management Plan template. Quantities, costs and final waste-management routes must be completed by the appointed contractor before or during the construction phase, as relevant. **LoW Code**	**Description**	**Volume Generated (tonnes)**	**Prevention (tonnes) (non-waste)**	**Reused (tonnes) (non-waste)**	**Recycled (tonnes) (waste)**	**Recovered (tonnes) (waste)**	**Disposed (tonnes) (waste)**	**Unit Cost Rate (€/tonne)**	**Total Cost (€)**
17 01 01	Concrete								
17 01 02	Bricks								
17 01 03	Tiles and Ceramics								
17 02 01	Wood								
17 02 02	Glass								

17 02 03	Plastic								
17 03 02	Bituminous Mixtures								
17 04 01	Copper Bronze Brass								
17 04 02	Aluminium								
17 04 03	Lead								
17 04 04	Zinc								
17 04 05	Iron & Steel								
17 04 06	Tin								
17 04 07	Mixed Metals								
17 04 11	Cables								
17 05 04	Soil & Stones								
17 06 04	Insulation Material								
17 08 02	Gypsum								
17 09 04	Mixed C&D Waste								
17 01 06*	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances								
17 02 04*	Glass, plastic and wood containing or contaminated with hazardous substances								
17 03 01*	Bituminous mixtures containing coal tar								
17 04 09*	Metal waste contaminated with hazardous substances								
17 05 03*	Soil and stones containing hazardous substances								
17 06 05*	Construction materials containing asbestos								
	Other resources (non-waste materials) (specify as needed)								
	Other wastes (specify as needed)								

Appendix K – Lighting Report & Layout (Ronan Meally Consulting Engineers)

DATE:	**17 July 2024**
DESIGNER:	**Ronan Meally**
PROJECT No:	**22K193**
PROJECT NAME:	**KILKENNY WATER SPORTS ACTIVITY CENTRE**

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Ronan Meally Consulting Engineers

Public Lighting design to meet IS EN 13201: 2015 Class P4

To migitgate impact on Bat population the lighting will feature the following measures.
1. Light lamp to have no UV element
2. Light colour redition to be 2700K with no upward light component.
3. Lamp sources to have preak wavelenghts higher than 550nm to avoid bat disturbance
4. Lighting to be time controlled to switch off at 10pm each night

Outdoor Lighting Report

PREPARED BY:

Ronan Meally Consulting Engineers
1 CIty Wall
James Street
Kilkenny

Layout Report

General Data

Dimensions in Metres Angles in Degrees
Grid Origin 650860.9m x 655811.6m
Area 70.7m x 97.6m
Sample Spacing 1.47m x 1.48m

Luminaires





Luminaire A Data

Supplier	
Type	ALUMET CD 24L35-730 RWETS CL HFX CL1 W4
Lamp(s)	ALUL_24L35RWETS3KCL 27W
LampFlux(klm)/Colour	2.84 4000/70
File Name	96274849_(STD).LDT
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	249.0, 71.2, 13.1
No. in Project	4

Luminaire B Data

Supplier	
Type	PIAZZA II LED 1690-840 HF E3TX ANT
Lamp(s)	TL_PIA2 15C4W
LampFlux(klm)/Colour	1.84 4000/80
File Name	96666258_(STD).LDT
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	387.0, 277.0, 95.5
No. in Project	5

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	650907.92	655879.43	6.00	125.00	0.00	0.00	0.00			
2	A	650926.53	655902.04	6.00	142.00	0.00	0.00	0.00			
3	A	650883.23	655864.05	6.00	138.00	0.00	0.00	0.00			
4	B	650863.68	655882.35	2.80	335.00	0.00	0.00	0.00			
5	A	650868.81	655869.11	6.00	40.00	0.00	0.00	0.00			
6	B	650891.41	655880.05	2.80	233.00	5.00	0.00	0.00			
7	B	650871.97	655895.25	2.80	232.00	0.00	0.00	0.00			
8	B	650879.99	655888.97	2.80	235.00	0.00	0.00	1.00			
9	B	650896.18	655883.45	2.80	46.00	0.00	0.00	0.00			

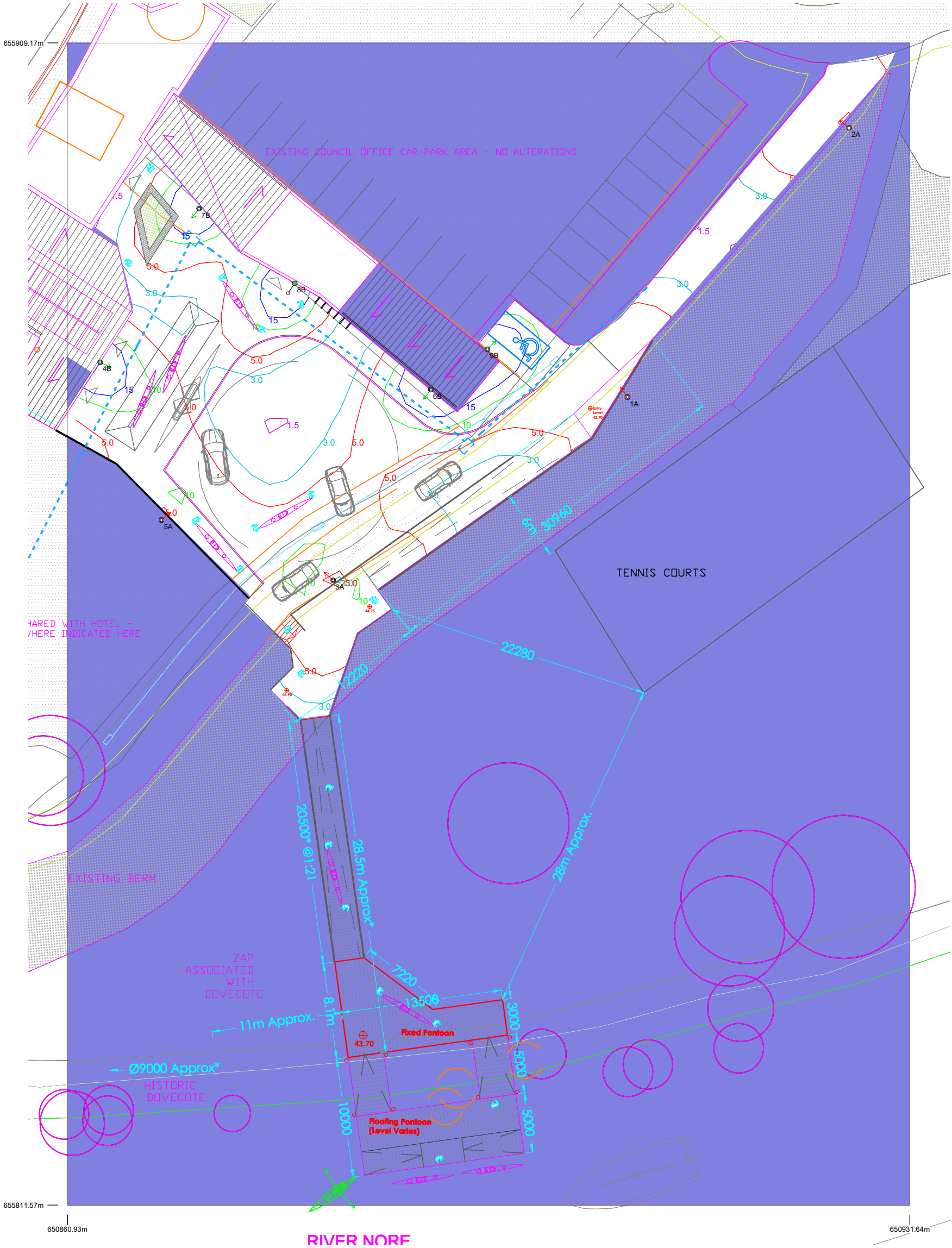
851467151

DATE: 17 July 2024 DESIGNER: Ronan Meally

PROJECT No: 22K193 PROJECT NAME: KILKENNY WATER SPORTS ACTIVITY CENTRE

Horizontal Illuminance (lux)

Grid 1



Results

Eav	6.63
Emin	1.47
Emax	22.61
Emin/Emax	0.07
Emin/Eav	0.22

8514671513

	Luminaire A	Luminaire B
Supplier		
Type	ALUMET CG 24/.35-730 RWETS CL HFX CL1 W4	PIAZZA II LED 1690-840 HF E3T K ANT
Lamp(s)	ALUL_24L35RWETS35KCL 27W	TL_PIA2 15C4W
Lamp Flux (klm)	2.84	1.84
Maintenance Factor	0.76	0.76
No. in Project	4	5

655909.17m

650811.57m

650860.93m

650931.64m

1800

28875

3375

12450

21990

13050

51360

61190

EXISTING COUNCIL OFFICE CAR-PARK AREA - NO ALTERATIONS

OVERFLOW CAR PARK SHARED WITH HOTEL
NO ALTERATIONS EXCEPT WHERE INDICATED HERE

COURT HOTEL

RIVERCOURT HOTEL

TENNIS COURTS

EXISTING BERM

ZAP ASSOCIATED WITH DOVECOTE

HISTORIC DOVECOTE

Fixed Pontoon

43.70

Floating Pontoon (Level Varies)

RIVER NORE

Results Grid 1	
Eav	6.63
Emin	1.47
Emin/Eav	0.22

rmce
Ronan Meally Consulting Engineers

PROJECT NAME:
KILKENNY WATER SPORTS ACTIVITY CENTRE

PROJECT No:
22K193

SCALE: **1:200**

DATE: **15 July 2024**

Public Lighting design to meet IS EN 13201: 2015 Class P4

To migitgate impact on Bat population the lighting will feature the following measures.
1. Light lamp to have no UV element
2. Light colour rediton to be 2700K with no upward light component.
3. Lamp sources to have preak wavelenghts higher than 550nm to avoid bat disturbance
4. Lighting to be time controlled to switch off at 10pm each night

PREPARED BY:

Ronan Meally Consulting Engineers
1 City Wall
James Street
Kilkenny

Appendix L – Archaeological Desktop Assessment (John Cronin & Associates)

JOHN CRONIN & ASSOCIATES
ARCHAEOLOGY | CONSERVATION | HERITAGE | PLANNING

Archaeological Desktop Assessment

Nore River Facilities, Collegepark, Johns Street, Kilkenny, Co. Kilkenny

Prepared by
John Cronin & Associates
3a Westpoint Business Centre
Link Road
Ballincollig
Cork

Commissioned by
Ailtiri
Anglesea House
Anglesea Street
Clonmel
Co. Tipperary

September 2024

Document Control Sheet

Client	Ailtiri				
Project	Nore River Facilities, Collegepark, Johns Street, Kilkenny, Co. Kilkenny				
Document type	Archaeological Desktop Assessment				
Document comprises	*DCS*	*NTS*	*TOC*	*Pages*	56
	Y	*N*	*Y*	*Appendices*	3

Rev	***Status***	***Author(s)***	***Reviewed by***	***Approved by***	***Office of origin***	***Issue date***
01	Draft	Camilla Brännström	Martin McGonigle	Martin McGonigle	Buncrana	20/03/2024
02	Draft	Camilla Brännström	Martin McGonigle	Martin McGonigle	Buncrana	25/04/2024
03	Final	Camilla Brännström	Martin McGonigle	Martin McGonigle	Buncrana	14/05/2024
04	Final	Camilla Brännström	Martin McGonigle	Martin McGonigle	Buncrana	07/08/2024
05	Final	Camilla Brännström	Martin McGonigle	Martin McGonigle	Buncrana	29/08/2024
06	Final	Camilla Brännström	Martin McGonigle	Martin McGonigle	Buncrana	17/09/2024

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1. Introduction

John Cronin and Associates have been commissioned by **Ailtiri** to compile an archaeological desktop assessment of a proposed development at Johns Street, Collegepark, Kilkenny, County Kilkenny. The proposed development consists of a new water sports activity centre on *c.* 0.32 hectares of greenfield and brownfield land. The proposed development site is located on a bend of the River Nore which forms its southern boundary (**Figure 1**).

This report presents summary details on the locations of recorded elements of the archaeological resource within the environs of the subject site. The study area for this assessment comprised the internal area of the proposed development site combined with the lands extending for approximately 200m from the outer boundary of the site (study area). There are 46 recorded archaeological sites within the study area. **The western development boundary coincides with the projected line of a lost section of the Kilkenny Town Defences (KK019-026001-) which is a designated National Monument. The development will also encroach slightly on the Zone of Notification of a 12th/ 13th century Dovecote (KK019-026238-).**

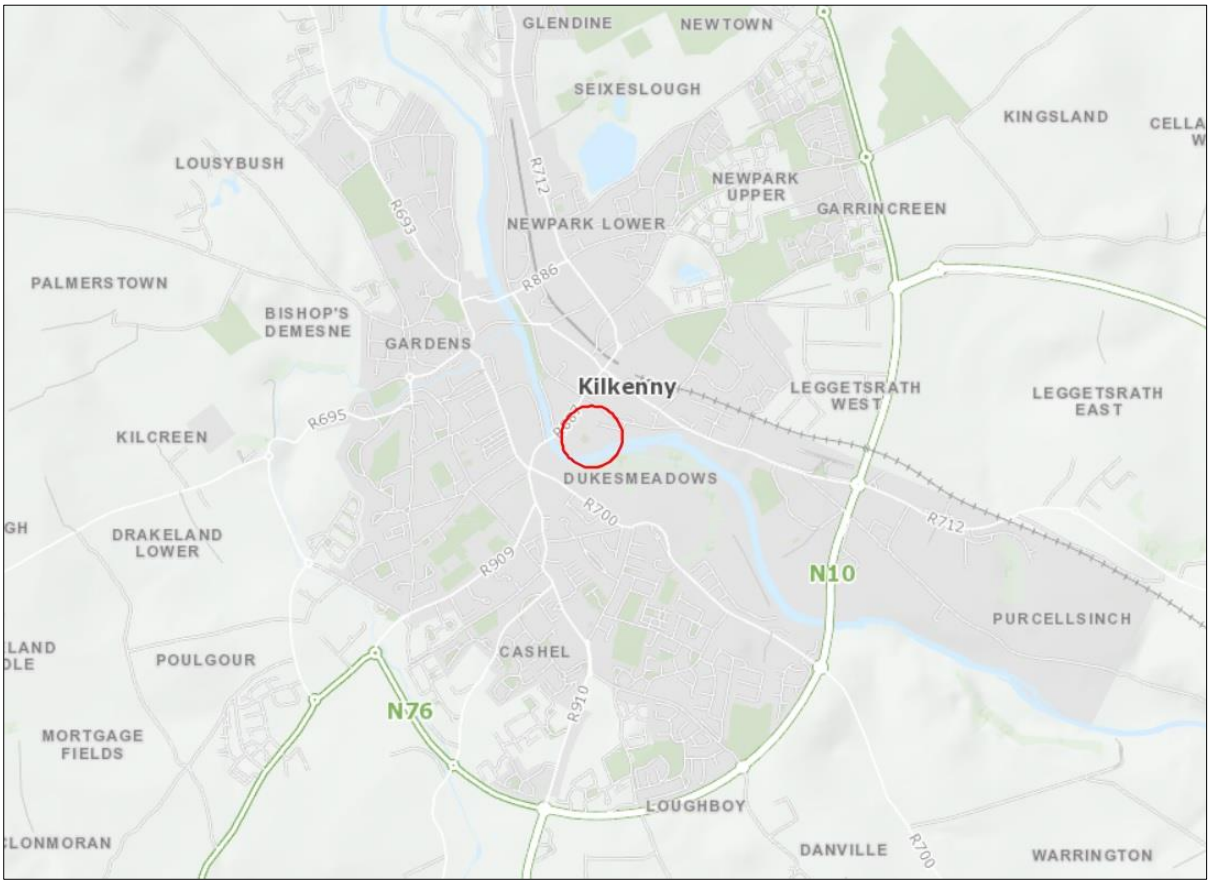


***Figure 1**: General location of development area (red circle) (Source: Government of Ireland)*

This assessment was prepared by John Cronin & Associates and is based on a programme of desktop research.

2. Methodology

The Sites and Monuments Record (SMR) and the Record of Monuments and Places (RMP) for Counties Kilkenny, published by the Archaeological Survey of Ireland (ASI), was the principal sources for identifying known archaeological constraints. The *Kilkenny City and County Development Plan 2021-2027* was consulted to review the planning authority's policies and objectives designed for the protection of the archaeological resource and historic landscapes.

In addition, the following sources were consulted to assess the potential for the presence of unrecorded archaeological sites within, and in vicinity to, proposed work areas:

- *Archaeological Survey of Ireland:* Since the publication of the original county SMRs and RMPs, the ASI has continued to record and add entries to the Sites and Monuments Record. In addition, the ASI has developed an online database and web viewer known as 'Historic Environment Viewer'. This has been developed to "enhance the user's experience by facilitating access to the database of the National Monuments Service Sites and Monuments Record (SMR) and the National Inventory of Architectural Heritage (NIAH) in a seamless one stop point of access for both data resources" (Source: www.archaeology.ie).
- *Database of Irish excavation reports:* This database contains summary accounts of all licensed archaeological excavations carried out in Ireland (North and South) from 1969 to 2023.
- *Historical publications and cartographic sources:* various published sources and historical maps were consulted as part of the assessment.
- *Aerial imagery:* available online aerial imagery of the study area was consulted to determine if any traces of unrecorded, sub-surface archaeological sites were evident within the proposed development area.

3. Context

The subject site is located within the townland of Collegepark, in the Civil Parish of St Patrick's, John Street, Kilkenny, County Kilkenny (**Figure 2**). The underlying geology of this area comprises Crinoidal wackestone/packstone limestone of the Ballyadams Formation, and the underlying subsoil consists of gravels derived from limestones (Source: Geological Survey Ireland). The proposed development area, *c.*0.32 hectares in total, is located within lands currently in use as car parks and landscaped parkland. The site is situated on a bend of the River Nore which forms its southern boundary, and is bounded to the north and southwest by existing car parks, parkland to the east and the walled rear plots of properties along John Street to the northwest.



***Figure 2**: Detailed location of the subject site, outlined in red (Source: OpenStreetMap)*

Legal & Policy Framework

The management and protection of cultural heritage in Ireland is achieved through a framework of national laws and policies which are in accordance with the provisions of the Valetta Treaty (1995) (formally the European Convention on the Protection of the Archaeological Heritage, 1992) ratified by Ireland in 1997; the European Convention on the Protection of Architectural Heritage (Granada Convention, 1985), ratified by Ireland in 1997; and the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, 2003, ratified by Ireland in 2015.

The administration of national policy in relation to archaeological heritage management is the responsibility of the National Monuments Service (NMS) which is currently based in the Department of Housing, Local Government and Heritage.

The Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 was signed into law on October 13th, 2023. This Act repeals the National Monuments Acts 1930 to 2014 and replaces those Acts with provisions for the protection of protection of archaeological and historical heritage. Amongst other measures, this Act gives the Minister (currently the Minister of Housing, Local Government and Heritage) the power to prescribe classes of relevant things of archaeological interest to be known as prescribed monuments and includes requirements for the reporting of the finds of such prescribed monuments to the Minister. The Act also establishes a Register of Monuments and procedures for the Minister to enter certain prescribed monuments and relevant things of relevant interest into this register which provides a legal mechanism for the formal designation of monuments under the Act.

The Act also includes transitional provisions applicable to the "Record of Monuments and Places" established and maintained under Section 12 of the National Monuments Act of 1994 and the "Register of Historic Monuments" established and maintained under Section 5 of the National Monuments Act of 1987. The Minister may by notice published in Iris Oifigiúil, specify a date on and from which the Register of Monuments will supersede the Register of Historic Monuments and the Record of Monuments and Places and following that date those relevant enactments shall cease to apply.

The archaeological baseline environment appraised as part of this assessment is based on current archaeological datasets published on the Department of Housing, Local Government and Heritage's online Historic Environment Viewer at the time of writing in March 2024.

The *Kilkenny City and County Council Development Plan 2021-2027* includes the following objectives in relation to the protection of the archaeological resource:

> ***Objective 9C*** *To protect archaeological sites and monuments (including their setting), underwater archaeology, and archaeological objects, including those that are listed in the Record of Monuments and Places, and in the Urban Archaeological Survey of County Kilkenny or newly discovered sub-surface and underwater archaeological remains.*

In addition, the Kilkenny City and County Development Plan 2021-2027 contains the following relevant Development Management Requirements:

> • *To endeavour to preserve in situ all archaeological monuments, whether on land or underwater, listed in the Record of Monuments and Places (RMP), and any newly discovered archaeological sites, features, or objects by requiring that archaeological remains are identified and fully considered at the very earliest stages of the development process and that schemes are designed to avoid impacting on archaeological heritage.*
> • *To require archaeological assessment, surveys, test excavation and/or monitoring for planning applications in areas of archaeological importance if a development proposal is likely to impact upon in-situ archaeological monuments, their setting and archaeological remains.*
> • *To ensure that development within the vicinity of a Recorded Monument is sited and designed appropriately so that it does not seriously detract from the setting of the feature or its zone of archaeological potential. Where upstanding remains of a Recorded*

Monument exist a visual impact assessment may be required to fully determine the effect of any proposed development.

• To require the retention of surviving medieval plots and street patterns and to facilitate the recording of evidence of ancient boundaries, layouts etc. in the course of development.

• To safeguard the importance of significant archaeological landscapes from developments that would unduly sever or disrupt the relationship, connectivity and/or inter-visibility between sites.

The Development Plan contains the following statement regarding the Walled Town of Kilkenny:

The Kilkenny City walls, built during the medieval period, would have historically formed a defensive line around the medieval town. Today, the walls are part-standing and part-buried. Town defences are considered to be monuments for the purposes of the National Monuments Acts, 1930-2004. The Council will support the National Policy on Town Defences which sets out national policy for the protection, preservation and conservation of the defences of towns and cities.

The National Policy on Town Defences states:

All works that will impact on the fabric of town or city defences, or any ground disturbance in proximity to the defences in local authority or the Minister's ownership or guardianship, or that have been the subject of a preservation order, are subject to a requirement for Ministerial Consent from the Minister for the Environment, Heritage and Local Government. It is advisable to consult with the National Monuments Service and the Architectural Heritage Advisory Unit of the Department of the Environment, Heritage and Local Government at an early stage when planning works. Many structures associated with town defences may also be protected structures and/or located within an architectural conservation area and planning permission may be required. The local authority archaeological and conservation officers should be consulted.

In considering applications for Ministerial Consent for works affecting town defences, it shall be the policy of the Department of the Environment, Heritage and Local Government:

• To seek the protection and preservation in-situ of these national monuments including the town walls, embankments and ditches, gates, bastions or ancillary fortifications or portions thereof;

• To seek the preservation of important views and prospects inside and outside the walls so as to preserve the setting of the monuments and to increase the appreciation of the circuit and character of the walled town. The Department may require a satisfactory buffer area to be established between any new development and the town defences in order to ensure the preservation and enhancement of the amenity associated with the presence of town defences within the historic urban pattern;

• To require any proposals for works to town defences to be preceded by a detailed measured survey of the monuments so as to have an appropriately detailed record;

• To provide pre-planning advice to developers where town defences are close to or included in their proposal site;

• To require the involvement of qualified and experienced conservation professionals in the detailed design and overseeing of works to town defences;

• Not to favour new roads crossing the wall or the line of the wall or the formation of any new openings in the wall;

• To favour the minimal intervention necessary to the authentic fabric of the monument and avoidance of unneccessary reconstruction;

• To require good quality, context-sensitive design for development proposals affecting the upstanding town defences that would not detract from the character of the town defences or their setting by reason of the location, scale, bulk or detailing;

• To encourage the enhancement of the setting of town defences including the pedestrianisation of town gates where this can be achieved without requiring new roads to be opened through the circuit of the walls. To encourage also the improvement of signage and public utilities structures, etc. where these affect the visual amenity of the defences;

Archaeological and historical context

There are a total of 46 archaeological sites published by the Archaeological Survey of Ireland within a 200m study area surrounding the subject site. Two sites (Town defences KK019-026001-, Dovecote KK019-026238-) are located within or in close proximity to the proposed development boundary (**Figure 3**, **Table 1**). Please see **Appendix 1** for full descriptions. The subject site is located within the Area of Archaeological Potential associated with the historic city of Kilkenny as defined in the Kilkenny City and Council Development Plan 2021-2027 (**Figure 4**).

The western boundary of the proposed development coincides with the projected line of the medieval town wall (KK019-026001-) which once enclosed the suburb of Saint John's (**Figure 5** and **6**). Although no upstanding remains of the town defences have survived along this section it is possible that sub-surface elements may survive within the boundary of the site. All town defences are designated National Monuments. The development will also encroach into the immediate surrounding of one recorded site, a 12th/ 13th century Dovecote (KK019-026238-) excavated in 2003 (01E0821). The centrepoint of this structure, which has an outer diameter of *c.* 9m, is located at ITM 650669/655823 (**Figure 7**).



***Figure 3**: Recorded archaeological sites (yellow dots) and their zones of notification (purple) within the study area, subject boundary defined by red line (Source: Government of Ireland)*

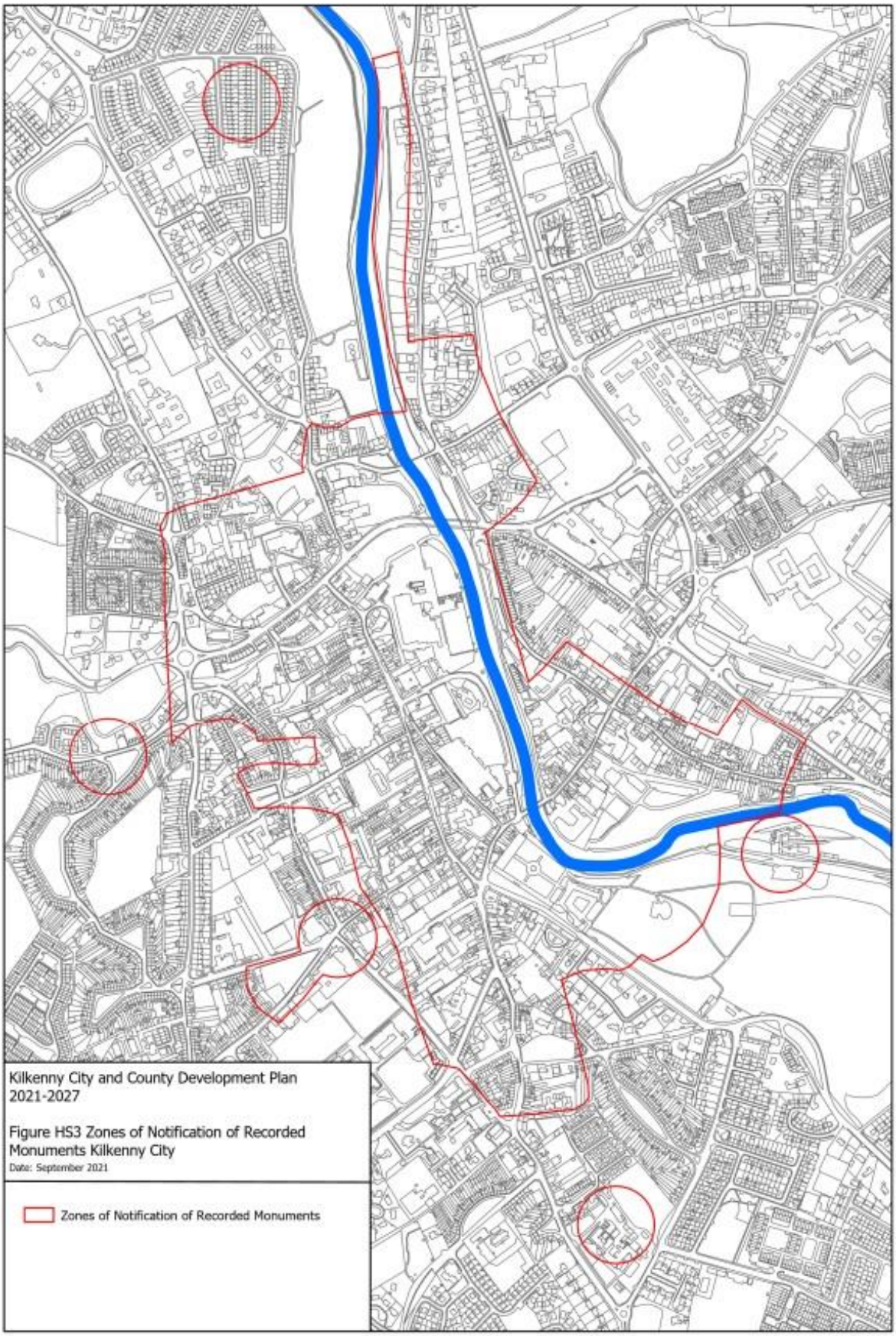


***Figure 4**: Area of Archaeological Potential, Kilkenny (Source: Kilkenny City and County Development Plan 2021 - 2027)*

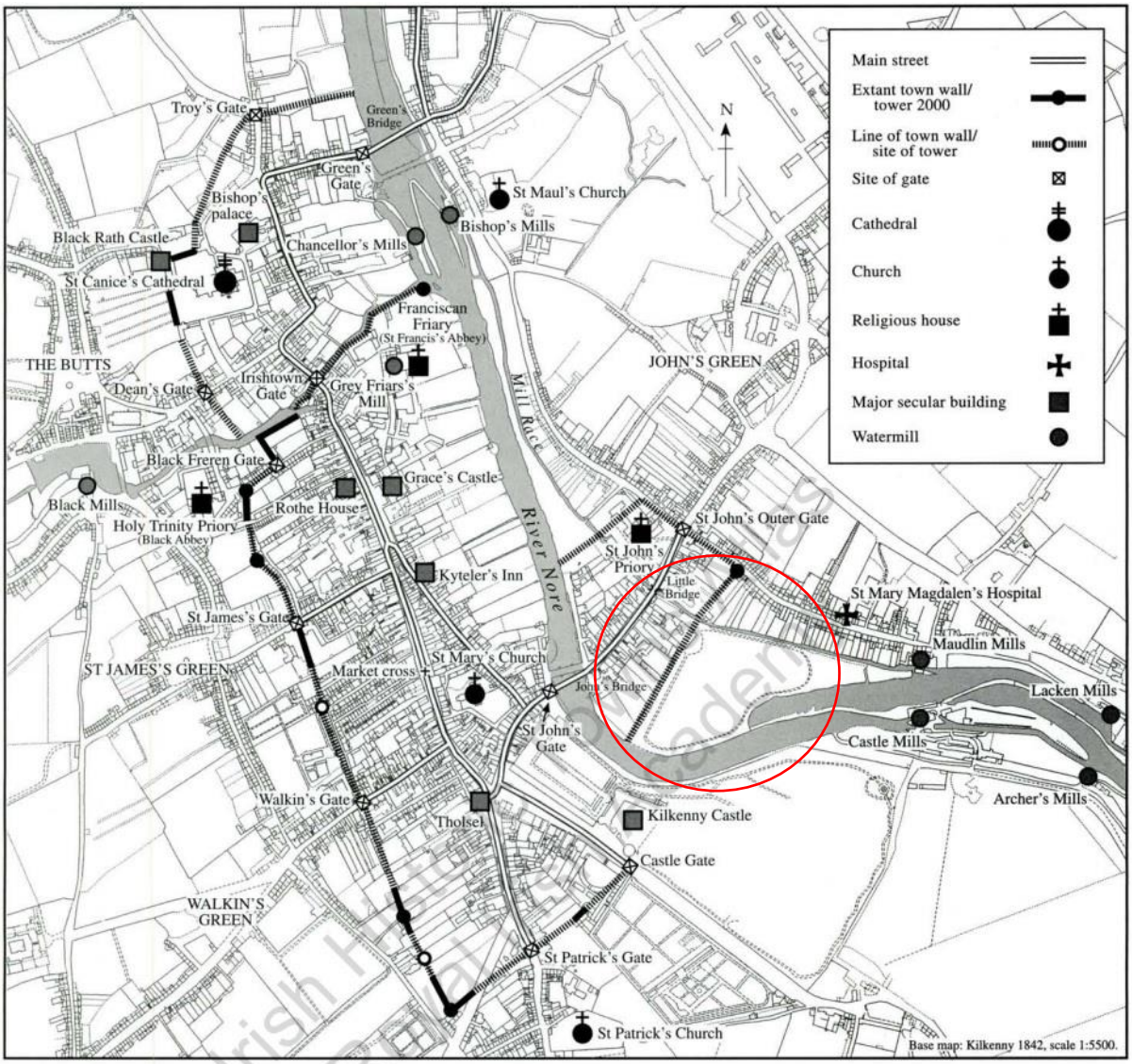


Figure 5*: Map of Kilkenny town wall. Subject site within red circle (Source: Kilkenny Irish Town Atlas 10, Royal Irish Academy)*



***Figure 6**: Detail showing projected location of town walls (green) in relation to subject site (solid red line) (Source: Kilkenny City Walls Conservation Plan, Heritage Council)*

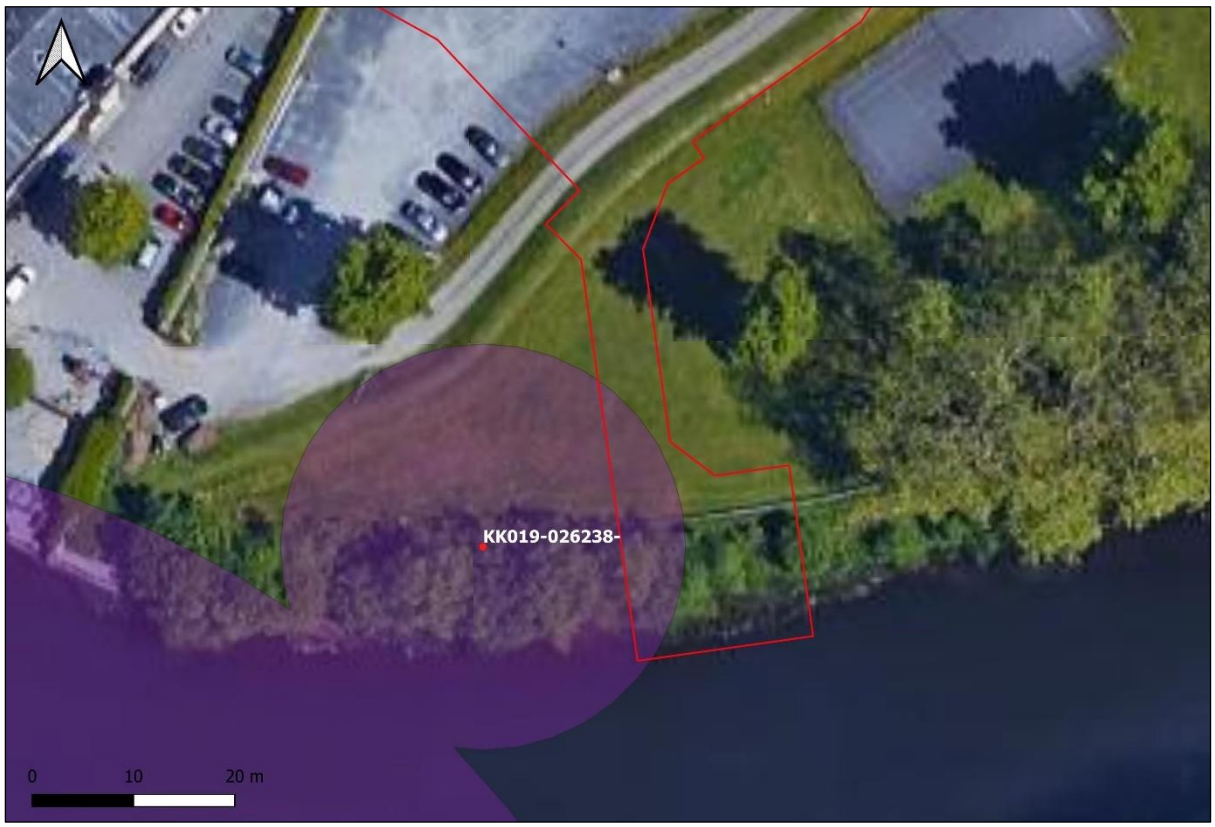


***Figure 7**: Recorded archaeological site (red dot) and ZoN (purple), subject site defined by red line (Source: Government of Ireland)*

***Table 1**: Archaeological sites within 200m of the subject site*

SMR No.	*Class*	*Townland*	*Easting*	*Northing*
KK019-026001	Town defences	Collegepark, Gardens (Kilkenny City By., St. Patrick's Par.), Gardens (Kilkenny City By., St. Mary's Par.), Gardens (Kilkenny City By., St. Canice Par.), Bishopsmeadows (Crannagh By., Kilkenny Rural ED), Gardens (Kilkenny City By., St. John's Par.)	650201	656315
KK019-026024-	House - 16th/17th century	Gardens (Kilkenny City By., St. John's Par.)	650807	656072
KK019-026066-	House - 16th/17th century	Gardens (Kilkenny City By., St. John's Par.)	650814	655962
KK019-026067-	House - 16th/17th century	Gardens (Kilkenny City By., St. John's Par.)	650763	655908
KK019-026068-	Religious house - Augustinian canons	Gardens (Kilkenny City By., St. John's Par.)	650847	656112
KK019-026069-	House - 16th/17th century	Collegepark	650850	656007
KK019-026070-	Bridge	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650725	655918
KK019-026071-	Bridge	Gardens (Kilkenny City By., St. John's Par.)	650845	656025
KK019-026074-	Tower house	Gardens (Kilkenny City By., St. John's Par.)	651104	655983
KK019-026075-	Church	Gardens (Kilkenny City By., St. John's Par.)	651166	656046
KK019-026076-	Water mill - unclassified	Collegepark, Gardens (Kilkenny City By., St. John's Par.)	651186	655918
KK019-026078-	Castle - Anglo-Norman	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650794	655734
KK019-026079-	Bowling green	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650928	655715
KK019-026114-	House - 16th/17th century	Gardens (Kilkenny City By., St. Mary's Par.)	650656	655873
KK019-026165-	Graveyard	Gardens (Kilkenny City By., St. John's Par.)	651185	656045
KK019-026166-	Graveslab	Gardens (Kilkenny City By., St. John's Par.)	651188	656041
KK019-026167-	Graveslab	Gardens (Kilkenny City By., St. John's Par.)	651188	656041
KK019-026219-	Stable	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	651027	655677
KK019-026220-	Fortification	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650879	655672

SMR No.	*Class*	*Townland*	*Easting*	*Northing*
KK019-026221-	Walled garden	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650879	655672
KK019-026225-	Designed landscape - summer house	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650946	655720
KK019-026233-	Castle - ringwork	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650794	655734
KK019-026235-	Graveyard	Gardens (Kilkenny City By., St. John's Par.)	650850	656083
KK019-026238-	Dovecote	Collegepark	650869	655823
KK019-026239-	Bridge	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650727	655918
KK019-026240-	Weir - fish	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650709	655897
KK019-026242-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.)	650844	656114
KK019-026253-	Excavation - miscellaneous	Gardens (Kilkenny City By., St. John's Par.)	650889	656144
KK019-026261-	Well	Gardens (Kilkenny City By., St. Mary's Par.)	650681	655845
KK019-026266-	Water mill - vertical-wheeled	Gardens (Kilkenny City By., St. John's Par.)	650900	656006
KK019-026420-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104	655984
KK019-026421-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104	655984
KK019-026422-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104	655984
KK019-026423-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104	655984
KK019-026424-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104	655984
KK019-026425-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104	655984
KK019-026426-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104	655984
KK019-026428-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104	655984
KK019-026430-	Graveslab	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650727	655920
KK019-026431-	Graveslab	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650727	655920

SMR No.	*Class*	*Townland*	*Easting*	*Northing*
KK019-026432-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650727	655920
KK019-026271-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650727	655920
KK019-026273-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650727	655920
KK019-026274-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650727	655920
KK019-026272-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)	650727	655920

Early prehistoric period

Traditionally, the earliest recorded evidence for human settlement in Ireland dated to the Mesolithic period (7000–4000 BC) when groups of hunter-gatherers arrived on the island. However, recent evidence in the form of a butchered bear patella found in Alice and Gwendoline Cave near Ennis in County Clare now suggests that humans were present in Ireland during the Palaeolithic period between 12,800 to 12,600 cal BC (Dowd and Carden, 2016, 161). The Mesolithic settlers did not construct any settlements or monuments that leave any above ground traces although their presence in an area can often be identified by scatters of worked flints in ploughed fields and rivers. The Neolithic period (4000-2400 BC) began with the arrival and establishment of agriculture as the principal form of economic subsistence, which resulted in more permanent settlement patterns. As a consequence of the more settled nature of agrarian life, new site-types, such as more substantial rectangular timber houses and various types of megalithic tombs, begin to appear in the archaeological record during this period. While archaeological monitoring of works on the River Nore have produced finds from the Mesolithic and Neolithic in the form of flints and a polished stone axe there are no recorded sites dating to either period within the study area.

Late prehistoric period

Metalworking arrived in Ireland with the advent of the Bronze Age period (c. 2400–500 BC). This period was also associated with the construction of new monument types such as standing stones, stone rows, stone circles and fulachta fia. Fulacht fia translates as cooking places of the wild (or of deer), they are often interpreted as the remains of cooking sites and are the most numerous archaeological site type in Ireland, radiocarbon dating of excavated examples has generally produced dates in the Bronze Age (c.2400-500BC). The development of new burial practices saw the construction of funerary monuments such as cairns, barrows, boulder burials and cists. The later first millennium BC and the early centuries AD comprise the Irish Iron Age, which is the most obscure period in the Irish archaeological record. While there is general agreement that the introduction of an iron technology was a significant factor in the eventual demise of bronzeworking on a large scale, but how, why and when this came about in Ireland is far from clear. A post and wattle fish weir (KK019-026240-) found in the River Nore at Saint John's Bridge

produced radiocarbon dates of 755-400 BC and 755-403 BC, placing it in the Late Bronze Age/Iron Age transition period.

Early medieval period

The early medieval period began with the introduction of Christianity and continued up to the arrival of the Anglo-Normans in the late 12th century (c. 400–1169 AD). While this period saw the emergence of the first phases of urbanisation around the larger monasteries and the Hiberno-Norse ports, the dominant settlement pattern was still rural-based and founded on a small-scale agricultural economy centred around enclosed farmsteads known as ringforts. These comprise circular enclosures delimited by concentric banks and ditches and are the most widespread archaeological field monuments in the Irish landscape. They were formerly known by the names rath/lios, which still form some of the most common Irish place name elements. The ecclesiastical sites dedicated to St Canice and St Patrick were established at Kilkenny during the 5th century, however there are no recorded monuments dating to this period within the study area.

Late medieval (AD 1169 – 1550)

The arrival and conquest of large parts of Ireland by the Anglo-Normans in the late 12th century marks the advent of the late medieval period. This period saw the continuing expansion of Irish urbanisation as many of the port cities developed into international trading centres and numerous villages and towns developed as local or regional market centres, including Kilkenny where a castle, constructed by Richard de Clare, Earl of Leinster, known as Strongbow is recorded in 1173. The settlement was later developed under William Marshal, Earl of Pembroke, who granted it privileges in 1207. Marshal also founded St John's Priory in 1211 adjacent to the bridge on the eastern bank of the River Nore where a suburb grew up around it. The suburb was later enclosed as part of the town defences. Most of the sites within the study area date to this period, including a dovecot (KK019-026238-), an Augustinian priory (KK019-026068-) and its graveyard (KK019-026235-), two castles (KK019-026078-, KK019-026233-), a walled garden (KK019-026221-), several effigies (KK019-026242-, KK019-026432-, KK019-026271-, KK019-026273, KK019-026274-, KK019-026272-) and graveslabs (KK019-026430-, KK019-026431-) some of which were found in the River Nore at the site of a late medieval bridge (KK019-026070-). A vertical watermill (KK019-026266-) is also located adjacent to the town wall of St John's (KK019-026001-) which enclosed the medieval suburb.

Post-medieval to early modern

The centuries following 1550 AD are referred to as the post-medieval period, which is generally considered to continue until the development of the Industrial Revolution in the 18th century. This period saw the development of both high and low status rural housing stocks and dispersed agricultural settlements consisting of single-storey thatched cottages with associated farm buildings, which began to be replaced by two-storey farmhouses during the late 19th century. The medieval suburb of St John's is mentioned in Cromwell's account of the Siege of Kilkenny in 1650. There are several 16th/17th century houses within the study area, predominantly along John Street, (KK019-026024-, KK019-026066-, KK019-026067-, KK019-026069- and KK019-026114-), as well as a 17th century stable (KK019-026219-), fortification (KK019-026220-) summer house (KK019-026225-) and bowling green (KK019-026079-) within the grounds of Kilkenny Castle. In addition to these sites there is also a circular limestone well (KK019-026261-) and bridge (KK019-026239-) likely dating from this period within the study area.

Stray finds

Consultation of the topographical files held by the National Museum of Ireland (NMI) did not reveal any stray finds recorded from the townland of Collegepark.

Placenames database

The Placenames Database of Ireland (available at www.logainm.ie) which provides translations of the Irish origins of townland names was consulted. Townlands are the smallest unit of land division in the Irish landscape, and many may preserve early Gaelic territorial boundaries that pre-date the Anglo-Norman conquest. The boundaries and nomenclature of the Irish townlands were recorded and standardised by the Ordnance Survey in the 19th-century. The Irish roots of townland names often refer to natural topographical features, but some name elements may also give an indication of the presence of past human activity within the townland, e.g., dun, lios or rath indicate the presence of a ringfort while temple, saggart, termon or kill record an association with a church site. The subject site is located within the townland of Collegepark derived from the Irish pairc meaning field. The townland name refers to Kilkenny College founded by the Duke of Ormonde in 1684 at Seix House immediately north of the subject site (IHTA 10, p. 22)

Cartographic review

The detail on historic cartographic sources demonstrates the nature of past settlements and land use patterns in recent centuries and can also highlight the impacts of modern developments and agricultural practices. This information can aid in the identification of the location and extent of unrecorded or partially levelled features of archaeological or architectural heritage interest. The cartographic sources examined for the study areas include the Down Survey (c.1655), John Rocque's Map of Kilkenny (1758) first edition 6-inch Ordnance Survey map (1839-40) and the 25-inch Ordnance Survey map (1900).

The Down Survey map from c.1655 (**Figure 8**) records the forfeited lands of Kilkenny following the city's surrender in 1650. The townland of Collegepark is depicted as a triangular parcel but unnamed. A small rectangular building is shown at the southern tip of this parcel on the bank of the River Nore. John Rocque's map of Kilkenny from 1758 (**Figure 9**) shows the subject site as located within a triangular orchard or park landscape covered by trees. The north-western margin of the site extends towards the rear plots of houses along John Street which are separated from the orchard by a wall.

On the first edition 6-inch Ordnance Survey (OS) map, the subject site is located within an orchard. The tree cover appears less dense than that depicted on Rocque's map from 1758. The north-western margin of the site extends within the rear plots of houses along John Street which are divided from the orchard by a wall (**Figure 10**). The 25-inch OS map depicts a reduction in the number of trees and the addition of a footpath which circles the field. A rectangular enclosure or playing field is depicted at the centre of the proposed development (**Figure 11**).

A review of modern aerial imagery shows that the northern portion of the site has been subject to modern disturbance through the construction of a car park and flood protection berm. Flood relief works have also impacted on the bank of the River Nore to the south (**Figure 12 and 13**).

There were **no indications of previously unknown archaeological sites** from this cartographic review.

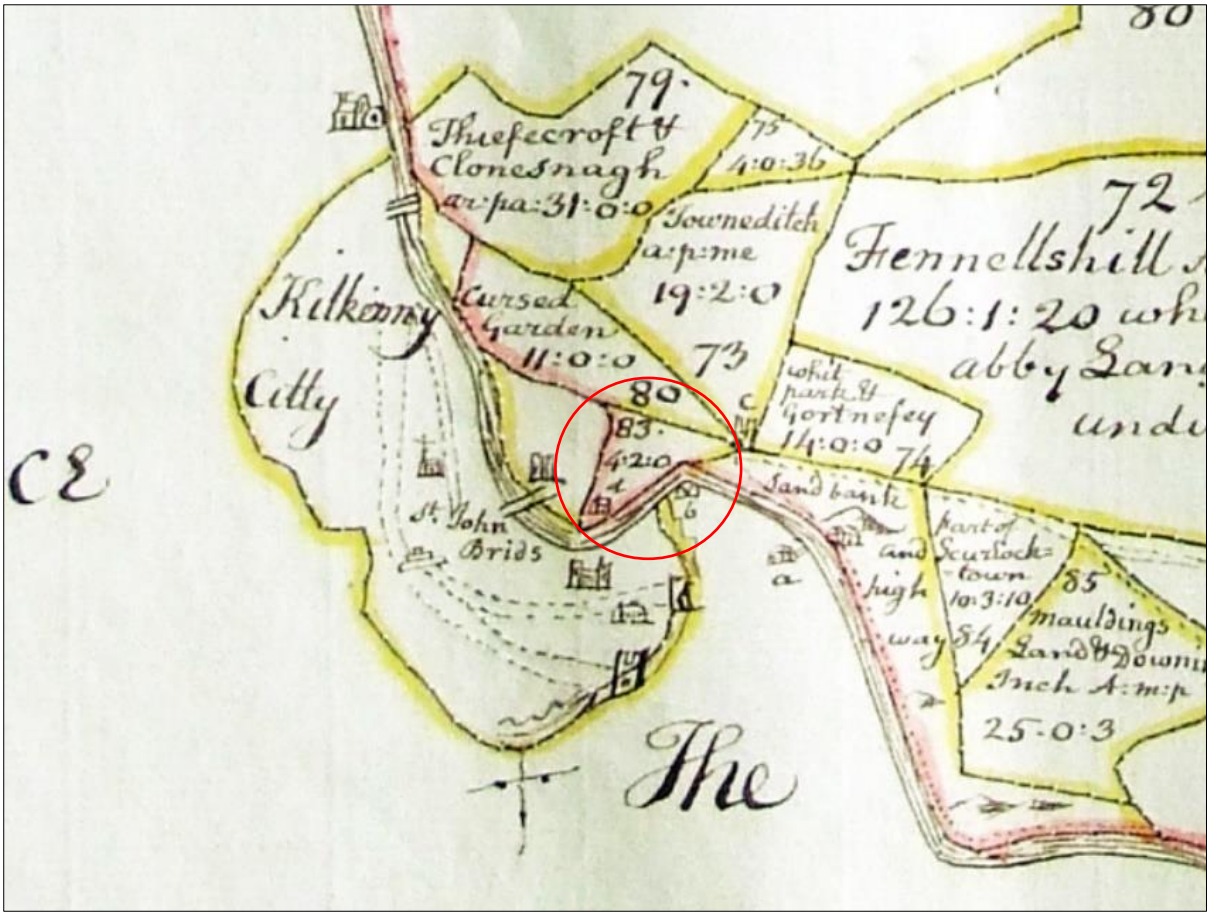


Figure 8: *Extract from the Down Survey (c.1655) (Source: Trinity College, Dublin)*

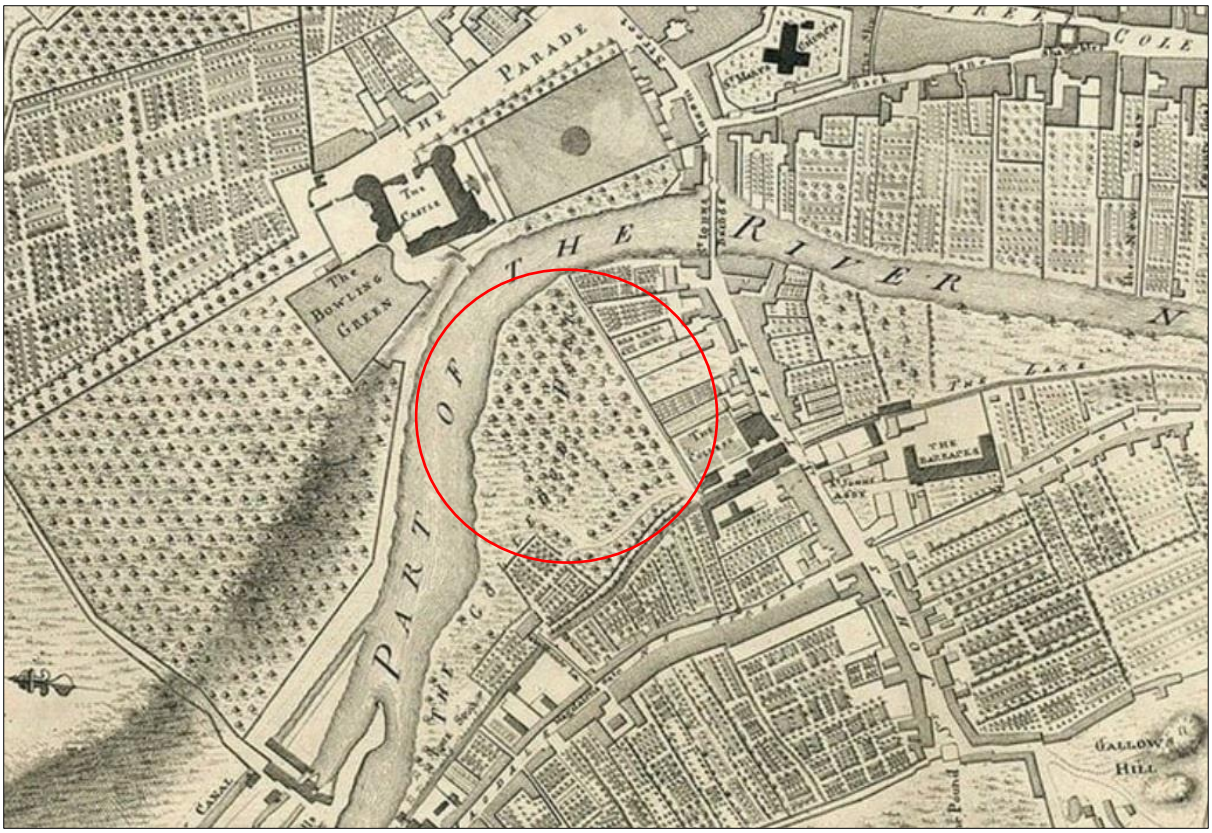


Figure 9: *Extract from John Rocque's map of Kilkenny (1758)*

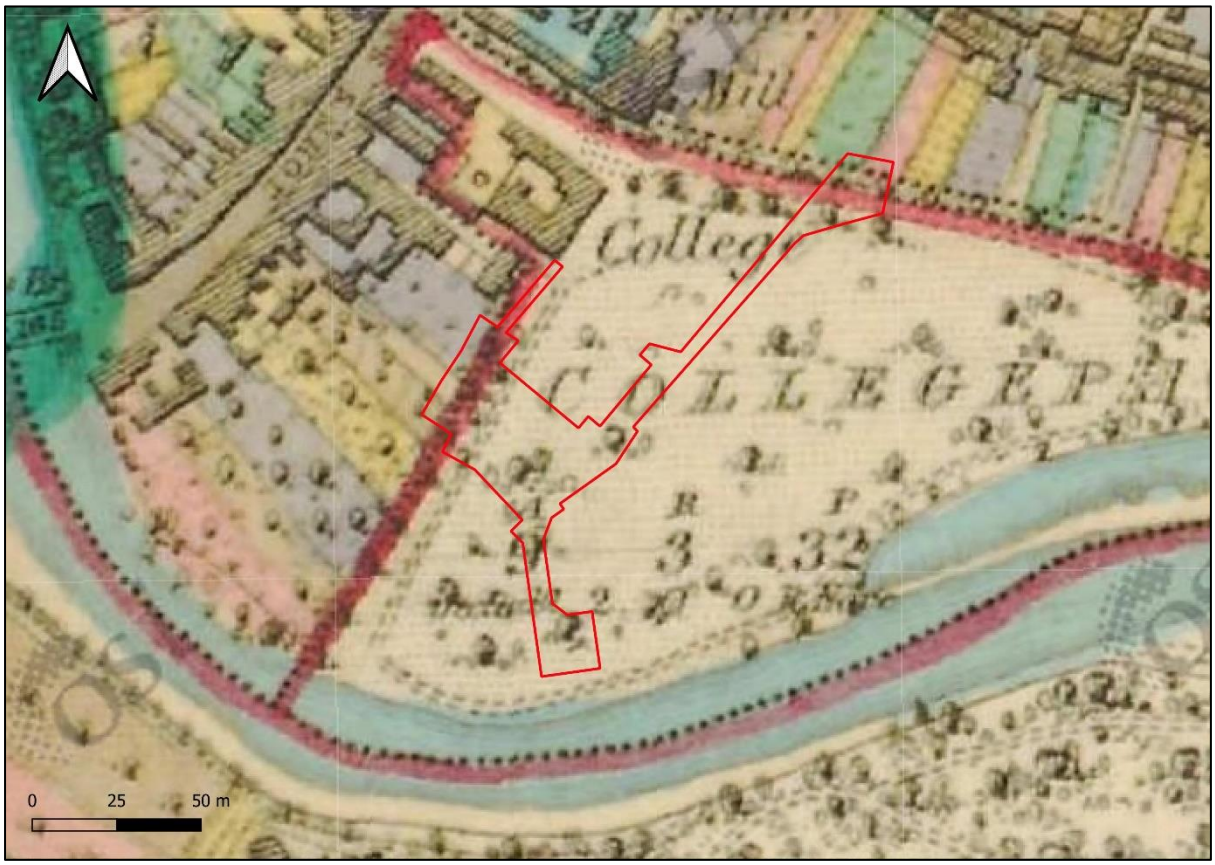


Figure 10: *Extract from the first edition 6-inch OS map (1839-40) (Source: Government of Ireland)*

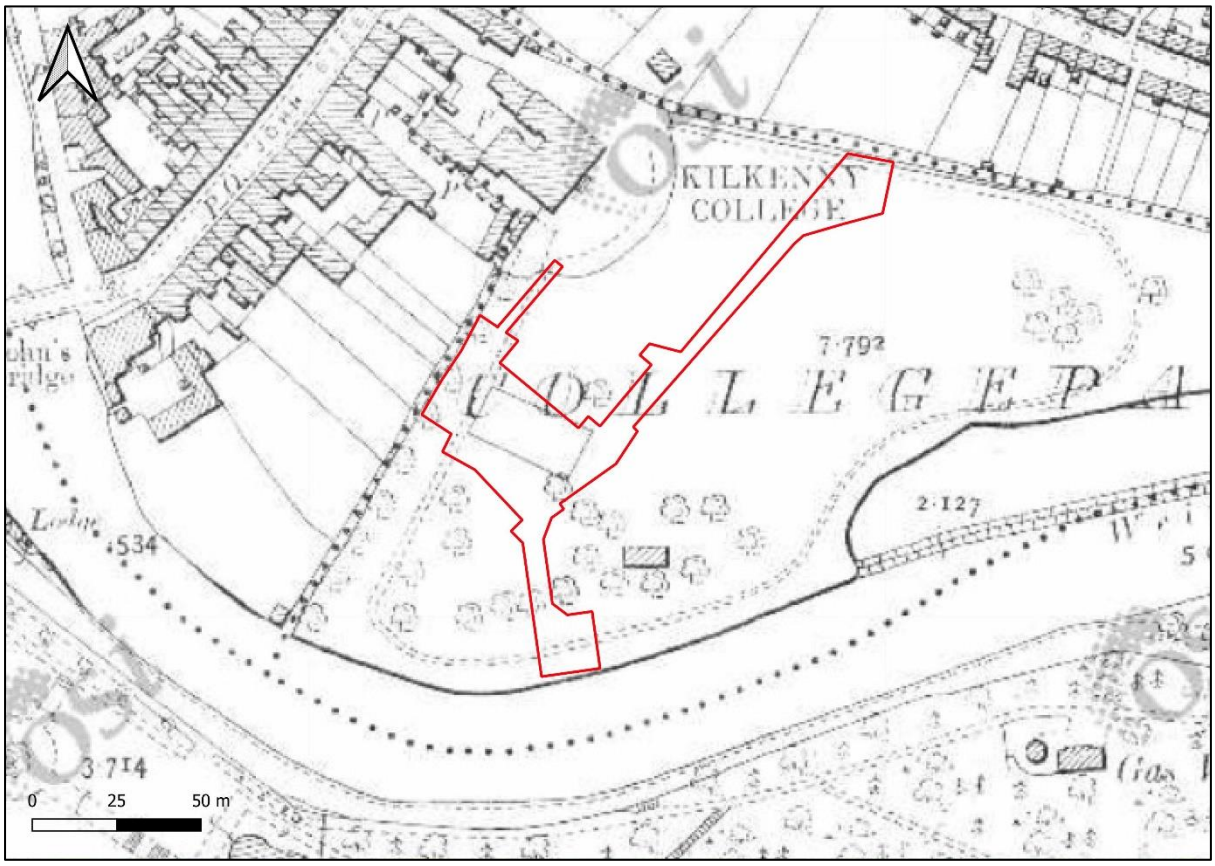


Figure 11: *Extract from the 25-inch OS map (1900) (Source: Government of Ireland)*



Figure 12: *Aerial view showing land use within subject site 2000-2005 (Source: MapGenie)*

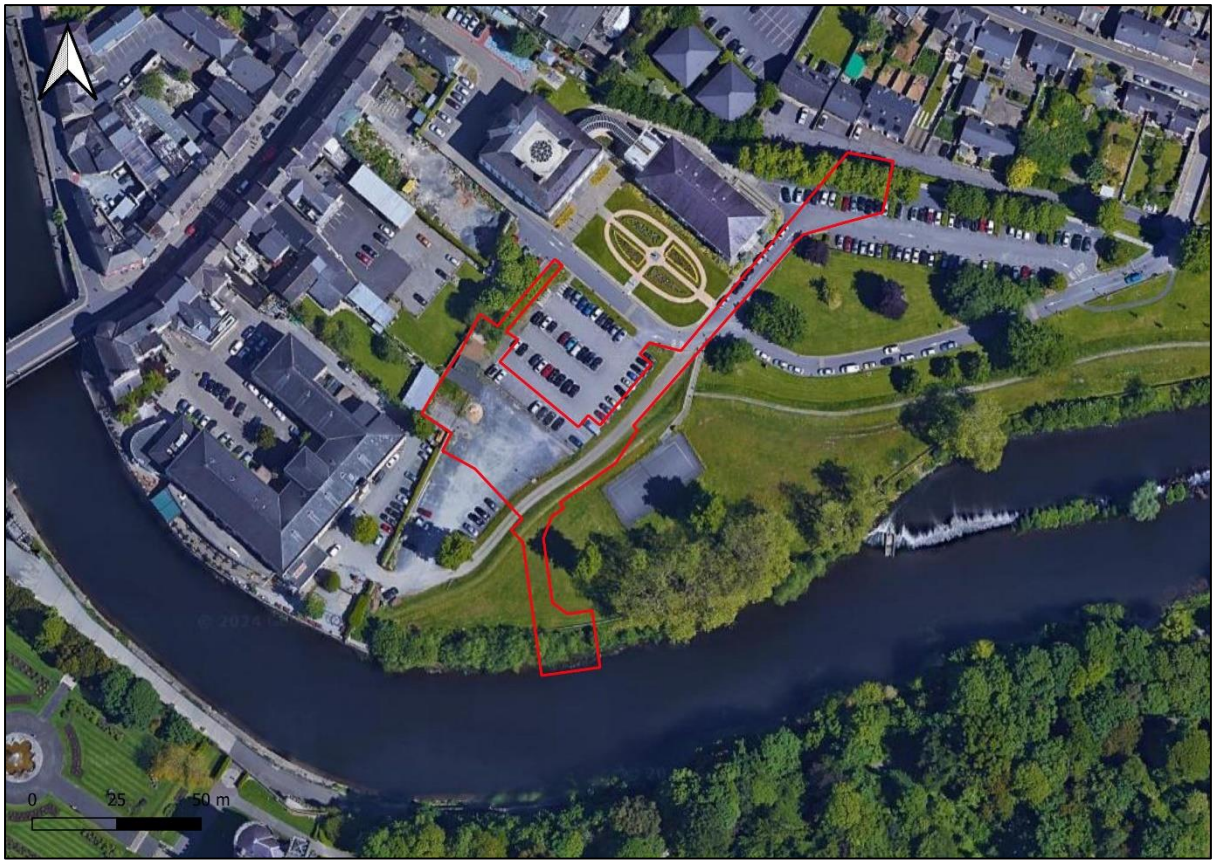


Figure 13: *Aerial view showing current land use within subject site (Source: Google Maps)*

The Excavations Database

The Excavation Database contains summary accounts of all licensed archaeological investigations carried out in Ireland (North and South) from 1969 to present. The database gives access to over 27,000 reports and can be browsed or searched using multiple fields, including year, county, site type, grid reference, license number, Sites and Monuments Record number and author. A review of the townland of Collegepark and adjacent townlands within the study area revealed that several licensed archaeological excavations have taken place within the boundary of the development and its immediate vicinity, see **Figure 14** and **Appendix 2** for further details.

Of particular interest is a programme of archaeological test trenching undertaken ahead of the River Nore (Kilkenny City) Drainage Scheme (Licence no. 00E0405). Trenches 6–8 were excavated on the banks of the river in Collegepark townland to the rear of the River Court Hotel and County Council buildings. The trenches were 6m long, 2m wide and between 2.2m and 3m deep. No features were identified but several sherds of 17th-century pottery and one sherd of medieval coarseware was recovered from the river gravel deposits. Subsequent archaeological monitoring of the flood relief scheme identified a circular masonry structure immediately west of the subject site. Upon excavation the structure, interpreted as a medieval dovecote, was found to rest on timber posts driven into the riverine deposits. Finds included sherds of 13th/14th century Kilkenny type pottery and one sherd of 15th/16th century German stoneware (01E0821, KK019-026238-, KKAP-077).

A programme of archaeological test trenching was carried out at Collegepark by H. King in 1991 ahead of the development of the new council offices. Two trial trenches were located within the proposed development area, however no archaeological features were found (**Figure 14**, KKAP-094).

Previous archaeological surveys of Kilkenny describe how the line of the defences is thought to be represented by the garden wall of premises in Nos 77-84 John Street and by a line of trees within the carpark of the River Court Hotel (Bradley 2000, Munby and Tyler 2005). A programme of archaeological testing and monitoring (95E0053) during the construction of River Court Hotel identified segments of a wall and ditch which were interpreted as part the town defences. In 1995, test trenching behind 88-9 John Street (within the present hotel carpark) did not uncover any evidence of the town defences and proved that the southern boundary wall was not medieval in origin. Subsequent archaeological testing in 1998 identified a 0.43m wide and 1.7m high sub-surface section of wall *c.* 24m east of No. 85 John Street. The wall, which had a battered base and acted as a revetment along the western side of a waterlogged ditch, was interpreted by the excavator as the remains of the town wall. Monitoring of construction of the River Court Hotel in 1999 also identified a 3m wide and 3m deep ditch, located 11m behind Nos 87-89 John Street, on the same alignment with that found behind No. 85. However, despite these findings, the precise alignment of the town ditch in relation to the proposed development boundary has not yet been fully established.

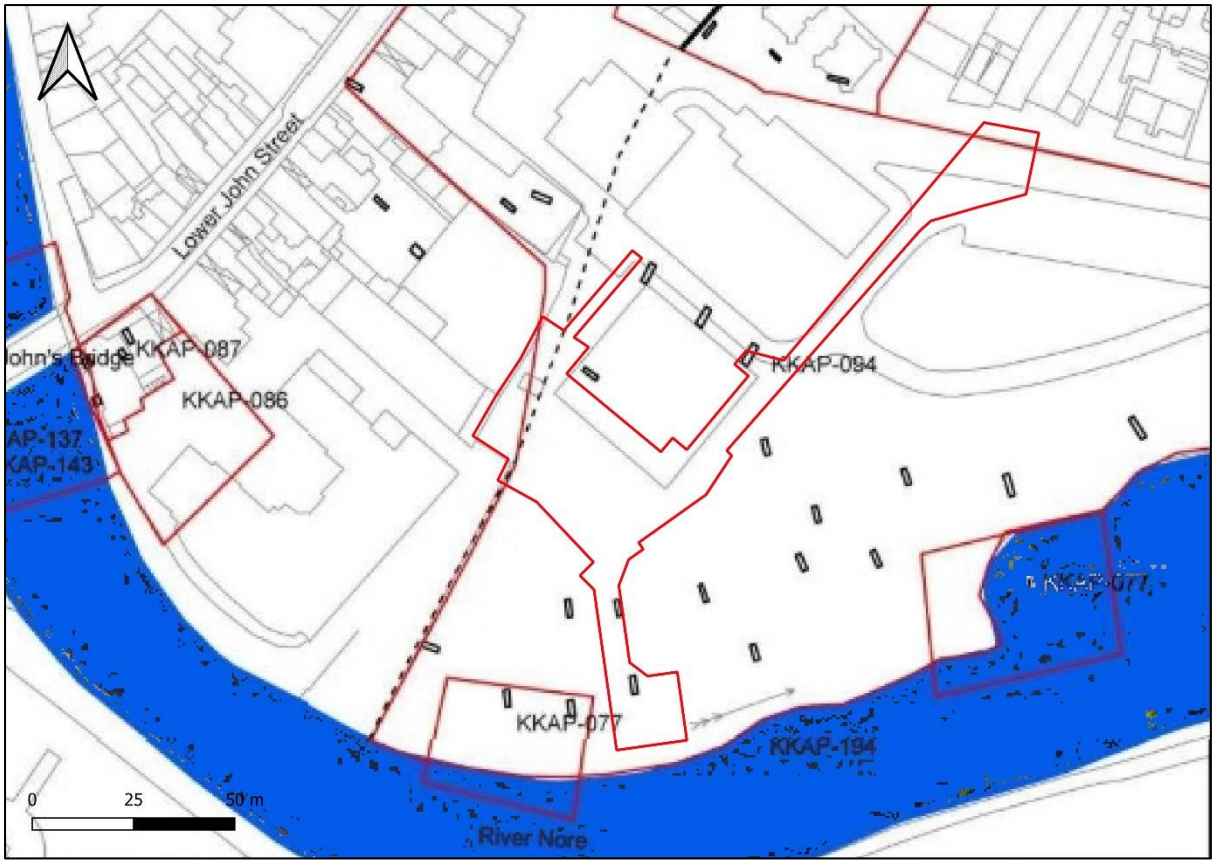


Figure 14: *Extract from Kilkenny Archaeological Project map (Figure 54) showing previous archaeological investigations in vicinity of subject site (Source: Kilkenny Archaeological Project)*

4. Conclusions and recommendations

The proposed development site is located within the ***Kilkenny Area of Archaeological Potential*** as defined by the County Kilkenny Development Plan 2021-2027. This desktop assessment has concluded that the subject site has been ***subject to moderate modern disturbance and development within its northern portion*** which is currently in use as a car park. The southern portion of the site consists of a greenfield area under grass on the eastern bank of the River Nore and extends into the river itself. The riverbank has previously been developed at this location as part of flood alleviation works which were subject to archaeological mitigation. An underwater survey is therefore not considered necessary in relation to this development.

The northwest portion of the development has the potential to encroach on the projected line of the medieval town defences of Kilkenny (KK019-026001-), a National Monument. While this area has been subject to moderate modern disturbance, and the precise location of the wall is unknown, there is a potential for remains of the town defences to be present within the boundary of the proposed development. Any works at or in proximity to a National Monument in the ownership or guardianship of the Minister for Housing, Local Government and Heritage, or a Local Authority, will require Ministerial Consent as per Section 14 of the National Monuments Act 1930 (as amended) which remains in force until the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 commence.

The proposed development will also encroach on the Zone of Notification of a recorded monument, Dovecote (KK019-026238-), identified and excavated during the River Nore flood alleviation scheme in 2003. The proposed development layout has been designed to avoid a direct impact on this feature. It is proposed to establish an 11m buffer zone from the outer edge of Dovecote (KK019-026238-) to the development boundary in order to protect the archaeological site from any direct impact. The Historic Environment Viewer records a further 28 archaeological sites within the 200m study area surrounding the site boundary, while the wider landscape around the proposed scheme contains a large number of archaeological excavations dating from the late prehistoric period onwards.

In summary, the subject lands can be considered to possess a ***high archaeological potential***. As such, in the absence of any mitigation measures, there is the potential for ***direct and indirect impacts*** to recorded and unrecorded archaeological heritage resources should the proposed development proceed subject to no mitigation measures.

It is recommended that any future development at this site is subject to ***a programme of licenced archaeological monitoring,*** carried out by a suitably qualified archaeologist in areas where ground reduction will be required. It is strongly advised that adequate time is allocated to allow for the evaluation and mitigation of any archaeological features that may be identified. Also, notification of any proposed works must be submitted to the National Monuments Service at least two months prior to commencement of works. Should the proposed mitigation measures be followed as recommended, this shall provide for either the avoidance of any archaeological resource or the proper and adequate recording of this resource (including presently unknown potential archaeological features).

Please note all recommendations are subject to approval from the National Monuments Service and the Planning Authority.

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Appendix 1: SMR inventory

SMR No: KK019-026001
Class: Town defences
Townland: Collegepark, Gardens (Kilkenny City By., St. Patrick's Par.), Gardens (Kilkenny City By., St. Mary's Par.), Gardens (Kilkenny City By., St. Canice Par.), Bishopsmeadows (Crannagh By., Kilkenny Rural ED), Gardens (Kilkenny City By., St. John's Par.)
Description: The Archaeological Survey of Ireland (ASI) is in the process of providing information on all monuments on The Historic Environment Viewer (HEV). Currently the information for this record has not been uploaded. To access available information for research purposes please make an appointment in advance with the Archive Unit (open Fridays 10.00 am – 5.00 pm), Department of Culture, Heritage and the Gaeltacht, The Custom House, Dublin 1 D01W6XO or email nmarchive@chg.gov.ie. See attached photographs: KK019-026001-_01 Talbot's Tower KK019-026001-_02 A 15th/16th-century stretch of the town wall of the Hightown was recorded by Cóilín Ó Drisceoil (07E0366) on the S bank of the river Breagagh at No. 6 Watergate Street KK019-026001-_03 A 15th/16th-century stretch of the town wall of the Hightown was recorded by Cóilín Ó Drisceoil (07E0366) on the S bank of the river Breagagh at No. 6 Watergate Street KK019-026001-_04 Profile of town wall on Abbey Street, E-facing section (E38330)

SMR No: KK019-026238-
Class: Dovecote
Townland: Collegepark
Description: The foundations of a circular 12th/13th-century masonry structure (ext. diam. 8.5m – 9m), possibly a dovecote, excavated by Ian Doyle (01E0821) at College Park on the N bank of the River Nore 75m N of Kilkenny Castle (KK019-026078-) (Doyle & O'Meara 2004, unpublished; Doyle 2005, 32-42). In 1375 a dovecote in 'a great park opposite the gate of the castle' was noted and in 1391-3 'dove-cots' formed part of the property at Kilkenny Castle that was assigned by Hugh le Despenser to James Butler, third earl of Ormond (Curtis 1934, vol. 2, no. 201, 141; no. 207, 145). 'One pigeon house' formed part of the estate of the Manor of Kilkenny as noted in a 1546 inquisition of James Butler, earl of Ormond (Curtis 1937, vol. 4, no. 361, 302). A 1537 document also refers to a dovecote situated within a meadow in the ward of St John's on the north bank of the Nore: 'The Verdyt of the Commoners of the Town of Kilkenny', '…they present that to the same Castell belong ... a garden at Saynt Johnes, and a culverhouse [dovecote] in the medowes aforsaid' (Hore and Graves 1880, 129). The 'medowes' can be identified as the College Park for in the deed whereby the Duke of Ormonde in 1684 endowed the school at Kilkenny, he gives to it 'all ye large mansion house in Kilkenny, now made use of for a school-house, &c., and meadow thereto adjoining, conmionly called Pigeon-house meadow' (Hore and Graves 1870, 129). The structure, as excavated, had been partially robbed out on the S (river) side. The stepped wall (Wth 1m x H 1 m) of the masonry tower at foundation level was built on a raft of oak piles, driven into the underlying river silts to stabilise the structure. A single fragment of 13th/14th-century pottery was recovered from the underlying river silt, and radiocarbon dating of a sample of an oak pile returned a determination of AD 1163-1278. A possible trampled mortar floor surface identified within the structure was dated to the 15th/16th century by a fragment of early German stoneware. The remains were sealed with a layer of mixed mortar, rubble and alluvium. It appeared likely that the structure was destroyed by the 17th century. This would explain its absence from the documentary record, and later its absence from Rocque's 1758 map of Kilkenny. Compiled by: Cóilín Ó Drisceoil Date of upload: 11 November 2020

SMR No: KK019-026024-
Class: House 16th/17th century
Townland: Gardens
Description: No information available

SMR No: KK019-026066-
Class: House 16th/17th century
Townland: Gardens
Description: No information available

SMR No: KK019-026067-
Class: House 16th/17th century
Townland: Collegepark
Description: Nos. 88-89 John Street, known as 'Bridge House' (NIAH 12000151), on the SE side of John's Bridge, on the E bank of the River Nore. The house was built in the mid-18th century as a dower house for the widow of the second Duke of Ormonde, who, along with her son the Earl of Arran, remodelled a late 16th/early 17th-century stone mansion house, much of which still remains. The Bridge House was a centre for social life in the city during the Georgian and Victorian periods when Sir Walter Scott and Maria Edgeworth were guests in the heydays of the famous Kilkenny Theatre. The house contains many of its Georgian fixtures and fittings, including fine fireplaces and a stucco ceiling that adorn what were regarded at the time as some of 'the finest rooms in Kilkenny'. During the Civil War (1922-3) the house was attacked and bullet holes can be still seen on the outside wall. The Bridge House has a fine 18th-century façade but much of the fabric of the three other main walls of No. 89 is of late 16th/early 17th-century date to second-floor level. A gable with several of the original hood-moulded window surrounds is incorporated into the rear S wall of the existing building (Farrelly et al 1993, 52). Archaeological investigations (95E0053; 01E1212) have also identified upstanding late 16th/early-17th century fabric in the N, S and E walls of No. 88 and test-excavations have identified the foundations of the original front W wall foundations (Wth 0.9m) (Gowen 1995, unpublished; 1996, 49-50; O'Donovan 1998, unpublished; 2000, 116-17; Hayden 2002, unpublished; 2003, unpublished test trenching and monitoring; 2003, unpublished monitoring; 2005, 268-9). A basement level for No. 88, with arched entrances in its N and S walls, may belong to an earlier phase of construction than the late 16th/early 17th-century house. It has been suggested by Alan Hayden that it may have been associated with a structure that was sited at the E end of the medieval St John's bridge, which was downriver of the present bridge crossing (Hayden 2002, 5, unpublished). Compiled by: Cóilín Ó Drisceoil Date of upload: 22 March 2022

SMR No: KK019-026068-
Class: Religious house – Augustinian canons
Townland: Gardens
Description: The priory of the Augustinian canons of St John the Evangelist occupied much of the medieval walled suburb of St John's which was located on the E bank of the River Nore. It consisted of an area of c. 2 acres within a walled precinct, currently defined by Back Lane to the N, the town wall/Michael Street to the E, John Street to the S and the mill-stream 'the Little River', c. 25m E of the Carnegie Library on John's Quay, to the W. There were several gateways into the precinct, including St Michael's Gate at the W end of Michael Street, Cart Gate mid-way along Back Lane and it is likely that there was also an entrance from John's Street (Bradley 2011, 336, 340). The priory was founded by the earl of Pembroke William Marshal to replace the earlier, possibly pre-Anglo-Norman, St. John the Evangelist's Hospital, which is thought to have been sited around

Green's Bridge to the N (Egan 1884, 260-3; Carrigan 1905, Vol. 3, 243; Gwynn and Hadcock 1970, 182; Farrelly et al. 1993, 62; Bradley 2000, 13; Bradley 2011, 318-19). The precise foundation date of St John's is not known but it would appear that its new lands were allocated by 1211 and its original grant was confirmed by a charter from William Marshal the younger c. 1223 (McNeill 1931, 63; Ledwich 1781, 528-9; Bradley 2005, 65 n. 9). In the charter, the younger Marshal granted to the Augustinian brothers the site, 'in honour of God and St John the Evangelist and to sustain the poor and indigent'. The church consisted of a nave and chancel in the 13th century, with a tower at the junction which may have been built slightly later (Bradley 2011, 331). A Lady Chapel was added to the priory church in 1290 and in 1325 the priory was substantially rebuilt; the bell tower collapsed in 1329-1330 and was probably rebuilt in the 15th century (Bradley 2000, 13; Bradley 2011, 319, 331-2). Place's c. 1698 drawing of Kilkenny, from the SW, shows St John's with a long nave, with a series of what appear to be lancet windows, a substantial tower and a chancel (Bradley 2011, 331). Following the surrender of the priory to the commissioners in March 1540 its property and lands were granted to the Corporation and citizens of Kilkenny and like the rest of the city's monastic holdings these were subsequently parcelled out amongst the ruling oligarchy (White 1943, 178; Gwynn and Hadcock 1970, 182; Bradley 2011, 322). The precinct and its possessions in the town were described at this time as follows: 'a church, belfry and cemetery, a hall, dormitory, six chambers, a kitchen, store, granary, two orchards, three gardens and sundry other closes, containing four acres, within the precincts of the priory; also ... twenty four messuages, thirty-three gardens, one hundred acres of arable land, twenty of pasture, ten of meadow and ten of wood; a water-mill, a pigeon house, and 3s annual rent, with the appurtenances in Kilkenny, of the yearly value, beside all reprises, of 14s 4d. ...' (Archdall 1786, 370). Its total holdings at the Dissolution amounted to over 240 acres, a grange, ten messuages, 40 gardens, the Maudlin mill, a wood called 'Chanons grove' with 200 acres of land adjoining and a further 200 acres in Drakelands as well as an interest in eight churches (Egan 1884, 262; Gwynn and Hadcock 1970, 182). In 1615 the nave and chancel of St John's priory was in ruins and by 1628, when it is recorded in a rental roll, its precinct and lands were in the ownership predominantly of the Rothe, Archdekin, Shee and Langton merchant families (Ledwich 1781, 403-4; Bradley 2011, 328-31). The rental (reprinted by Edward Ledwich) provides information on some of the buildings that occupied the site at this time: 'two chambers in the cloister of St. John's and orchard near the cloyster', 'the cart gate, castle, and out stall in St. John's cloyster', 'the bake-house at St. John's and the Prior's fires', 'chapter house within the cloyster' and 'rooms from the entry of St. John's Abbey towards the outer St. John's gate' (Ledwich 1781, 403-4). Analysis of the rental and Kilkenny Corporation leases, as well as a limited amount of information yielded from archaeological excavations, allows the general layout of the main priory precinct after the Dissolution, and by extension much of its medieval layout, to be reconstructed (Bradley 2011, 331-43). The church, positioned just S of centre, dominated the precinct. The chapter house was located immediately N of the crossing tower and the cloister occupied the position immediately N of the nave (ibid. 332). The W range of the cloister housed the prior's chambers at ground-floor level and the dorter or dormitory of the canons on the first-floor (ibid. 334). Portion of the rib-vaulted ground-floor of the NE angle of the W range survives. Within a pointed arched recess there is a pointed doorway, now blocked up, exiting to the N, and another, also blocked up, exiting to the E, to the former cloister. The N range may have originally housed the kitchen and rectory, however, post the Dissolution the kitchen and rectory occupied only the NW angle of the cloister, extending northward, with a stable in the central part of this range and a chamber attached to the E (ibid. 333). A bake-house, brew house and barn were located in the N portion of the precinct, with a lime-kiln in the NE angle (ibid. 335-8). The vicar occupied a chamber immediately W of the church and S of this there was a hospital, possibly at 19-21 John Street Lower, which was sited in the SW corner of the precinct (ibid. 338-9). There were also gardens within the precinct to supply

the needs of the kitchen and the infirmary (ibid. 340-41). The graveyard (KK019-026235-) is located S of the church. Bradley (2011, 333) mentions that there are several references in the 16th century, 'to at least six houses, two of one bay, one of two bays, and two of four bays, between the churchyard [graveyard] and the street, none of which survive above ground level, as well as a house adjoining St Michael's Gate on the E side. The priory also owned property outside the boundary of the precinct, including orchards immediately to the W (ibid. 334, 341-3). In 1645 a Jesuit chapel and college were briefly established at the priory but in the late 17th-century much of the nave of the church, with its two square towers, and many of the domestic buildings were levelled and the materials used to construct a military barracks, which was in turn converted into an asylum in 1818 (Bradley 2000, 22; Clohosey 1946-7, 62). Today, most of the chancel, the Lady Chapel (incorporated into the present St John's C of I church in 1817), a fragment of the nave, as well as parts of the W range survive above ground level (Farrelly et al. 1993, 58). The priory church is constructed of limestone rubble roughly coursed and is orientated NE-SW (described as E-W for convenience). A late 18th-century illustration by Wheatley (https://catalogue.nli.ie/Record/vtls000550645; accessed 5 April 2022), viewed from the E, shows the E gable and the E end of the S wall of the roofless chancel with the E gable and S wall of the roofless Lady Chapel in the foreground. The E gable of another smaller building is depicted projecting from the W end of the S wall of the Lady Chapel. The chancel survives as depicted. It has a clasping buttress on the NE and SE angle. The E gable is dominated by two sets of graded three-light cusped trefoil- pointed windows, the central window of each set being higher. Externally the window heads have hood-mouldings with decorative label-stops, including head-stops. There are two relieving arches, one over each tripartite arrangement. Centrally placed in the gable above these windows is a quartrefoil window and above this there is a narrow flat-headed single-light window with external chamfer. Internally both tripartite arrangements are set within moulded rear-arches carried on banded shafts. Leask (1966, vol. 2, 109) suggests that the E window grouping is stylistically too early.

SMR No: KK019-026069-
Class: House 16th/17th century
Townland: Collegepark
Description: No information available

SMR No: KK019-026070-
Class: Bridge
Townland: Gardens
Description: No information available

SMR No: KK019-026071-
Class: Bridge
Townland: Gardens
Description: No information available

SMR No: KK019-026074-
Class: Tower house
Townland: Gardens
Description: No information available

SMR No: KK019-026075-
Class: Church

Townland: Gardens
Description: No information available

SMR No: KK019-026076-
Class: Water mill
Townland: Collegepark, Gardens
Description: No information available

SMR No: KK019-026078-
Class: Castle - Anglo-Norman masonry castle
Townland: Dukesmeadows
Description: Kilkenny Castle is sited on the S side of the city of Kilkenny, on a glaciofluvial terrace of limestone gravels and boulder clay on the south bank of a meander in the river Nore, 12m above the level of the river. The present castle, largely rebuilt in the early 19th century and comprising three wings to the N, W and S, corresponds generally with the Inner Ward of the early 13th-century masonry castle built by William Marshal, earl of Pembroke and lord of Leinster (d. 1219). Between 1207 and 1213 the earl was 'in exile' at Kilkenny Castle from the royal court of King John, and this period saw the creation of Kilkenny as the de facto political capital of the lordship of Leinster and, commensurate with its new-found standing in the urban hierarchy, a largescale expansion of the adjoining town (Crouch 2017, 39; Bradley 2000, 2). On the death of William Marshal the elder in 1219 his first son William gained seisin of the castle and town of Kilkenny and four years later he issued an extended charter to the burgesses (McNeill 1931, 71-4; Crouch 2015, 275-6). Following the younger William's death in 1230 the castle and town were assigned, in succession, to the estates of his four younger brothers, who famously all died without male issue. In the ensuing partition of Leinster in 1247 the castle and town passed to the third son of the younger Isabel Marshal, Richard de Clare, Earl of Gloucester and Hertford (Orpen 1920, vol. 3, 325). The de Clares retained the castle until the fourth Earl of Gloucester died in 1314, at which time it descended to the le Despencers, Barons le Despencer, who in 1391 sold their Kilkenny estate to James Butler, the third Earl of Ormond (Carrigan 1905, vol. 2, 171; vol. 3, 49, 51; Curtis 1932, vol. 2, no. 297). The castle was to remain in the Butler family until 1967 when it was sold to the state. The castle is now a National Historic Property in the care of the Office of Public Works. The historical record is not particularly illuminating regarding the overall plan of the original 13th century masonry castle built by William Marshal. The earliest reference directly linking the earl with the castle is in his 1207 charter to Kilkenny, which refers to 'the bailiffs of my castle' and to the provision that 'no burgess shall have to face a lawsuit in the castle' (Bradley and Murtagh 2017, 246-7). In 1210 the Marshal quartered King John's enormous army and hosted a 'most lavish reception' for the king at his castle, at the beginning of the king's two-month campaign to restore royal authority over the barons in Ireland (Holden et al 2004, 14258-60). The account of King John at Kilkenny Castle includes a reference to a gate-building at the castle. The only other contemporary record of the Marshal at Kilkenny Castle is contained in the Histoire de Guillaume de Maréchal, which was written shortly after the death of the earl in 1219 and contains an account of its defence in 1208 by his wife Isabel de Clare from a siege by a coalition of his Leinster vassals and Meiler fitz Henry (Holden et al. 2004, vol.2, 13528-13550, 13820-4). Isabel is said to have defended the castle from its 'battlements', perhaps an indication that a masonry castle was in place by this time. The Histoire also includes a reference to the earl describing to King John the arrival of William de Briouze to the 'walls of my castle' at Kilkenny earlier in 1210, another possible reference to a stone castle (Holden et al. 2004, 14296). There are occasional written allusions to individual buildings in the 13th and early 14th century, for example an exchequer is mentioned in 1269 (Sweetman 1877, no. 861), and a prison in 1305,

1308 and 1325 (Sweetman 1877, no. 384; Williams 2007, 52-3, 171n), but the first description of the castle to contain information on its overall plan is the 1307 extent of the estate of Joan countess of Gloucester and Hertford: '….the said Joan held in the vill of Kilkenny on the day of her death a castle in which there are a hall, four towers, a chapel, a moat [mota], and other divers houses necessary to the castle, wherefrom nothing can be received a year … there are in that vill 5 ½ acres of lands of demesne, whereof they extend each acre at 12 d. per year; there are also 5 ½ acres of meadow under the castle, which they extend at 20s. per year; and 7 acres of meadow near le Gibbethule, which they extend at 14s. a year, to wit. 2s. each acre; there are also 5 acres of pasture lying in portions, which they extend at 5s. a year. Total 44s. 6d. … There is a garden under the castle, the fruit with the herbage of which they extend at 6s. 8d. a year.' (Sweetman 1886, no. 653). The description in the 1307 extent of the original masonry castle as having had 'four towers' has been central to all prior interpretations of its plan as a quadrilateral enclosure with corner towers. Various four-sided castle plans have been suggested heretofore, including wedge, square, rectangular, quadrangular and trapezium layouts, and the most recent interpretation by Ben Murtagh has suggested it was of pentagonal plan (Murtagh 2018, 259, 261, fig. 7). Ben Murtagh's comprehensive study of the Inner Ward of the standing castle, and his archaeological excavations at the site, have revealed a great deal of information about the plan and architecture of the original masonry castle attributed to the elder William Marshal. Surviving standing remains include intermittent stretches of curtain wall between three of the original circular towers, at the NW, SW and SE angles, as well as defensive plunging arrow loops and their round-headed embrasures (Murtagh 1993, 1110-1; 2017, 173-7; 2018, 257-64). Sub-surface structural remains relating to this phase of the castle have also been revealed in excavations, including stretches of curtain wall which had been constructed along the ridge of the rampart for the earlier earth-and-timber castle, two sally-ports, garderobe chutes and medieval floor levels (Murtagh 2018, 291-5). Inside (to the W) of the demolished E curtain wall excavation showed that the ground level was raised by c. 2m above the natural glacial substratum to c. 56.2m OD probably during construction of the Marshal castle by spreading out the redeposited glacial clay of the truncated ramparts of the earlier earth-and-timber castle (E627 and 99E481: Cuttings 19, 25, 26, 27). Portions of the substantial stone-lined moat that surrounded the castle have been revealed on the S and W sides of the castle. There may not have been a moat on the N, with instead the steep escarpment to the River Nore acting as a 'natural moat'. Excavations by Patrick Neary outside, SW, of the SE tower on The Parade revealed two sections of the curving top of the counterscarp of the S castle moat revetted with a sloping stone wall (top 55.33m OD) at a distance of 10.15m out from the tower (Neary 2010, figure 20, plates 21-4). Ben Murtagh's excavation (E627:Cutting 16) of the same section of moat, in the angle of the SE tower and the S curtain wall, reached a depth of c. 4.6m (c. 50.7m OD) below the level of the top of the excavated counterscarp (c. 5.5m below present ground level) but the base was apparently not reached (Murtagh 2018, 293, figure 6). The inner (N) edge of the fosse was also revetted by a substantial base-batter which supported the curtain wall above and incorporated a sally-port and garderobe chute outlet. Excavation of the moat in the Rose Garden, outside the W wing, (E627: cutting 10), also revealed a 5.5m thick base-batter incorporating a sally-port (Murtagh 1993, 1111, figure 3). At this location, the bottom of the fosse was revealed at a depth of 6.5m (48.75m OD) below present ground level, i.e. c. 2m below the base as revealed outside the SW curtain. The width of the moat on this side of the castle is unknown. The missing fourth (E) wing of the castle, which was demolished in the late 18th-century, originally housed the main gate-building of the castle. Archaeological excavations (15E590)

SMR No: KK019-026079-
Class: Bowling green
Townland: Dukesmeadows

Description: No information available

SMR No: KK019-026114-
Class: House 16th / 17th century
Townland: Gardens
Description: No information available

SMR No: KK019-026165-
Class: Graveyard
Townland: Gardens
Description: No information available

SMR No: KK019-026166-
Class: Graveslab
Townland: Gardens
Description: No information available

SMR No: KK019-026167-
Class: Graveslab
Townland: Gardens
Description: No information available

SMR No: KK019-026219-
Class: Stable
Townland: Dukesmeadows
Description: Outside of the outer ward defences to the E of Kilkenny Castle (KK019-026078-), a large mid-17th century stable and grain stand identified in a 2010 geophysical survey (Gimson 2010, unpublished; Ó Drisceoil 2020, unpublished). The 1654-6 Civil Survey records a large stable and a hay stand in a yard outside the 'outergate' of the castle: 'The greate Stable being a dubble building devided into two parts ye back part all in one in wch are Beames laid to make Lofts wch if repaired would hold 2000 barells of wheat (96 feet [c. 29m] x 38 feet [c. 11.6m]). Belonging to ye aforesaid Castle Is a plot of ground neere ye said Stable where ye Publique Store of hey was kept Cont 40 perches small Measure' (Simington 1934, vol. 6, 534-5). In 1719 moneys were assigned by Kilkenny Corporation 'for repairing the castle stables...' (Corporation Minutes 20.01.1719 (p. 114)). Compiled by: Cóilín Ó Drisecoil Date of upload: 11 November 2020

SMR No: KK019-026225-
Class: Designed landscape – summer house
Townland: Dukesmeadows
Description: Located c. 70m NE of the NE wing of Kilkenny Castle (KK019-026078-) in an area presently under woodland. In 1680 the first Duke of Ormond had an elaborate waterhouse and banqueting hall constructed adjoining the bowling green (KK019-026079-) of the castle. It had been removed by the time of Rocque's 1758 survey. Dineley, writing in 1681 described it as follows: '…Bowling green, Gardens Walks Orchards & a delightfull Waterhouse adjoining to the B Green, which with an Engine of curious artifice by the help of one horse furnisheth all the Offices of the Castle with that necessary Element. This Waterhouse hath a pleasant summer banquetting room, floor'd and lin'd with white & black marble which abounds here, with a painted skye roof wth Angells, in this is seen a fountaine of black marble in the shape of a large cup, with a ject d'eau or throw of water in the middle ariseing, mounts into the hollow of a Ducall Crown, which but

hangs over it, and descends again at severall droping places round this I have touch'd off on the other side the following leaf' (Dineley 1681, 202; see Costello 2016, 146-7). The manuscripts of the Marquess of Ormond record that construction of the waterhouse included the following, 'On Monday and Tuesday next the marble piers by the grotto will be got up, which could not be carried through the bowling green until the dry weather came in. I believe the like were not seen in this kingdom heretofore' (Falkiner 1908, vol. 5, 292). The waterhouse is clearly depicted as an elaborate circular turret topped off with a statue on a 1681 view by Thomas Dineley and on the 1699 Francis Place and 1708 Henry Pratt views. (Ó Drisceoil 2020, unpublished). Compiled by: Cóilín Ó Drisceoil Date of upload: 11 November 2020

SMR No: KK019-026220-
Class: Fortification
Townland: Dukesmeadows
Description: Outside the original main gatehouse of Kilkenny Castle (KK019-026078-), a possible 17th-century fortification was identified in a 2010 geophysical survey of the parkland to E of the castle (Gimson 2010, unpublished; Ó Drisceoil 2020, unpublished). The 1654-6 Civil Survey records a masonry-built 'Mount' outside the main castle gatehouse, 'Wth out ye gate a Mount all built wth stone (32 feet [c. 10m] x 30 feet [c. 9m])' (Simington 1934, vol. 6, 534-5). This may have been some form of Confederate-era bastion that defended the E approach to the castle. A rubble spread and possible structural remains identified in the geophysical survey 45m outside, E of, the castle gatehouse may represent its sub-surface remains (Gimson 2010, unpublished; Ó Drisceoil 2020, unpublished). Compiled by: Cóilín Ó Drisceoil Date of upload: 11 November 2020

SMR No: KK019-026221-
Class: Walled garden
Townland: Dukesmeadows
Description: Medieval walled garden associated with the Shirehall Castle (KK019-026222-) located c.180m SE of the SE wing of Kilkenny Castle (KK019-026078-) and identified in a 2010 geophysical survey of the parkland to E of the castle (Gimson 2010, unpublished; Ó Drisceoil 2020, unpublished). A castle in the Outer Ward known as the 'Shirehall garden' is referred to in 15th century documents. The shire hall was one of the castle's administrative buildings and was used by the sheriff and for the seignorial assizes (Mills 1957, unpublished). The Kilkenny shirehall can be placed, on the basis of a 1435 grant to William Boyd, in the area to the E of the main castle, and probably in the Outer Ward, which was also the usual location for the castle shire hall: 'Indenture made on the 22nd day of April in the 13th year of Henry VI witnesses that James, Earl of Ormond, has granted to William Boyd of Kilkenny all his land outside "le Shirehall-gardyne," from the gate of same garden by measures and bounds between that garden and the garden of said William and the water of the Nore in length, and between the wall of the Earl's garden and the common road by which you go from said William's messuage to the Earl's castle. To have and to hold for the term of twenty years, rendering yearly therefor twelve pence silver. And said William and his heirs shall build on the land aforesaid and return it at the end of the term to the Earl or his heirs "styf and stanche" (Curtis 1935, vol. 3, no. 124, 114). In 1435 the custody of the 'castle called ' le Shirhall gardeyne'' was granted by James, earl of Ormond to Walter Glerne (ibid., no. 125, 114). In 1449 the 'Shirehall gardyne' is again referred to: 'Indenture between James, Earl of Ormonde and Walter Glerne 'gentilman' in which he grants to Walter 'the two messuages near Kilkenny and 'le Shirehall gardyne' there in which John Mesioun and Thomas McRebir lately dwelt' (ibid., no. 172, 165-6). The Shirehall castle can also probably be correlated with the 'little Castle wth out outergate' referred to in the 1654-6 Civil Survey (Simington 1942, vol. 6, 534-5). It may also be the castle that is marked on the Down Survey county map and on the barony of

Kilkenny liberties and Parish of St Patrick and Canice maps as being located outside (E of) the castle and Town Wall and directly S of the Ormonde mills, which would place it somewhere in the parkland to the E of the castle. The maps show it in the townland of 'Danceing Meadow and other Small Inclosyers', which is denoted as commonage in the parish terrier. The castle was probably cleared along with the rest of the outer ward at the time of the first Duke of Ormonde's remodelling of the castle (Bradley 2006, 107). By 1750 the name of the townland had changed to its current denomination, Dukesmeadows. The 2010 geophysical survey identified what is probably the Shirehall castle and an adjoining large enclosed garden that probably gave it the name the 'Shirehall garden', situated between the possible barbican gate (KK019-026216-) and the road to the Castle Mills to its E. The castle can be identified in the geophysics with a rectangular masonry structure (dims. 13m x 11m) and an adjoining rubble spread situated 160m E of the main gatehouse of Kilkenny Castle (KK019-026078-). Situated directly to its E the survey identified a rectangular walled enclosure (dims 66m E-W x 56m N-S) adjoining the N side of the 'Common Road' (KK019-026218-). The N and E sides of the enclosure appear to be defined by very thick 4-6m wide walls, which might suggest they were truncated to the level of their base-batters. Inside the enclosure the geophysics identified garden soils and what may be a formal garden layout with a central path and yard surface. Compiled by: Cóilín Ó Drisceoil Date of upload: 11 November 2020

SMR No: KK019-026239-
Class: Bridge
Townland: Gardens
Description: Abutments and collapsed sections of the 1772 St John's Bridge excavated by Ian Doyle (01E0980) immediately upstream/N of the current bridge crossing (NIAH 12000229), completed 1910, over the River Nore in Kilkenny City. The 1772 bridge replaced a succession of medieval bridges, the latest (KK019-026070-) of which was destroyed, along with most of the bridges on the Nore, by the 'Great Flood' of 1763 (Doyle 2003, 8-12). The 18th-century bridge was a three-arch masonry structure (L 45m) with a slightly humped profile, designed by George Smith and built by the contractor William Colles. Two of the bridge piers (L 12m x Wth 4m) were recorded in the excavation. Both piers were built on raft foundations of timber and masonry and the timber shuttering in which the pier bases were constructed was also present. A series of adjacent softwood timbers were interpreted as the remains of a temporary bridge erected in the immediate aftermath of the 1763 flood. These timbers, many of which retained forged iron shoes, formed three parallel lines driven into the river bed. A collection of 13th/14th-century grave slabs, probably taken from nearby St Mary's parish church (KK019-026115-), were recovered from the river gravels around the piers of the 18th-century bridge where they had been placed to protected the piers (Doyle and O'Meara 2004, 6-20). Part of an abutment of the 18th-century bridge survives today on the E bank of the river but most of the masonry abutments were removed during the Kilkenny Flood Relief Scheme. The remains of the late 16th-century St John's Bridge (KK019-026070-) and an Iron Age post-and-wattle fish-trap (KK019-026240-) were also recorded below the current John's Bridge. Compiled by: Cóilín Ó Drisceoil Date of upload: 12 November 2020

SMR No: KK019-026240-
Class: Weir - fish
Townland: Dukesmeadows
Description: A post and wattle structure, probably a fishtrap, excavated by Ian Doyle as part of the Kilkenny Flood Relief scheme on the W bank of the Nore directly underneath the existing John's Bridge (NIAH 12000229) and adjacent an abutment of the preceding 1772 bridge (KK019-

026070-) (Doyle 2004, 28-9; 2006, 271-2). Two collapsed post-and-wattle fences, probably representing a N-S orientated V-shaped fishtrap (estimated total dims. L 4.8m x W 1m), were exposed and excavated. Two timber samples from the structure produced radiocarbon dates of 755-400 BC and 755-403 BC. The structure continued beneath the W bank. Compiled by: Cóilín Ó Drisceoil Date of upload: 12 November 2020

SMR No: KK019-026253-
Class: Excavation -miscellaneous
Townland: Gardens
Description: Medieval pits to rear of 26-9 John Street upper, 40m outside (NW of) the site of St John's Gate and within a suburb of the medieval town that developed in the 13th century. Test excavations in advance of development of the existing 'Kilford Arms' hotel development by Ken Hanley (00E0711) revealed two pits, furrow cuts and a possible fosse, all of which produced Kilkenny-type 13th/14th-century medieval pottery (Hanley 2000, unpublished; 2002, 179; 2002, 179-80).

SMR No: KK019-026261-
Class: Well
Townland: Gardens
Description: A drystone-walled well at the rear of an early 19th-century house at No.4 Rose Inn Street (NIAH 12000149), excavated by Simon Ó Faoláin (01E0466) (Ó Faoláin 2002, unpublished; 2004, 283). The well (int. diam. c.1.1m) was constructed of roughly dressed limestone blocks with occasional red bricks in the upper courses. A lead pipe had been inserted into the well and it was sealed by a raft of timber planks. No evidence for its dating was found. The upper two courses (c.0.5m) of the well were removed under archaeological supervision and the remainder of it is preserved under the concrete floor of an extension to No. 4 Rose Inn Street. Compiled by: Cóilín Ó Drisceoil Date of upload: 14 December 2020

SMR No: KK019-026266-
Class: Water mill - vertical-wheeled
Townland: Gardens
Description: Mill building depicted on the 1758 John Rocque map of Kilkenny and the 1st ed. (1839) OS 6-inch map, at the rear of 68-69 John Street. The mill is on the N side of the medieval millrace (KK019-026077-) and abuts the NW (internal) face of the town wall (KK019-026001-) of St John's. Archaeological test excavation by Bernice Molloy (01E1031) identified the remains of a mill building comprising a limestone and red brick wall foundation and an upstanding red brick wall which projected from the face of the town wall (Molloy 2001, unpublished; 2003, 215). Much of its fabric remains preserved in situ. Compiled by: Cóilín Ó Drisceoil Date of upload: 14 December 2020

SMR No: KK019-026233-
Class: Castle - ringwork
Townland: Dukesmeadows
Description: According to the Annals of Tigernach, in 1173 the 'foreigners' in the 'castle [caislen] of Kilkenny' were attacked by the combined armies of Domhnall Ó Briain, the king of north Munster, and Conchobhar Ua Conchobair, the son of the 'king of Ireland' Ruaidrí Ua Conchobair (Annals of Tigernach T1173.10). The castle was abandoned and 'the town was breached after the Foreigners left it, and the whole district was plundered. That reduction was a grief to the Foreigners of Ireland'. Orpen identified the 'castle of Kilkenny' that was the attacked as probably

a motte in the area of the present Kilkenny Castle (Orpen 1909, 316-7; 1911, vol. 1, 332, 376-7). After Strongbow's death in 1176 the lordship of Leinster, including whatever settlement then existed at Kilkenny, was placed into royal custody, pending the marriage or majority of his heiress Isabel de Clare (Orpen 1911, vol. 2, 5). Nothing is recorded about the castle, or adjoining borough, between c. 1175 and 1192, which might, as Adrian Empey has suggested, imply they had been abandoned, but this is far from certain (Empey 2017, 64). Mac Gilla Pátraic dominance in the area, and in most of central Ossory, continued until around 1190, when William Marshal, earl of Pembroke, who had married Isabel de Clare in 1189, eventually gained seisin from a reluctant King John of his wife's inheritance in Leinster (Carrigan 1905, vol. 3, 47; Bradley and Murtagh 2017, 217). This broadly coincides with the statement, as recorded by James Ware in his 'Annals', that in 1192 'in Leinster the castle of Kilkenny was built and another at Kilfeacle in Munster' (Ware 1705, 33). At Kilkenny Castle the earliest phase of settlement uncovered thus far in excavations is a 'sod building' with contemporary metalworking activity, that was excavated by Ben Murtagh in 1992-3 beneath the central, W, wing of the castle (E627, Cutting 1e) (Murtagh 1993, 1108; 2018, 293). Sherds of 'local cooking ware' pottery from in and around the 'sod building' have been compared with Leinster Cooking Ware pottery, which based on current dating of the pottery type, would place the structure and its associated metalworking horizon no earlier than the late 12th century and therefore probably belonging to the early Anglo-Norman occupation of the site (Murtagh 1993, 1114; Ó Flo?inn 1988; Bradley 2000a, 1; McCutcheon 2006, 36). As no close identification of the pottery has yet been published and no scientific dating of the structure has been undertaken, its precise chronology remains poorly understood. It is possible that the pottery in question is the same 10th-12th-century coarse cooking ware pottery that has been found in the Hiberno-Norse towns of Waterford, Wexford and Cork, although to date none of the excavated early medieval sites in and around Kilkenny have produced this particular ware (McCutcheon and Meenan 2011, 95-6). The 'sod building' was sealed beneath an earthwork rampart of an earth-and-timber castle that preceded the masonry castle built by William Marshal in the early 13th century. Sections of this rampart and fosse have been uncovered in excavations at a number of locations within the S half of the Inner Ward of Kilkenny Castle (Murtagh 1993, 1108-10; 2017, 173; 2018, 292-3). Where it survived most intact, under the W wing (E627:Cutting 1), the rampart stood to a height of 3m above the old ground level and was c. 7m wide (as excavated), comprising of layers of redeposited boulder clay derived, presumably, from the digging of the surrounding fosse (Murtagh 1993, 1108-10, fig. 3). Determining the physical form of the original castle enclosure is complicated by its possible recutting when the masonry castle was subsequently constructed and because of the limited amount of excavation undertaken, particularly on its N half. The excavations have determined that the masonry castle followed the same general layout as the earth-and-timber castle, and this is demonstrably the case for the S half of the castle (Murtagh 1993, 1108, 1111; Murtagh 2017, 177, fig. 5.40; see Bradley 2000, 2). Whether the same applies to the N half of the castle, however, remains unclear. The earth-and-timber castle, as excavated, has been regarded by Ben Murtagh as 'a ringwork, built by Earl Strongbow and burnt down in 1173' or a ringwork castle that succeeded the original motte and bailey castle built by Strongbow (Murtagh 1993, 1108; 2017, 173; 2018, 292). An alternative scenario is that it represents the former bailey of the motte and bailey castle, which Orpen suggests may have been still standing on the site in the early 1300s (Orpen 1909, 316-7). Compiled by: Cóilín Ó Drisceoil Date of upload: 4 April 2021

SMR No: KK019-026235-
Class: Graveyard
Townland: Gardens

Description: Graveyard of the 13th-century Augustinian priory of St. John the Evangelist (KK019-026068-) presently occupying the walled area (0.5 acres) to S and E of the priory church and is defined by Michael Street in E, Barrack Lane in W and John Street in S. An archaeological excavation (C000414), carried out by Claire Walsh in 2019 of an area (L 27m; Wth 1.8m) running N-S on Barrack Lane, uncovered the skeletal remains of c. 150 individuals (Claire Walsh pers. comm.). The burials were all in simple pits and orientated E-W with their heads to the W. The burials have been dated to the medieval period, possibly the 13th and 14th centuries. Compiled by: Cóilín Ó Drisceoil Date of upload: 4 April 2022

SMR No: KK019-026242-
Class: Tomb - effigial
Townland: Gardens
Description: In a recess in the N wall of the roofless chancel of St John's Priory, Kilkenny (KK019-026068----). An effigial tomb (chest dims. L 2.21m; Wth 1.3m; H 0.72m; mensa H 0.11m) with the effigy of an knight (L 1.39m; Wth 0.7m; H 0.2m) and his wife (L 2.3m; Wth 0.5m; H 0.33m) on separate slabs. The knight is badly damaged, the head and feet are missing. Hunt (1974, vol. 1, 194-5; vol. 2, 155, 289) describes the armour as being, 'of Ossory type with a few minor differences. The trunk is protected by the usual pair of plates, the skirt of the habergeon appearing beneath. The arms are of plate, but the cowters are smaller than the usual Kilkenny variey and have a small rondel over the cubitus. There are articulating plates above and below. The gauntlets have short tight cuffs pointed below with fluting in chevron form on the back of the hands, giving the pieces a gothic appearance. The leg defences also have a more gothic feeling than the type, with a pronounced keel down the cuisses and greaves and are of a narrower and more elegant form than is usual. The poleyns are of simple outline, articulating twice above and below. The neck and shoulders are protected by a pisane, with besagews on the shoulder points. The sword hangs across the body from a strap over the right shoulder, as at Gowran. The hilt has a drooping cross, with disproportionately large disc-like terminations, and a small ovate pommel'. The figure of the woman is well preserved. She is described by Hunt (ibid. 195) as wearing, 'a long gown with tubular folds and with a V-neck. The tight sleeves are buttoned nearly to the shoulder. The gown is belted with a wide girdle ornamented with quatrefoils, and over the gown she wears a mantle thrown far back from the shoulders to mid-arm. On her head is a heart-shaped head-dress, the central kerchief decorated with leafage, below which a finely pleated barbe falls from either side and beneath her chin suggesting that she was a widow. On the folds of her dress is an inscription, which is continued upon the mensa of the tomb and of her husband's tomb'. The inscription, in raised Black Letter script, is transcribed by Carrigan (1905, vol. 3, 256) as, 'Hic ja…. Purcell quondam……. Obiit [ ] die m…… Hic jacet et Johanna Purcell uxor eius q[ui] obiit vi die me[n]sis [ ] A. D. mccccc' and translated as, 'Here lies … Purcell formerly …. died…. Here also lies Johanna Purcell his wife who died the 6th of [ ] A. D. 1500'. The front panel of the tomb is carved with seven ogee-headed niches with decorated spandrels. Each niche contains the figure of an apostle, with their names carved on either side of their heads. Described by Hunt (ibid. 195; vol. 2, 289), 'On the dexter stands St Peter holding two keys in his right hand and a book in his left, a loop of his gown held under the left arm. This figure is partly carved on the return of the dexter end-slab. The second niche has a figure of St Andrew holding his saltire cross in both hands. The third niche contains a figure of St James Major with his pilgrim's hat, staff and purse. The central niche contains the figure of St John holding a chalice in his left hand and with his right extended on his breast. The fifth figure is St Thomas with a spear held in the right hand angularly across the body. The next figure is St James Minor with a saw in this right hand and book in his left and the last niche has a figure of St Philip holding a cloth before him, with both hands, containing five loaves'. 'The end-slab at the feet is carved with two niches containing figures of St Bartholomew

and St Simon, each carved with their names on a scroll behind their heads and with their respective attributes, a flesher's knife and a pole-axe or sparth' (ibid., vol. 2, 290). 'The head-end is carved on the dexter side with the figure of an archbishop blessing and holding a cross-staff and with decorated pointed mitre under a canopy with foliage. Unfortunately, he has no label. On the sinister is a broad panel carved with a Crucifixion, Christ crucified with a voluminous perizonium flaring out on either side between the figures of Our Lady and St John. The Virgin has a pleated gown with a large veil and clasped hands, St John on the sinister in a gown of the same pleated form with a cloak, holding one end in the right hand as if to wipe away his tears. Above the arms of the cross are four rectangles carved in relief with roses and quatrefoil floral decoration' (ibid., vol. 2, 291). This effigial tomb can be attributed to the O'Tunney workshop (ibid. 195-6). Compiled by: Jean Farrelly Date of upload: 6 April 2022

SMR No: KK019-026420-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. Portion of a limestone graveslab (01E0980: 2277) was found mortared into the base of one of the piers of the late medieval bridge (ibid. 8-9). It consists of a rectangular fragment (L 1.2m; Wth 0.54-0.58m; T 0.25m), tapering towards the base (ibid. 11; 14). Both sides of the top of the slab, as well as the base of the slab, are missing (ibid.). It is decorated with a four-armed incised cross with fleur-de-lis terminals, though the dexter terminal is broken off (ibid.). The cross-head has an open lozenge-shaped centre (ibid.). Stylistically this graveslab dates to the 13th/14th century.

References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026421-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. A limestone graveslab (01E0980: 2272/2273) consists of two adjoining fragments of a tapering slab (total dims. L 1.42m; Wth 1.02m; T 0.2m), the top and lower sinister side of which is missing (ibid. 12, 15). It is decorated with an incised floriated cross and, though most of the cross-head is missing with only three fleur-de-lis terminals surviving, enough survives to infer that this was an eight-armed, interlaced cross (ibid.). Below the cross-head the shaft opens into a double-ringed

circle (ibid.). The cross-shaft rests on a stepped cross-base, only the dexter side of which survives (ibid.). There is Lombardic script along the sinister edge in Norman French which possibly reads, 'SABENL' (ibid.). This graveslab has been dated to the mid-14th century (ibid. 12).

References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026422-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. Portion of a limestone graveslab (01E0980: 2276) which consists of rectangular fragment (L 0.61m; Wth 0.32m; T 0.24m) which appears to have been cut, possibly for reuse as a building stone (ibid. 13, 14). Of the incised cross-head only the centre and sinister arm side survives, indicating that it was a simple three-armed cross with trefoil terminals (ibid.). From either side of the lower portion of the cross-shaft there springs a foliate design consisting of a stem with lobed terminal and a leaf, though that on the dexter side is truncated (ibid.). Stylistically this dates to the 13th/14th century.

References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026423-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. Fragment of a limestone graveslab (01E0980: 2275) which has been cut and reused as a building stone, it has mortar accretions (ibid. 13, 14). Only portion of the incised cross survives, the circular centre as well as the sinister and lower arm of a four-armed cross with fleur-de-lis terminals, within a double-lined circle (ibid.). There is a circular knop on the cross-shaft below the cross-head (ibid.). Stylistically this dates to the 13th/14th century (ibid.).

References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026424-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. A tapering limestone graveslab (01E0980: 2274) was found beneath the remains of the one of the piers of the late medieval bridge (ibid. 8-9). The slab (L 1.62m; Wth 0.4m; T 0.2m) is broken into six pieces, with the top of the slab missing, though most of the cross-head is visible (ibid. 12-13). It is decorated with an eight-armed cross in raised relief, however, the cross has been deliberately defaced, with only the rough outline remaining (ibid.). The cross-head had fleur-de-lis terminals and the cross terminates in a three-armed floriated cross beneath a barred knop (ibid.). There are two lines of Lombardic inscription, in Latin, along the upper surface of the dexter side (ibid. 12). It reads, 'HIC JACET EMMA VXOR THOME DE WAWIL ORATE PRO ANIMA EIUS', which translates as, 'Here lies Emma wife of Thomas De Wawil Pray for their souls' (ibid. 12-13). This has been dated to the 14th century (ibid. 13).
References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026425-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. A limestone sub-rectangular graveslab (01E0980: 2252/2262) which is broken in two roughly down the middle (total dims. L 1.83m; Wth 0.67m; T 0.14m), one end of the slab is broken off (ibid. 11, 16). It is very heavily water worn and pitted and is perforated through at one point, with no decoration or inscription visible (ibid.). It has rounded double bevelled edges and may have been the lid of a chest tomb (ibid.). The slab possibly dates to the 14th century (ibid. 11).
References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026426-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-

026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. Fragment of a limestone tapering graveslab (01E0980: 2313) which consists of the central portion of the slab, the head and base of which are missing (ibid. 11, 15). The slab (L 0.7m; Wth 0.45m; T 0.23m), with bevelled edges, is heavily water worn and only the rough outline of the base of the cross-head, formerly in relief, are visible (ibid.). Stylistically this dates to the 13th/14th century (ibid.).
References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026427-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. Fragment of a tapering limestone graveslab (01E0980: 2315), with bevelled edges, the top and bottom of which are missing (ibid. 12, 15-16). The slab (L 0.7m; Wth 0.45m; T 0.23m) was decorated with a cross in relief, however, the upper surface is heavily water worn and only the rough outline of the cross survives (ibid.). It is decorated with a plain centred four-armed cross, the form of the terminals is not discernible (ibid.). Stylistically this dates to the 13th/14th century (ibid.).
References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026428-
Class: Graveslab (present location)
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). Currently stored in Magdalan tower (KK019-026074-), Maudlin St, Kilkenny. Fragment of a limestone graveslab (01E0980: 2312) which consists of the central portion of the slab (L 0.69m; Wth 0.28m; T 0.2m), with one side missing (ibid. 15). It is decorated with an incised cross-shaft (ibid.). White gritty lime mortar accretions are visible on the slab (ibid.). Stylistically this dates to the 13th/14th century (ibid.).

References: Doyle, I.W. and O'Meara, B. 2004 Medieval grave slabs recovered from the River Nore, St John's Bridge, Kilkenny City. Old Kilkenny Review 56, 6-20.

SMR No: KK019-026430-
Class: Graveslab
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). The current location of this graveslab fragment is unknown. Fragment of a limestone graveslab (01E0980: 2310), only a piece (L 0.51m; Wth 0.32m; T 0.09m) of the upper portion survives (ibid. 14). It has been recut, the upper surface lightly punch dressed and it has light grey gritty mortar accretions on the undecorated face (ibid.). It is decorated with a plain centred incised cross, with only one trefoil terminal surviving (ibid.). Stylistically this dates to the 13th/14th century (ibid.). Compiled by: Jean Farrelly Date of upload: 16 January 2023

SMR No: KK019-026432-
Class: Tomb - effigial
Townland: Gardens
Description: Thirteen graveslabs were recovered from the River Nore during the archaeological excavations (01E980) carried out in 2001-2003 as part of the River Nore Drainage Scheme (Doyle and O'Meara 2004, 6-20). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge (ibid. 7). It is suggested that the graveslabs were deliberately cleared from a graveyard, possibly belonging to either St Mary's parish church (KK019-026115-) c. 100m to the W or to St John's Priory (KK019-026068-) c. 200m to the NE, and used as part of the rubble needed to form a protective apron for the piers of the late medieval bridge (ibid. 16-19). The current location of this graveslab fragment is unknown. Fragment of a limestone incised effigial tomb (01E0980: 2321), only a sub-rectangular portion (L 0.43m; Wth 0.22m; T 0.1m) of which survives (ibid. 13, 16). It was decorated with a person in a long pleated gown, however, only, 'the shoed foot, and the lower part (?hem, two vertical pleats and a fold)', remain. Stylistically this dates to the 13th/14th century (ibid.). Compiled by: Jean Farrelly Date of upload: 16 January 2023

SMR No: KK019-026271-
Class: Tomb - effigial
Townland: Gardens
Description: Five partial funerary monuments were recovered from the River Nore during the archaeological excavations (01E0036) carried out in 2001 as part of the River Nore Drainage Scheme (Brady 2004, unpublished). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge. Brady (ibid. 22) suggests that these monuments were deliberately defaced and dumped in the river by iconoclasts during the Reformation in the 1540s. The closest church is St Mary's parish church (KK019-026115-) c. 100m to the W, with St John's Priory (KK019-026068-) a little further, being c. 200m to the NE. Doyle and O'Meara (2004, 16-19) contend that the these monuments may have been seen as a convenient supply of stone, and were deliberately reused as part of the rubble needed to form a

protective apron for the piers of the late medieval bridge. An effigial tomb (overall dims. L 2.27m; Wth 0.65m; T 0.11m), described by Brady (ibid. 45) as a, 'Knightly sarcophagus lid of limestone in three pieces. Defaced raised decoration shows a figure in outline only, perhaps robed rather than in armour, resting on a pillow stone, and equipped with a sword. The tip of the scabbard remains intact, and in this detail the stonework is smooth. The long sides of the slab retain an ornate vine scrollwork that forms interlocking fleur de lys. A tendril wraps around the head end to suggest that originally the entire side edge was so decorated. The scrollwork is partly eroded on the left side but is intact on the right side. Date: mid-thirteenth century'. Brady (ibid. 22, 44) compares the elaborate decoration on the sides with that of the bishops' effigies in Ferns (Hunt 1974, vol. 1, 237-8 (catalogue no. 262); vol. 2, plate 65) and Kildare (ibid., vol. 1, 160-61 (catalogue no. 87); vol. 2, plate 69), as well as the tomb of Longespée, the Earl of Salisbury (c. 1230-40) in Salisbury Cathedral. This slab is currently in storage with the National Museum of Ireland (see OF018-204----). Reference: Brady, N. 2004 Archaeological investigation and excavation John's Bridge, Kilkenny: River Nore flood alleviation scheme. Excavation licence no. 01E0036. The Archaeological Diving Company Ltd. Unpublished final report. Compiled by: Jean Farrelly Date of upload: 17 January 2023

SMR No: KK019-026273-
Class: Tomb - effigial
Townland: Gardens
Description: Five partial funerary monuments were recovered from the River Nore during the archaeological excavations (01E0036) carried out in 2001 as part of the River Nore Drainage Scheme (Brady 2004, unpublished). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge. Brady (ibid. 22) suggests that these monuments were deliberately defaced and dumped in the river by iconoclasts during the Reformation in the 1540s. The closest church is St Mary's parish church (KK019-026115-) c. 100m to the W, with St John's Priory (KK019-026068-) a little further, being c. 200m to the NE. Doyle and O'Meara (2004, 16-19) contend that the these monuments may have been seen as a convenient supply of stone, and were deliberately reused as part of the rubble needed to form a protective apron for the piers of the late medieval bridge. Fragment of an effigial tomb (L 1.43m; Wth 0.83m; T 0.3m), described by Brady (ibid. 45) as a, 'sculpted panel, possibly side-stone of sarcophagus tomb. Defaced outline of saint/angel framed beneath a gabled canopy. Octagonal column rises on left side with smaller (now headless) angel figure in upper left corner'. Other effigies carved within architectural canopies include that of a layman in Cashel, Co. Tipperary (TS061-025080-) (Hunt 1974, vol. 1, 224-5 (catalogue no. 234); vol. 2, plate 37) and a bishop at Ferns (Hunt 1974, vol. 1, 237-8 (catalogue no. 262); vol. 2, plate 65). This slab is currently in storage with the National Museum of Ireland (see OF018-206----). Reference: Brady, N. 2004 Archaeological investigation and excavation John's Bridge, Kilkenny: River Nore flood alleviation scheme. Excavation licence no. 01E0036. The Archaeological Diving Company Ltd. Unpublished final report. Compiled by: Jean Farrelly Date of upload: 17 January 2023

SMR No: KK019-026274-
Class: Tomb - effigial
Townland: Gardens
Description: Five partial funerary monuments were recovered from the River Nore during the archaeological excavations (01E0036) carried out in 2001 as part of the River Nore Drainage Scheme (Brady 2004, unpublished). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge. Brady (ibid. 22) suggests that these monuments were deliberately defaced and dumped in the river by iconoclasts during the

Reformation in the 1540s. The closest church is St Mary's parish church (KK019-026115-) c. 100m to the W, with St John's Priory (KK019-026068-) a little further, being c. 200m to the NE. Doyle and O'Meara (2004, 16-19) contend that the these monuments may have been seen as a convenient supply of stone, and were deliberately reused as part of the rubble needed to form a protective apron for the piers of the late medieval bridge. An effigial tomb (L 1.62m; Wth 0.58m; T 0.15m), described by Brady (ibid., 46) as an, 'eroded and much fragmented tapered effigial slab in four large fragments and a fifth fragment that is shattered into six pieces. The head and foot portions do not survive. A rounded edge and groove runs along both long sides. The slab is tapered from head to foot. Further details, and whether it had an image on its surface do not survive'. Stylistically this dates to the 13th/14th century. This slab is currently in storage with the National Museum of Ireland (see OF018-207----). Reference: Brady, N. 2004 Archaeological investigation and excavation John's Bridge, Kilkenny: River Nore flood alleviation scheme. Excavation licence no. 01E0036. The Archaeological Diving Company Ltd. Unpublished final report. Compiled by: Jean Farrelly Date of upload: 17 January 2023

SMR No: KK019-026272-
Class: Tomb - effigial
Townland: Gardens
Description: Five partial funerary monuments were recovered from the River Nore during the archaeological excavations (01E0036) carried out in 2001 as part of the River Nore Drainage Scheme (Brady 2004, unpublished). These were found associated with the late medieval bridge (KK019-026070-), immediately N of the current John's Bridge. Brady (ibid. 22) suggests that these monuments were deliberately defaced and dumped in the river by iconoclasts during the Reformation in the 1540s. The closest church is St Mary's parish church (KK019-026115-) c. 100m to the W, with St John's Priory (KK019-026068-) a little further, being c. 200m to the NE. Doyle and O'Meara (2004, 16-19) contend that the these monuments may have been seen as a convenient supply of stone, and were deliberately reused as part of the rubble needed to form a protective apron for the piers of the late medieval bridge. An effigial tomb (overall dims. L 1.92m; Wth 0.49m; T 0.3m), described by Brady (ibid 45.) as a, 'Knightly sarcophagus lid of limestone in two pieces, tapering slightly from shoulders to feet. The figure's head is missing, but details of the shoulders and left side reveal a well executed smooth sculpture that describe a knight dressed in a cloth tunic and wearing a cloak. The remains of a sword scabbard survive at the lower left side. Details of the feet do not survive, as the slab has been repaired in antiquity and mismatching masonry inserted here. The upper surface of the figure is defaced. It is likely that his area would have been occupied with a shield that would have shown the heraldic arms. Date: fourteenth century'. This slab is currently in storage with the National Museum of Ireland (see OF018-205-----). Reference: Brady, N. 2004 Archaeological investigation and excavation John's Bridge, Kilkenny: River Nore flood alleviation scheme. Excavation licence no. 01E0036. The Archaeological Diving Company Ltd. Unpublished final report. Compiled by: Jean Farrelly Date of upload: 17 January 2023

Appendix 2: Excavations.ie summaries

Name	*Licence & Author*	*Summary*
Kilkenny, Banks of the River Nore	Ian W. Doyle 01E0821	During 2003 the River Nore (Kilkenny City) Drainage Scheme commenced widening the existing banks of the Nore as it passed through Kilkenny city. During the monitoring of river widening, archaeological material was uncovered at four locations along the left, or eastern, bank of the river. The remains included post-and-wattle fences adjacent to the swimming pool and Peace Park on John's Quay/Mayor's Walk, the remains of a circular stone tower downstream of John's Bridge in College Park, and the northern landfall of Ormonde Weir, also in College Park. John's Quay A deposit of rough cobbles and pebbles, possibly representing the remains of a pathway to the water's edge, was uncovered at Site A (50677 56299). The limited remains were revealed at the southern end of the area examined and measured 2.5m east–west by 1.7m as exposed. A post-and-wattle fence was constructed across the area examined. This fence was exposed for a length of 10m north–south, with a height of 0.5–0.9m. This fence post was constructed against the eastern side of the stone bank to the southern end of the site and appeared to terminate at this point. This suggests that they may be contemporary. A horizontal timber beam, which measured 4.3m north–south by 0.25m thick, was exposed against the western side of the wattle. This may have been placed there to give additional strength. Following the partial collapse outwards of the post-and-wattle fence, the area surrounding it silted over. This silting was represented by a deposit of dark-grey, fine clayey silt alluvium, with occasional peaty inclusions and almost no stones. The deposit was recorded over an area measuring 20m north–south by 2m, as exposed. Artefacts recovered from this material included 18th–20th-century pottery and glass. Subsequent to this, three rows of stakes were made to the west of the wattle fence. It was not possible to establish with certainty which stake row was earlier or later than another. These stakes were sealed by modern overburden. Monitoring of the removal of riverbank along Mayor's Walk, on the eastern bank of the river, exposed additional stretches of post-and-wattle fences (50683 56335). The area examined was located downstream of Green's Bridge and was 60m to the north of the area described above. The earliest activity recorded was a collapsed post-and-wattle fence, which measured 6.05m north–south by 0.68m. Some 0.2m to the west of the collapsed fence, a timber beam, which measured 5.61m north–south by 0.26m, was revealed. Seven stakes were found to pin this beam into place. A second post-and-wattle fence was located some 0.95m to the south-west. This fence measured 7.04m north–south, with a maximum depth of 0.64m. An additional fence was also uncovered, which measured 10.6m north–south and ran across the eastern edge of the site.

Name	*Licence & Author*	*Summary*
		The fences uncovered at John's Quay remain undated at the time of writing, but it is hoped that post-excavation analysis will assist in this. Nevertheless, the fences represent attempts at reclaiming ground from the River Nore. College Park Investigations commenced in August 2003 when a masonry structure was uncovered during the monitoring of river-widening works. The site was located within the County Council grounds in College Park townland, between the adjacent hotel and the eastern arm of Ormonde Weir. The structure was found on the riverbank directly opposite Kilkenny Castle. The remains consisted of a circular masonry tower founded on wooden posts driven into the riverine silts (50917 55777). The earliest deposit exposed on the site was a light to mid-grey compact riverine silt. A single sherd of Kilkenny-type pottery recovered from this layer can be dated to the 13th to 14th centuries. This silt was sealed by a thick deposit of light to mid-orangey-brown, gravelly, silty sand. Two sherds of Kilkenny-type pottery were recovered from this layer, suggesting a medieval date (or later) for its deposition. In order to construct the masonry tower, a cut was excavated into this riverbank material. This vertical-sided cut was only visible against the inner face of the tower wall for a maximum depth of 0.18m. Within the construction cut, a 2.5m-wide deposit of unbonded rubble stone was placed. This was interpreted as a foundation layer, to form the base for the masonry structure. No trace of a construction cut was detected on the exterior face of the structure and it is likely that the continual scouring out and redeposition of riverbank material by the river caused the removal of this. Some 140 wooden posts were revealed at the southern part of the site, adjacent to the river. These posts were visible, as a part of the masonry fabric had been removed during antiquity and immediately prior to discovery when the riverbank was mechanically graded. The stakes formed an arc, which measured 2.5m in width, and these posts indicated the complete circumference of the tower structure. The stakes were between 0.42 and 0.82m long and were driven into riverine deposits. The tops of the stakes corresponded to the base of the unmortared rubble foundation deposit. The stakes were intended to consolidate the riverbank and acted like a mini-pile support structure under the masonry wall. The presence of these posts under the surviving masonry could not be determined, as it was preserved in situ. The main body of masonry wall was most complete at the northern part of the structure. At this point the wall survived to a maximum height of 1m on top of the foundation layer. The exterior face of this wall was stepped, with a maximum of three steps recorded over the foundation. The lowest course was made up of roughly faced, uncoursed, random rubble limestone blocks between 0.1 and 0.3m in size. This step protruded 0.4m from the base of the next step. Above this a second step, 0.3m high and protruding 0.4m, was composed of a mixture of large, roughly squared, and small flat, roughly faced, limestone blocks. The larger stones (0.3–0.6m) formed the main part

Name	*Licence & Author*	*Summary*
		of the step, with the flat stones creating a level top. The uppermost visible step was very worn and probably incomplete, being a maximum of 0.25m in height by a maximum of 1m in width, and comprised large roughly squared and faced limestone blocks. The internal face of the masonry wall did not demonstrate the same stepping or variation in coursing. The foundation layer was visible internally as a rough, unfaced, heavily mortared course 0.4m high, corresponding with the bottom step on the outside. This appears to have been built up against the edge of the construction cut. The wall fabric was bonded with a compact light-grey to white lime-based mortar with occasional burned-shell fragments. Analysis of the mortar revealed it was feebly to moderately hydraulic. The structure had an internal diameter of approximately 5m. A thin lens of mortar was noted abutting the inside wall of the structure. This lens appeared to indicate the point where the internal masonry of the wall changed from the rough and heavily mortared portion built up against the construction cut to the faced masonry visible above ground. Accordingly the mortar layer appeared to indicate the construction period ground surface and the mortar may be contemporary with this activity. The mortar lens was 0.1m thick and extended from the wall into the interior of the structure by over 1.1m. A single sherd of what appears to be 15th/16th-century German stoneware (C. McCutcheon, pers. comm.) was recovered from this deposit. Later activity on this site included the infilling of the area immediately to the west of the structure. This appears to have happened in the post-medieval period. No evidence for demolition rubble was encountered, although robbing and episodic flooding by the river may have removed some of the debris from such demolition. The structure does not appear on any historic mapping or illustration of this area. A preliminary assessment of the date of the structure suggests an early post-medieval date, perhaps during the 15th–16th centuries. This is suggested on the basis of the pottery evidence. A radiocarbon determination from a timber post is expected. The role or function of the structure is open to interpretation. No indication of an adjoining wall, such as would be expected with a mural tower, was uncovered. Indeed, the very location of the tower at the margins of the river, in an area of what was essentially flood-plain, is somewhat enigmatic. The tower may have had a defensive function, given its location directly opposite Kilkenny Castle, or alternatively a more mundane role as a dovecote may be suggested. Indeed, placename evidence may suggest the latter (J. Bradley, pers. comm.). Following excavation and recording, the structure was covered with a protective membrane and backfilled. It now survives in situ beneath the redesigned rock armour. Ormonde Weir As part of the river-widening works carried out on the eastern bank of the River Nore, a considerable amount of riverbank material was removed at College Park. This work revealed part of the weir that crossed the river from Ormonde mills (51021 55800). Ormonde Weir forms part of the Ormonde

Name	*Licence & Author*	*Summary*
		mills complex (Excavations 2001, Nos 710 and 711, 01E1107 and 00E0388 ext.). Previous excavation by Paul Stevens of the weir on the opposite, western, bank determined the construction techniques used but failed to recover any material to date its construction. As part of the investigations in 2003, a 1.5m-wide section was dug through the weir. The exposed structure was found to run parallel to the river, with its eastern end disturbed but visibly terminating. Excavation revealed a single-phase construction. The upper surface was comprised of large, often sub-trapezoidal-shaped, blocks of limestone. The structure had a curved profile, vertical on its northernmost side, before becoming concave on the southern side and sloping down to the river. A deposit of dark-brown, sandy, silty clay was removed to reveal the weir fabric. Beneath the upper stones of the weir, a deposit of tightly packed, small, black and grey, rounded and angular gravels was recorded. This sealed a bank of large, medium and small rounded and sub-rounded stones of mixed geology. This deposit was quite similar to gravels which form the riverbed. Finds from this deposit include two sherds of brown-glazed red earthenware and accordingly suggest an 18th–19th-century date for this context.
Kilkenny, College Park	n/a Heather A. King	Trial trenching was carried out at Kilkenny College in March 1991 in advance of the proposed renovation of the former College for use as Kilkenny County Council Offices and the construction of a new office building and linkway east of the College. It was funded by Kilkenny County Council. The College is situated in the Parish of St John on the east bank of the River Nore. The site consists of the former college buildings and an associated area of open parkland. It is bounded on the east and south by the River Nore, on the north by the culverted millrace of the former Magdalen Mill and on the west by John Street. The house itself is Georgian, constructed in 1782, and is reached through a recessed entrance gate from John Street. The greater part of the site lies outside the suggested line of the medieval defences of St John's (Bradley 1975-6) but part of the site straddles the line of the wall and it includes two or possibly three burgage plots which fronted onto John Street. From an archaeological point of view the site could be divided into three sections. 1. The street frontage and entrance way linking the street with the former college This part of the site was the location of a private house built by the Seix family in the late 16th or early 17th century which was altered in 1666 by the Duke of Ormonde to accommodate the first Kilkenny College. It is shown on Rocque's map of Kilkenny (1758) and can be identified as a Tudor-style building on an 18th-century illustration of Magdalen Castle. It was taken down sometime after the construction of the present building in 1782. It was anticipated that its foundations would survive below street level. A cutting 4.2m x 1.3m was opened immediately inside the entrance gate and

Name	*Licence & Author*	*Summary*
		a mortared wall of roughly coursed rubble limestone, faced externally, was exposed. The wall 1.2m wide, averaged 0.12m in height above a plinth which was 1.64m wide and 0.9m high. A possible cross wall and a layer of cobbling were also located. 15th/14th-century pottery was found in the layer above natural. The interpretation of the cutting was that a layer of 13th-century deposits was cut through by the construction of the Seix house and following its demolition in 1782 a layer of cobbles was laid down. Further cuttings in the College backyard provided evidence for a layer of 13th-century refuse and a later box drain. The proposed development will not interfere with these deposits but it is envisaged that the present gateway will be reset and widened slightly to accommodate vehicular traffic more easily. As it incorporates two rebuilt late 16th or early 17th-century door frames it has been recommended that these should be retained in the new gateway. 2. The line of the town defences which is straddled by the College Two cuttings were made to locate the line of the defences. One was completely disturbed but a stone wall of limestone rubble 0.7m wide and 0.8m high was uncovered in the second. To the east (externally) the stratigraphy was disturbed by sewage trenches and on the west the wall was resting on brown garden soil. The narrowness of the wall and the fact that it was built on brown garden soil suggest that the wall may be a boundary wall rather than the defences of St John's. 3. The area of parkland outside the line of the medieval defences This area, comprising about six acres, is to be extensively landscaped so a large number of trial trenches were opened to check the stratigraphy. The trenching revealed that the area has always been subject to winter flooding and would have been unsuitable for building purposes. Dumps of redeposited 16th- 18th-century material were found in some cuttings along with the insertion of modern drains which suggest repeated attempts to raise the level of the land and drain the ground. References Bradley J., 1975-6, The Town Wall of Kilkenny OKR Vol.1 No.2, 85-103; ibid., No.3, 209-18.
84-89 John St. Lower	95E0053 Margaret Gowen	An archaeological evaluation of a large site at 84–89 John St. Lower, Kilkenny, was carried out in two phases during May and August 1995. The preliminary report on the evaluation of the site comprised an inspection of the standing buildings at 88 and 89 John St. and an examination of mechanically excavated test-trenches throughout the long open garden area at the rear. Further test-trenches were opened to supplement the preliminary work, following a revision of the layout of the proposed development. At present the site is occupied by Bridge House, with a cobbled yard, coach-house and stables at the rear. The remainder of the site comprises two gardens bounded by stone walls. The proposed development includes refurbishment of Nos 88 and 89 John St. and redevelopment of the

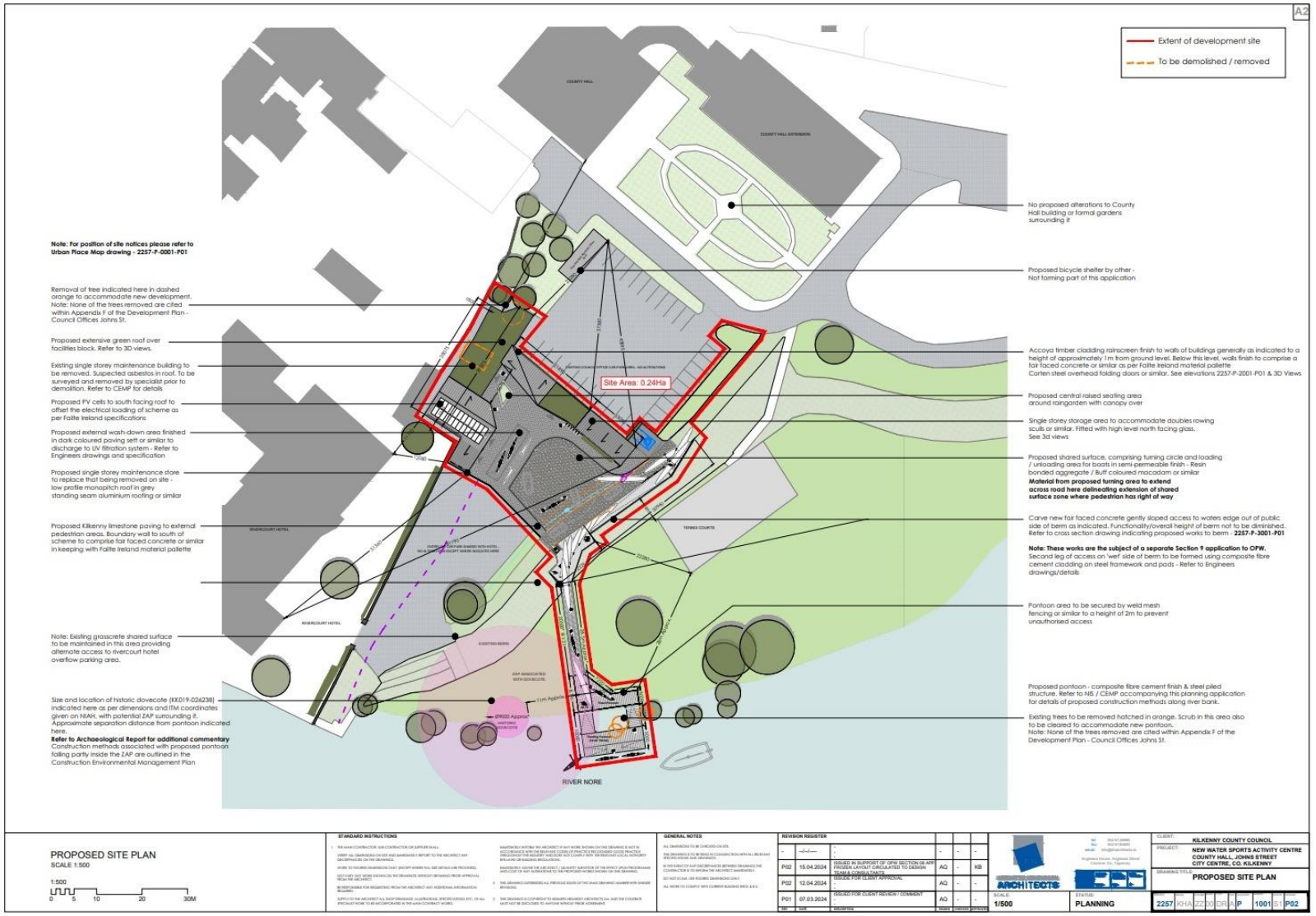
Name	*Licence & Author*	*Summary*
		land to the rear of these buildings. The buildings of Nos 84–87 John St. are not included in the development. The site is located on the east side of the river outside the medieval walled town, but within a walled suburb which originally formed part of the precincts of St John's Priory. Bridge House (Nos 88 and 89) incorporates an earlier stone medieval building, tentatively dated to the late 16th century on architectural grounds, although it may be earlier. In addition, the supposed line of the medieval suburb wall runs along the boundary in the modern property boundaries from the back of Bridge House via Kilkenny College to a small bastion beside No. 89 Maudlin St. The OPW Urban Archaeological Survey records that Bridge House is thought to have been built by the Ormond Butlers, since Charles Butler, Earl of Arran, and brother to the 2nd Duke of Ormond, was in possession of the building in 1704. It was almost certainly the Butlers who rebuilt the house at the end of the century. The site on which the house stands is also thought to have once belonged to St John's Priory and was located within the priory walls. The priory was founded in 1211 by William Marshall for the Canons Regular of St Augustine (also called the Brethren of the Hospital of St John the Evangelist). The monks apparently had an earlier foundation near John's Bridge which continued in use until 1325. When the Priory was suppressed in 1540, the extensive property, including 'a church, belfry, and cemetery, a hall, dormitory, six chambers, a kitchen, store and granary' (Rocque, J., A survey of Kilkenny, 1758), was granted to the Corporation of Kilkenny. In 1645 the Priory was given to the Jesuit Order to establish a college on the site. They occupied the site until 1650. Later the house on this site became one of the dower houses of the Ormond family. Bridge House (No. 89) has a fine 18th-century facade, but much of the fabric of the three other main walls is medieval to second-floor level. A three-storey, Georgian facade with seven steps leading to the double doorcase fronts onto John St. Access to the cobbled yard and outbuildings at the rear is gained through a groin-vaulted entrance. The 16th-century gable with several of the original, hood-moulded window surrounds can be clearly seen, incorporated into the back wall of the existing building. The 16th-century windows are blocked up. The survey of the building included an inspection of the basement and the ground-floor level. In addition, selected sections of the upstanding walls were stripped of plaster to help identify the extent of the medieval remains. On the basis of the preliminary survey three phases of building were tentatively identified. The test-trenching on the site has revealed the following. (i) The open portion of the site behind Bridge House, in the garden area, has no archaeological remains or soils. (ii) The present southern boundary wall is not the late medieval wall and no evidence for the wall was located during the site assessment: the exact line of the medieval wall was not established. It is proposed to construct a carpark in this area and any ground disturbance will require monitoring.

Name	*Licence & Author*	*Summary*
		(iii) The cobbled yard covers the demolished remains of at least one red brick wall which probably dates to the 18th century. Of more significance is a second wall and associated cobbled surface 6m below the present cobbled surface which may date to the late medieval period. In addition, a scar of a wall on the south-east corner of the standing buildings suggests that other late medieval walls may lie beneath present ground level. (iv) The demolished foundations occur in soils that are not rich in archaeological material (i.e. no habitation deposits were noted). Further archaeological assessment will be needed in this area, in advance of any further ground disturbance in the yard area, to establish the nature, location and extent of any other late medieval walls. The preservation in situ of the fabric of the original building will be sought under National Monuments Law and further assessment of proposals for the refurbishment of Bridge House is required.
Bridge House, John Street	95E0053 ext. Edmond O'Donovan	The final phase of an archaeological assessment was carried out on a development site in Kilkenny in February 1998. Five test-trenches were excavated. The site lies on the eastern bank of the River Nore adjacent to and immediately beside St John's Bridge. The suburb is an extension of the main medieval town (Hightown) on the western side of the Nore. This suburb grew up around St John's Priory, which moved to its present location in 1325. John Street is the central axis from which the suburb was laid out (Lanigan, K. and Tyler, G., Kilkenny, its architecture and history, 1987). This continued into the Tudor period, when large stone houses were built. With the redevelopment of the street over the past 400 years many of these buildings have been removed or altered. However, Nos 78/81, the 17th-century residence of a branch of the Fitzgeralds and Shees, survives, as well as Nos 88/89 (Bridge House, the Dower House of the Ormond family). The earliest recorded mentions of town walling around the suburb of St John's occur in the early 16th century, when there are references to a stone and lime wall, with reference to a turret in 1570 (Thomas, A., The walled towns of Ireland, 1992). The suburb is mentioned in Cromwell's account of the siege of Kilkenny in 1650: 'Having possessed the Irishtown, and there being another walled town on the other side of the river (St John's); eight companies of foot were sent over to possess that'. The town wall was evidently in existence from at least the mid-16th century and continued in use through to the end of the 17th century. The line of the town wall has been discussed in detail by J. Bradley (The town wall of Kilkenny, Old Kilkenny Review, parts I and II, 1975–6) and A. Thomas (The walled towns of Ireland, 1992). They both speculated, based on Rocque's map, that the town wall ran along the eastern boundary of the development site. The wall has been positively identified at the north-eastern corner of the suburb. It extends from a small mural tower on Maudlin Street, along the rear property plots of John Street, where it stood at the rear of Nos 68/69 (O'Donovan, E., Unpublished archaeological assessment report, 1997).

Name	*Licence & Author*	*Summary*
		A section of wall enclosing the suburban precinct of St John's was identified in Trench D. It stood 24m south of and parallel to John Street, was 0.43m wide and lined the western edge of a ditch. The wall was 0.19m deep on its western side and 1.7m deep on its eastern side, where it displayed a characteristic basal batter. The ditch outside the wall was 2.5m wide, 0.8m deep and cut into natural boulder clay. The basal 0.3m of the ditch was filled with poorly humified organic material, containing occasional fragments of red brick. A deposit of grey clay, 0.5m thick, sealed this. A thick mantle of demolition rubble made up of mortar, red brick and stone sealed all of the features in the trench. Throughout the assessment a significant number of trenches were excavated in the rear gardens of Nos 85–89 John Street. It was thought that the town wall ran along the south-eastern property boundary of the site (Thomas, ibid. and Bradley, ibid.); however, owing to the identification of the town wall in Trench D, it now appears that the wall is significantly further north-west. The soil profiles recorded in all of the archaeological trenches (apart from Trench D (this assessment) and Trenches 12, 13i and 13ii (previous assessment by Margaret Gowen, Excavations 1995, 49–50) are modern and insignificant. This area can be considered as a river flood-plain that acted as a fallow area outside the town wall in the medieval period, which could be readily defended from the town wall.
Bridge House, John Street Lower	01E1212 Alan Hayden	Two small test-trenches were excavated, and the excavation of a trench for underpinning a modern wall was monitored, in the basement of Bridge House. These revealed the internal spine wall and the original front wall of the late medieval building that formed the northern part of Bridge House. The top of layers of medieval river silt was revealed beneath the buildings. No finds were uncovered.
73-75 John Street	E4417; C523 Paul Stevens	An archaeological impact assessment and monitoring of geological trial pits was undertaken in May, June and October 2012, on behalf of Kilkenny Council and Borough Councils, for a proposed City and County Library development. Assessment comprised a conservation architectural survey (by R. Goodbody) and test trenching in available areas not occupied by standing buildings. This work constituted Phase 1 (pre-demolition) of a two-phase assessment programme. The proposed area of investigations was located to the rear of three-storey buildings fronting John Street, and also partially encroaching into public car-parking bays within College Park. The site lay within the urban area of archaeological potential for Kilkenny (KK019-0026, medieval suburb of St Johns), along the supposed line of the town wall defences, as depicted in 1758 on J. Rocque's map of Kilkenny, and adjacent to No. 73–5, John Street Lower, the site of the 16th/17th-century Seix House and site of the former Kilkenny College building (KK019-00260069). Seven test trenches and three trial pits were mechanically excavated throughout the development footprint area to the rear of 75–76 John Street Lower in Gardens townland and within the County Council car park in Collegepark townland.

Name	*Licence & Author*	*Summary*
		Trenches II, III and pit VII were located either side of a c. 7m-high masonry wall, located on the 'supposed line' of (lost) town wall for the medieval suburb of St John's (KK019-026-001). The upstanding limestone wall measured 0.45-0.57m in thickness, revealed it had patches of (modern) brick, was raised by 2.24m using concrete block and stone repair but was otherwise of uniform limestone-mortared rubble build. Its foundations were slightly splayed and rested on a 1m-wide mortared stone plinth, sealing an archaeologically sterile fluvial clay deposit. Testing revealed no evidence for defensive architectural features or any trace of a large outer fosse, as is usually associated with a defensive town wall. In addition, a small square early 19th-century mill building and millrace were revealed abutting the masonry wall. The mill building walls were limestone mortared rubble with brick-lined opes, built against (and incorporating) the south-eastern face of the masonry wall, and straddled an in-filled millrace which extends south-west to the River Nore, and is depicted on both J. Rocque 1758 and the 1st edition 1841-2 OS maps. Two trenches and a soak pit were excavated within the County Council car park, to the south of the present County Council offices, extending south-east from the development site and line of the town wall. Nothing of archaeological significance was revealed below the c. 0.5m-thick modern car park foundations; the trenches and pit revealed a natural soil profile and an extensive depth of sterile fluvial flood deposits. Three trenches (Trench IV-VI) were excavated to the rear of the building fronting John Street Lower, in plots 75 and 76. These trenches revealed extensive garden deposits and fragmentary limestone or brick boundaries walls, annex walls to garden structures, a brick-cellar, hearths/fireplaces, all of either post-medieval or early modern date. These sealed lower levels of sterile flood deposits across most of the site, with some limited evidence of medieval occupation deposit surviving adjacent to the archway between 75 and 76 John Street Lower. Excavation was discontinued at the rear of the yard to No. 76 due to the presence of a thick concrete slab floor below the tarmac.

Appendix 3: Development drawings




No proposed alterations to existing rubble stone walls surrounding the site.
Provision of 5no. restricted access heated shower/change areas and cleaner store adjacent Universally accessible WC / Standard WCs and Changing Places Facility is also provided opposite
Former storage building on the site to be demolished to accommodate new water sports activity centre. Suspected asbestos in existing roof - to be surveyed and removed by specialist prior to demolition - Refer to CEMP for further details
This area dedicated to external plant items - Refer to Building Services Engineer drawings
Note: Facility generally to be wheelchair accessible with level access threshold available to each of the blocks. Facilities block contains TGD M compliant bathroom, changing & showering facilities in addition to a 'Changing Places' facility. Refer to Floorplan: 2257-P-1100-P01
Trough style washdown area with lockers to reverse side for secure storage of users belongings reverse side of external covered circulation area also secured with roller shutter or similar out of hours
Facility secured out of hours with use of perforated metal overhead roller shutters or similar
Heated drying room - Subdivided by club or similar
Roof overhangs in this area to provide shelter for temporary upright storage of canoes/kayaks against wall while people use showers etc
Boat washdown area - Limestone paving dished locally to discreet stainless steel drainage channel or similar before discharging to collection tank for UV filtration. Refer to Engineers drawings/report for details.
Universally accessible parking bay to be delineated using dark coloured paving slabs or similar in this area
For details of hard / soft ground treatment surrounding buildings please refer to Landscape Plan
Turning area has been designed to cater for emergency vehicle and fire tender. Turning and setdown/unloading area only for car/boat trailer drop off. No parking
No proposed alterations to existing overflow parking area. Scheme to be shielded to 1100mm high.
Existing fence to southern edge to be replaced by 1100mm high cast in situ fairfaced concrete wall or limestone clad wall
No proposed alterations to existing gasscrete shared pedestrian and vehicular surface except where indicated
Note: For details regarding foul / storm drainage please refer to Engineers drawings and report accompanying this application.
Existing tree to be removed in this location as indicated in order to accommodate the proposed building
Existing fence delineating edge of carpark to be removed to accommodate proposed building. Note: Localised storm drainage works required here which will temporarily displace some parking along this edge
Proposed raingarden combined with raised central seating area. Refer to Section BB for details
Covered external space associated with the community space to be provided here. Area secured after hours through use or discreet overhead roller shutter or gates as per Failte Ireland specification. Note: Green roof factors into engineers calculations for rainwater attenuation.
Discreet bike storage for facility users only. Additional bike storage provided elsewhere on site by the council. Refer to Site Plan drawing 2257-P-1001-P01
Single storey storage area to accommodate doubles rowing sculls or similar. Fitted with high level north facing glass. See 3d views
Note: Parking requirement in compliance with the current Development plan to be provided elsewhere by KCC. Refer to Architects Planning Report
Lamp standard to be relocated from this position - Refer to Services Engineer Public lighting layout/report for lighting proposal for the works
Fair faced concrete retaining wall here where access route up and over berm is proposed. Note: Integrity of berm is to be maintained. Refer to Engineers drawings and cross section drawings for further detail.
Note: Proposed works to the berm are the subject of a separate Section 9 application to the OPW.
100mm upstand and stainless steel balustrading with glass infill panels to unprotected edge of sloped acess. Note: Edge protection also required along berm walkway where it occurs in line with sloped access here
Typical existing walkers route indicated here to remain in use. Crossing over pontoon acess path at level landing point as indicated
No proposed alterations to existing tennis courts or surrounding grassed/planted area except where specified
Oversized landing in concrete also to allow for manouevring of larger boats etc. Openings in edge protection allow for walkers route to be maintained. Steps at western corner on desire line to waters edge for smaller craft or pedestrians to comply with TGD M
SITE AREA 0.24Ha
43.65m
43.60m
TENNIS CO
Demolished / Removed / Altered
Proposed Public Lighting
Proposed Constuction
Proposed Enclosed Floor Area
Proposed Covered Circulation
43.70m Proposed Finished Floor Level
Existing Walking Route Maintained
Extent of Existing Low Level Planting
Extent of Existing Grass
Extent of Existing Grassed Berm
Extent of Existing Carpark Area
Extent of Existing Grasscrete
Extent of Proposed Raingarden
Extent of Proposed Shared Surface (Colour Macadam/Bonded Aggregate)
Extent of Proposed Limestone Paving
Extent of Proposed Washdown Area & Accessible Parking Circulation
Extent of Proposed Pontoon Access (Fairfaced concrete path / landing)
Extent of Proposed Pontoon Access (Suspended walkway - Fibre cement)
PROPOSED SITE LAYOUT
SCALE 1:200
1:200
0 1 2 4 6 8 10M
STANDARD INSTRUCTIONS
GENERAL NOTES
REVISION REGISTER
P02 15.04.2024 ISSUED IN SUPPORT OF OPW SECTION 50 APP. / REVISED LAYOUT CIRCULATED TO DESIGN TEAM & CONSULTANTS AQ KB
P02 12.04.2024 ISSUED FOR CLIENT APPROVAL AQ
P01 07.03.2024 ISSUED FOR CLIENT REVIEW / COMMENT AQ
ARCHITECTS
SCALE 1/200
STATUS PLANNING
CLIENT: KILKENNY COUNTY COUNCIL
PROJECT: KCC - WATER SPORTS ACTIVITY CENTRE COUNTY HALL, JOHNS STREET KILKENNY CITY, CO. KILKENNY
DRAWING TITLE: PROPOSED SITE LAYOUT
2257 KIA ZZZZ DR A P 1002 S1 P02

Appendix M – OPW: Section 09 Application – Written Approval (Letter)

OPW Oifig na nOibreacha Poiblí Office of Public Works

Ionad Cothabhála Siltin Regiún an Oirthir
An Baile Nua
Baile Átha Troim
Co. na Mí
C15 K8V0
Telephone: (046) 9431484
(046) 9431352
Fax: (046) 9431451
East Region Drainage Maintenance
Newtown
Trim
Co. Meath
C15 K8V0
Telephone: (046) 9431484
(046) 9431352
Fax: (046) 9431451

Ref- 394-2023

Mr. Brian Healy,
DRA Consulting Engineers,
14 Cresent Mall,
Henrietta Street,
Wexford
Y35 XD1K

Re: Section 9, Kilkenny Water Sports Activity Centre, Kilkenny, (structure location, Kilkenny F.R.S., Embankment E2, ITM 650882, 655861)

Dear Mr. Healy,

I refer to the above Section 9 application received by this office.

The documentation submitted has been examined and based on the Engineers assessment on behalf of the Commissioners of Public Works in Ireland, I confirm the consent of the Commissioners of Public Works under Section 9 of the Arterial Drainage Act, 1995 (as amended) is granted to the proposed steps and a ramp as follows:

The consent is based on the following criteria being met:

- All relevant stakeholders and Local Authorities are to be informed of the proposed works and all relevant approvals and permissions are in place.
- The work proposed on the embankment, is constructed in accordance with the information submitted.
- Detailed method statements, temporary works drawings and construction drawings are provided, to the satisfaction of this office, before work commences.

OPW Oifig na nOibreacha Poiblí Office of Public Works

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Fax: (046) 9431451

It should be noted that consent is granted only for the purpose of Section 9 and does not absolve the recipient of responsibility for any adverse effects caused by this installation to any third party.

The Commissioners of Public Works are not responsible and accept no liability for any loss or damage whatsoever caused as a result of this development. The Commissioners of Public Works must be informed of any amendments/alterations to the approved application before the works are undertaken.

Signed on behalf of the Commissioners of Public Works in Ireland.

Yours sincerely

Nora Carey

August 1st 2024
Flood Project Management

Appendix N – Notices Issued to Prescribed Bodies (copies)

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

An Coimisiún Pleanála

64 Marlborough St,

Rotunda, Dublin 1,

D01 V902

Re: Construction of a Water-Based Activity Facility consisting of showers, changing cubicles, toilets, storage spaces, including a new pontoon and associated site works at the Nore River Facilities, County Hall, John Street, Kilkenny City, Kilkenny

A Chara,

The following prescribed bodies has been notified, by letter dated 23rd June 2026, of the lodgement of an application to An Coimisiún Pleanála seeking approval for the construction of a Water-Based Activity Facility located within the grounds of County Hall at John Street, Kilkenny City, Co. Kilkenny:

- Minister for Housing, Local Government & Heritage
- Environmental Protection Agency (EPA)
- National Parks & Wildlife Service
- Heritage Council
- An Taisce
- Uisce Eireann (UE)
- Waterways Ireland
- Kilkenny County Council
- Southern Regional Assembly
- Failte Ireland
- Dept of Culture, Communications & Sport
- An Comhairle Ealaíon (The Arts Council)
- Office of Public Works (OPW)
- Irish Sports Council
- National Disability Authority
- Land Development Agency
- Sport Ireland

Kind Regards,

Mark McGarry

Executive Engineer

Kilkenny County Council / Comhairle Chontae Chill Chainnigh

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Minister for Housing, Local Government & Heritage

Development Applications Unit,

Department of Housing, Local Government and Heritage,

Custom House,

Dublin, D01 W6X0

23rd June 2026

NOTICE OF APPLICATION FOR APPROVAL TO AN COIMISIUN PLEANALA, SECTION 177AE OF THE PLANNING 7 DEVELOPMENT ACT 2000 (AS AMENDED)

Re: Construction of a Water-Based Activity Facility consisting of showers, changing cubicles, toilets, storage spaces, including a new pontoon and associated site works at the Nore River Facilities, County Hall, John Street, Kilkenny City, Kilkenny

A Chara,

Pursuant to Section 177AE of the Planning & Development Act 2000 (as amended), and the requirements of the of the Planning & Development Regulations 2001 (as amended), we hereby give notice that an application, including a Natura Impact Statement (NNIS) and the relevant plans and particulars, for a proposed development comprising the construction of a water-based activity facility consisting of showers, changing cubicles, toilets, storage spaces, including a new pontoon and associated site works at the Nore River Facilities, County Hall, John Street, Kilkenny City, Kilkenny will be submitted to An Coimisiún Pleanála.

The Natura Impact statement, including the plans and particulars for the proposed development, will be placed on public display from **Wednesday 1st July – Wednesday 12th August 2026**

Submissions or observations with respect to the proposed development may be made to An Coimisiún Pleanála in relation to:

1. The implications of the proposed development for proper planning and sustainable development in the area concerned
2. The likely effects on the environment of the proposed development; and,
3. The likely significant effects of the proposed development on a European site, if carried out.

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Submissions or observations should be made in writing to **An Coimisiún Pleanála**, 64 Marlborough Street, Dublin 1, D01 V902 no later than 17:30 hrs on the **12th August 2026**.

The Natura Impact Statement and the plans and particulars of the proposed development will be available to view and/or download via the website of Kilkenny County Council : https://consult.kilkenny.ie/ from the **1st July to the 12th August 2026.**

If you have queries or require a hard copy of the Natura Impact Statement and the plans and particulars of the proposed development, please contact:

Mark McGarry, Executive Engineer, Capital Delivery Office & Parks Department

Kilkenny County Council / Comhairle Chontae Chill Chainnigh

Email: mark.mcgarry@kilkennycoco.ie

Office: 056-7794437

Your sincerely

Tim Butler

Director of Services, Planning, Town Regeneration, Community & Economic Development.

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Environmental Protection Agency (EPA)

PO Box 3000,

Johnstown Castle Estate,

Co. Wexford,

Y35 W821

23rd June 2026

NOTICE OF APPLICATION FOR APPROVAL TO AN COIMISIUN PLEANALA, SECTION 177AE OF THE PLANNING 7 DEVELOPMENT ACT 2000 (AS AMENDED)

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R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

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Kilkenny County Council / Comhairle Chontae Chill Chainnigh

Email: mark.mcgarry@kilkennycoco.ie

Office: 056-7794437

Your sincerely

Tim Butler

Director of Services, Planning, Town Regeneration, Community & Economic Development.

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

National Parks & Wildlife Service

90 King Street North,

Dublin 7,

D07 N7CV

23rd June 2026

NOTICE OF APPLICATION FOR APPROVAL TO AN COIMISIUN PLEANALA, SECTION 177AE OF THE PLANNING 7 DEVELOPMENT ACT 2000 (AS AMENDED)

Re: Construction of a Water-Based Activity Facility consisting of showers, changing cubicles, toilets, storage spaces, including a new pontoon and associated site works at the Nore River Facilities, County Hall, John Street, Kilkenny City, Kilkenny

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Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

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Kilkenny County Council / Comhairle Chontae Chill Chainnigh

Email: mark.mcgarry@kilkennycoco.ie

Office: 056-7794437

Your sincerely

Tim Butler

Director of Services, Planning, Town Regeneration, Community & Economic Development.

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Heritage Council

Church Ln, Gardens,

Kilkenny,

R95 X264

23rd June 2026

NOTICE OF APPLICATION FOR APPROVAL TO AN COIMISIUN PLEANALA, SECTION 177AE OF THE PLANNING 7 DEVELOPMENT ACT 2000 (AS AMENDED)

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Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

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Email: mark.mcgarry@kilkennycoco.ie

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Your sincerely

Tim Butler

Director of Services, Planning, Town Regeneration, Community & Economic Development.

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

An Taisce

Tailors Hall,

8 Back Ln, The Liberties,

Dublin 8, D08 X2A3

23rd June 2026

NOTICE OF APPLICATION FOR APPROVAL TO AN COIMISIUN PLEANALA, SECTION 177AE OF THE PLANNING 7 DEVELOPMENT ACT 2000 (AS AMENDED)

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Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

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Email: mark.mcgarry@kilkennycoco.ie

Office: 056-7794437

Your sincerely

Tim Butler

Director of Services, Planning, Town Regeneration, Community & Economic Development.

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Uisce Eireann (UE)

PO Box 860,

South City Delivery Office,

Cork City

23rd June 2026

NOTICE OF APPLICATION FOR APPROVAL TO AN COIMISIUN PLEANALA, SECTION 177AE OF THE PLANNING 7 DEVELOPMENT ACT 2000 (AS AMENDED)

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R95 A39T

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Kilkenny County Council
County Hall John Street Kilkenny
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Creating Sustainable Communities and Places

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Office: 056-7794437

Your sincerely

Tim Butler

Director of Services, Planning, Town Regeneration, Community & Economic Development.

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Waterways Ireland

2 Sligo Road,

Enniskillen,

Fermanagh,

BT74 7JY

23rd June 2026

NOTICE OF APPLICATION FOR APPROVAL TO AN COIMISIUN PLEANALA, SECTION 177AE OF THE PLANNING 7 DEVELOPMENT ACT 2000 (AS AMENDED)

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R95 A39T

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Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

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Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Kilkenny County Council

County Hall,

John Street Lower,

Kilkenny,

R95 A39T

23rd June 2026

NOTICE OF APPLICATION FOR APPROVAL TO AN COIMISIUN PLEANALA, SECTION 177AE OF THE PLANNING 7 DEVELOPMENT ACT 2000 (AS AMENDED)

Re: Construction of a Water-Based Activity Facility consisting of showers, changing cubicles, toilets, storage spaces, including a new pontoon and associated site works at the Nore River Facilities, County Hall, John Street, Kilkenny City, Kilkenny

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Comhairle Chontae Chill Chainnigh
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R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

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Mark McGarry, Executive Engineer, Capital Delivery Office & Parks Department

Kilkenny County Council / Comhairle Chontae Chill Chainnigh

Email: mark.mcgarry@kilkennycoco.ie

Office: 056-7794437

Your sincerely

Tim Butler

Director of Services, Planning, Town Regeneration, Community & Economic Development.

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh
R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Southern Regional Assembly

Assembly House,

30 O'Connell St,

Waterford,

X91 F8PC

23rd June 2026

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Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Failte Ireland

88 - 95 Amiens Street,

Dublin 1,

D01 WR86

23rd June 2026

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R95 A39T

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Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Dept of Culture, Communications & Sport

Leeson Lane,

Dublin,

D02 R5Y3

23rd June 2026

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Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
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Creating Sustainable Communities and Places

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Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

An Comhairle Ealaíon (The Arts Council)

70 Merrion Square S,

Dublin 2,

D02 NY52

23rd June 2026

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Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
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Creating Sustainable Communities and Places

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R95 A39T

Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Office of Public Works (OPW)

Jonathan Swift Street,

Trim,

Co Meath,

C15 NX36

23rd June 2026

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Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Irish Sports Council

Top Floor Block A,

Westend Office Park,

Blanchardstown,

Dublin 15

23rd June 2026

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Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

National Disability Authority

NDA,

25 Clyde Road,

Dublin 4,

D04 E409

23rd June 2026

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Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Land Development Agency

George's Court,

54-62 Townsend St,

Dublin 2,

D02 R156

23rd June 2026

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Pobail agus Áiteanna Inbhuanaithe a Chruthú

Kilkenny County Council
County Hall John Street Kilkenny
R95 A39T

Creating Sustainable Communities and Places

Sport Ireland

The Courtyard, Sport Ireland Campus,

Snugborough Road, Blanchardstown,

Dublin 15, D15 PNON

23rd June 2026

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Your sincerely

Tim Butler

Director of Services, Planning, Town Regeneration, Community & Economic Development.

Appendix O – Platforms for Growth – A Programme for Tourism Investment (Failte Ireland)

KILKENNY COUNTY COUNCIL

Fáilte Ireland

PLATFORMS FOR GROWTH

A Programme for Tourism Investment

2019 – 2025

Platform 2: Facility Centres for Water Sports Activities

-Supporting Documentation

Introduction

'Platforms for Growth' is Fáilte Ireland's new multi-annual capital investment programme designed to support Fáilte Ireland's strategic imperative of Building Brilliant Visitor Experiences. Platforms for Growth is part of the Grants Scheme for Large Tourism Projects 2016 – 2020. It is Fáilte Ireland's intention to base our future investments in large-scale capital projects on 'platforms' over the medium term. This is the second 'platform' to invite applications under the Platforms for Growth Investment Programme. This platform will enable sector growth and support the recovery of Irish tourism.

Background

In order to be recognised internationally as a best-in-class activity destination, it is crucial that Ireland invests in compelling activity infrastructure, the visitor experience and building the capacity of the activity providers to ensure the Irish experience meets and exceeds visitor expectations. With a temperate climate, Ireland has the potential to offer high-quality outdoor experiences for a minimum of nine months of the year, however, the quality of activity experience currently lags behind international standards due to the lack of adequate visitor facilities and an ad hoc approach to the delivery of activity experiences.

This scheme is designed for Local Authorities only and is anticipated to deliver an appropriate range of new activity visitor facilities around the country via a collaborative approach. The outcomes Fáilte Ireland is aiming to achieve with the addition of activity visitor facilities are all-weather changing facilities at existing water sports locations, the key components of which will be;

- sustainable and accessible design
- toilet provision
- shower provision
- changing provision
- secure storage
- induction space
- external terrace
- equipment washdown facilities
- orientation points and security

The facilities are likely to be a combination of new builds or appropriate repurposing of existing facilities on the identified sites.

Audit of Activity providers

In order to align the scheme with the strategic objectives of investment in activity tourism infrastructure and experiences, Fáilte Ireland conducted a spatial mapping exercise to identify potential priority locations and suitable sites for the development of an Activity Facility Centre. This mapping identified a range of 'activity hotspots' and clusters across the country that are considered to have the potential to become significant 'activity hubs'.

When conducting the spatial mapping, a series of criteria were applied to the exercise. It was a requirement that the potential locations and sites identified comprised or displayed particular features and characteristics. These included (but were not limited to) the following:

• Candidate locations should include two or more commercial water sports activity operators.

• Candidate locations must be at or in close proximity to Blue Flag or Green Coast beaches or a Blueway or well-established destinations for water sports activities.

• Candidate locations should be in close proximity to other visitor provision such as accommodation facilities, food and beverage outlets/services, visitor attractions and other visitor experiences, and other things to see and do in the locality

Site shortlisting process

Fáilte Ireland initially identified 136 eligible locations. This long list was distilled down to a shortlist of 22 locations. This was done in consultation with three key stakeholders; Fáilte Ireland's local programme team, Industry representatives and the Local Authorities. Please note that there are now 20 perspective sites.

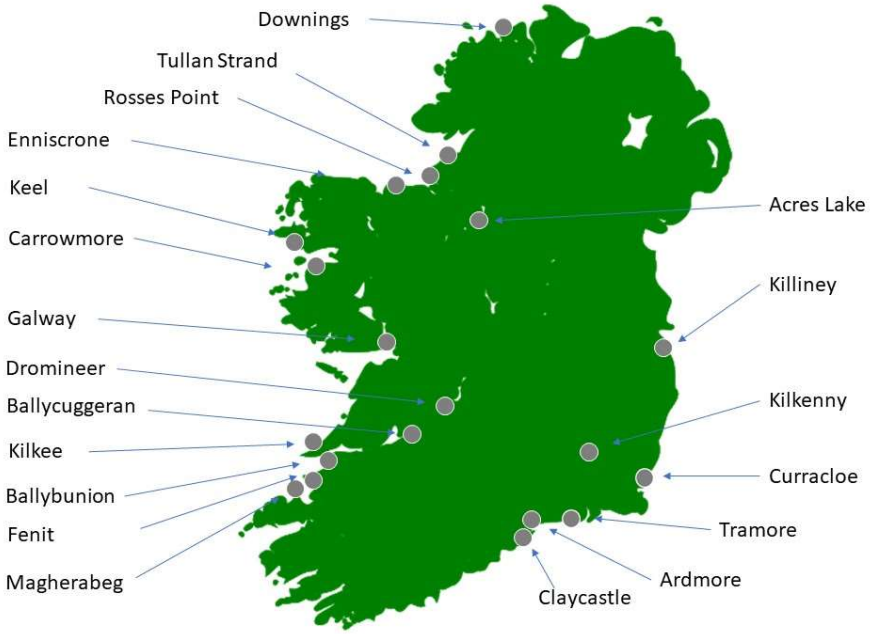
Programme Team Consultations
The "long list" of potential locations was shared with and discussed with Fáilte Ireland programme Teams to reinforce and verify the list of identified locations, taking into consideration the local knowledge, alignment with VEDP's, destination priorities and Local Authority capacity. This engagement further refined the list and identified a number of locations for further investigation and formed the basis for the Local Authority consultation phase. Ongoing dialogue continued with the Programme Teams throughout the design of the scheme.

Industry Engagement
A representative sample of industry providers specialising in water sports in the candidate locations were interviewed to ascertain the gaps and opportunities in the delivery of best-in-class water-based visitor activities. At least two letters of support from water sport operators, from each candidate location, were included in the Local Authorities' initial application.

Local Authority Engagement
Conversations were had with a number of Local Authorities as part of the scoping phase of the scheme. This confirmed the need and appetite for the scheme. More detailed engagement with Local Authorities examined each prospective site in detail. In December 2020 the Local Authorities were invited to formally nominate sites which were subsequently evaluated against eligibility criteria by Fáilte Ireland's Investment Analysis Division.

Environmental Constraints & Opportunities
Fáilte Ireland developed a four phased environmental assessment approach to contribute to the site selectin process. Further details on this approach can be viewed under "Environmental *Assessment"*

Final site locations



Exemplar Design (modify for sites that are only using design points)

The concept and strategy behind the scheme's design-led approach was to appoint one design team (procured by Fáilte Ireland) that developed universal and standardised design options for all of the Activity Facility Centres delivered under the scheme, but which can be adapted to suit individual location and site specifications (size, dimensions, capacity, etc.) as well as the surrounding environment and landscape.

The design-led approach is anticipated to deliver the following benefits:

• A consistent approach to activity visitor product, service, and experience provision across the country (including minimising possible variance in provision between different locations and sites)

• A readily recognisable facility by way of its physical structure and composition and associated branding

• An 'off-the-shelf' exemplar design solution informed through stakeholder consultation and engagement and 'proof of concept'

• A collaborative approach with Local Authorities, Activity Operators and key stakeholders with robust, ongoing support and expertise from Fáilte Ireland

• Cost savings due to economies of scale and efficiencies in delivering the Activity Facility Centres

Design development

An outline brief was created by Fáilte Ireland which informed the project aspirations. MCA were awarded the contract. Three sample water sport operators were consulted by MCA in order to inform practical elements of the design. A concept design was created based upon a number of clear project aspirations including;

- Structural requirements, robustness, life cycle and reduced maintenance over time
- Sustainable service provision and low running cost
- Universal access – fully accessible regardless of ability or disability
- An aesthetic design which had a clear relationship to and was complementary to its environs



MCA concept design sample

The concept design was presented back to the local authorities for further consultation and a cost check performed by external quantity surveyors in order to ensure that the concept design was affordable within parameters of the Platforms for Growth scheme.

This Exemplar Design was shared with the Local Authorities along with a works document which outlines how Fáilte Ireland envision the design to be used. The level of detail shared with each authority constitute design intent. It is intended that each authority adapt the Exemplar Design to each site context. A set of design points within the works document specifies key features which are to be retained irrespective of any other adaptations. This will help to ensure a level of brand consistency across all site locations.

Environmentally Sustainable principles of Design/Build

As a condition of the investment grant scheme, all new build facilities are required to conform to nearly zero energy building standards and be appropriately and sensitively designed to integrate with the site's natural environment and surrounding location. The facility should be built to the highest possible environmental specifications, including the following solutions:

- The development of carbon neutral buildings
- The use of sustainable building materials that are sourced locally (projects should use recycled building material where possible)
- The use of solar heating panels for hot water
- The use of windows and natural daylight to reduce the need for electricity usage
- Being sympathetic to the environment and landscape of the selected location and site
- Planting trees and native plants on the site
- Installing high efficiency utilities
- Construction stage environmental management plan
- Consideration for innovative and sympathetic construction methodologies e.g., floating foundations

The above solutions are not an exhaustive list, and Local Authorities are encouraged to adopt any further appropriate and environmentally sound actions and measures for the ongoing management and operation of the facility.

Management and Maintenance

The concept behind the scheme's collaborative design-led approach is to drive innovation, create efficiencies, leverage economies of scale and deliver a consistent, world class experience for visitors. The investment grant scheme proposes that following the initial capital investment by Fáilte Ireland in the construction and fit-out of the facility centre, the Local Authority will own, operate, maintain, and reinvest in the facility.

It will be a condition of an award of investment grant funding that the Local Authority agrees to enter into a Management Agreement for the ongoing management cleaning, maintenance, and repair of the facility centre to ensure its upkeep to the highest possible standards and the facilitation and promotion of users' health and hygiene.

The Management Agreement will be put in place for the term of the investment, a period of 15 years.

Fáilte Ireland and Local Authorities recognise that these facilities should be of the highest hygiene standards to meet and preferably, exceed visitor expectations at all times. This will require a consistent approach to the day-to-day operation and maintenance of the facilities.

As such, a Standard operating procedure (SOP) for cleaning and maintenance of the facility will be established as a condition of the Investment Grant Agreement in line with industry best practice and will contain a detailed cleaning and hygiene of the facility including specifications for cleaning, minimum cleaning frequencies and maintenance responsibilities.

The facility should be visited, inspected, and cleaned in accordance with this cleaning schedule, in order to ensure compliance with the standard operating procedure and grant terms and conditions. SOP's will be developed based on environmentally sustainable best practice.

Environmental Assessment

Note : This section deals primarily with Failte Irelands approach to the Habitat Directive Assessment (the likely significant effects on a European Site) and all other environmental considerations beyond the Directive should be detailed as part of your application as set out in the relevant ABP Guidelines for Local Authorities. Refer to section 3.2 of the Guidelines for further information.

Fáilte Ireland developed a four phased approach to ensuring that environmental protection and promotion form an integral element of the development, assessment and implementation of this Platforms for Growth and resulting proposed facility.

An initial list of 47 potentially suitable sites were considered under this Platform for Growth and this environmental approach contributed to refining the final list of proposed sites to 21

In developing this approach, it was intended that the following are achieved:

- The Platform is in line with the VICE Model for Sustainable Tourism Development
- Compliance with all required environmental legislation & regulation
- Aid the applicants in choosing suitable sites
- Contribute to suitable design, siting, construction & operation of facilities
- Ensure full compliance with the Habitats Directive i.e. consider the requirement for Appropriate Assessment for each site that is considered under the Platform
- Develop environmental mitigation and monitoring that will be implemented during both development & operation

The following are a summary of the four phases

Phase 1 – Environmental Opportunity & Constraints Assessment

- Scope: Desktop review of initial list of sites resulting in matrix table and categorising sites through a traffic light system
- Purpose: To aid local authorities to refine site list.
- Output: Traffic Light Matrix for all sites
- Parameters Considered:

- Ecological Sensitivities: SAC/SPA, Annex I habitats present, known threats & pressures to the ecology at that site.
- Planning Issues
- Archaeology
- Landscape/ Scenery
- Traffic
- Water Services

A traffic light system was used to categorise the sites according to the following criteria:

Green	Mild Amber	Deep Amber	Red
No obvious ecological constraints	Ecologically sensitive site with potential to be managed appropriately	Ecologically sensitive site which may provide supporting habitat for protected species.	Clear ecological constraints are evident

Phase 2: Site Visits – Site Visit & Habitat Assessments

- Scope: Ecologist to visit sites from refined list in order to carry out detailed habitat and environmental mapping
- Purpose: - To determine further site constraints and opportunities
- To gather relevant information required for future appropriate assessments
- To review current site issues (e.g. traffic, wastewater, other site activities) beyond ecology
- To offer input to design process –suitable locations, environmental solutions etc.
- Output 1: Habitat & Environmental Mapping for each site
- Output 2: Update & finalisation of Environmental Opportunity & Constraints Assessment

Phase 3 – Further Detailed Surveys for the Purposes of the Habitats Directive

- Scope: Complete specialist ecological surveys for sites that identify the requirement for same form Phase 1 and 2 e.g. wintering bird surveys
- Purpose and Output: To ensure all required survey work is completed on sites going forward in the scheme in order to fully inform the Appropriate Assessment (AA) process if required for that site.

Phase 4 – Appropriate Assessment

- Scope: Having consideration for Phase 1, 2 & 3 and for the application sites consider requirements under the Habitats Directive e.g. AA Screening & possible full Appropriate Assessment.
- Purpose:
- To ensure the scheme is compliant with the requirements of the Habitats Directive
- To develop where required compliance requirements through mitigation & monitoring
- To aid in streamlining the consent process for each applicant

- Output 1: Appropriate Assessment Screening – Screened Out - Part 8 Planning
- Output 2: Appropriate Assessment Screening - Screened in - Full Appropriate Assessment Report – Section 177AE – Application to the Board.

Policy context

National Level

Project Ireland 2040 National Planning Framework

The National Planning Framework (NPF) The NPF is the overarching planning policy for the state (published in February 2018 under Project 2040) and contains ten National Strategic Outcomes and 75 National Policy Objectives. This planning framework sets out where development and investment should be guided to shape the national, regional and local spatial development in economic, environmental and social terms to 2040. A National Strategic Outcome prescribed in the NPF is 'Enhanced Amenities and Heritage' with the objective to;

Invest in and enable access to recreational facilities, including trails networks, designed and delivered with a strong emphasis on conservation, allowing the protection and preservation of our most fragile environments and providing a wellbeing benefit for all.

National Tourism Policy 2015: 'People, Place and Policy: growing Tourism to 2025'

The Department of Transport, Tourism & Sport published national tourism policy in March 2015 entitled ''People, Place and Policy: growing Tourism to 2025'.

The National Tourism Policy notes that to provide an effective tourism product, there must be a diverse range of activities for visitors. While much of our attractiveness as a tourism destination is down to the natural environment, since the early 1990s, the State has supported the development and improvement of our place by investing in our physical visitor attractions, visitor infrastructure, and facilities for visitor activities.

Policy Proposal 1.3.3 states: The design of future supports for capital investment in tourism will recognise the need for investment in both physical assets and in other areas that provide a lasting improvement in the overall quality of the visitor experience.

In order to be recognised internationally as a best-in-class activity destination, it is crucial that Ireland invests in compelling activity infrastructure, the visitor experience and building the capacity of the activity providers to ensure the Irish experience meets and exceeds visitor expectations. It is considered the proposed development is critically important to implementing on a key national tourism policy.

National Marine Planning Framework

The NMPF contains a vision, objectives, and planning policies for all marine-based human activities. It outlines how those activities will interact with each other in an increasingly pressured ocean space. It is to be the key decision-making tool for Government departments, State agencies, regulatory authorities, and policy makers for decisions on marine activities up to 2040.

The NMPF has numerous objectives and planning policies which supports the development of tourism, tourism facilities and improved access.

Key Objectives of the NMPF are to;

- Increase participation in a range of water-based sports and recreation activities for the benefit of public health and wellbeing, as well as developing our tourism offering.

- Position Ireland as a world-class sustainable coastal and marine tourism destination through the sustainable development of coastal and marine recreation activities and industries in Ireland.

A number of planning policies support the proposed development

Tourism Policy 1

Where appropriate, proposals enabling, promoting or facilitating sustainable tourism and recreation activities, particularly where this creates diversification or additional utilisation of related facilities beyond typical usage patterns, should be supported.

Sport & Recreation Policy 1

Proposals that promote sustainable development of water-based sports and marine recreation, while enhancing community health, wellbeing and quality of life, should be supported, provided that due consideration is given to environmental carrying capacities and tourism pressures.

Sport & Recreation Policy 4

Proposals that improve access to marine and coastal resources for tourism activities, and sport and recreation should be supported, where appropriate, at the applicable scale and aligned with existing development plans.

Access Policy 2

Proposals demonstrating appropriate enhanced and inclusive public access to and within the maritime area, and that consider the future provision of services for tourism and recreation activities, should be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policies and objectives of this NMPF.

The principal statutory purpose of the RSES is to support the implementation of Project Ireland 2040 and the economic policies and objectives of the Government by providing a long-term strategic planning and economic framework for the development of the Eastern and Midlands, Northern and Western and the Southern Regions. The development of Regional Strategic Outcomes in the RSES is also closely aligned and supportive of both the NSO's prescribed in the NPF and the UN Sustainable Development Goals.

(EMRA) Applicable for the following counties – DLRCC/Louth

Tourism is a key growth enabler for the Dublin, Core and Gateway region as highlighted in section 3.2

"*Promote the Region as a key destination for tourism, leisure and recreation activities and support the development of an integrated network of greenways, blueways and peatways while ensuring that high value assets and amenities are protected and enhanced."*

The importance of investing in tourism product is clearly outlined in section 6.5 of the RSES and is supported by the following Regional Policy Objectives:

RPO 6.7: Support local authorities to develop sustainable and economically efficient rural economies through initiatives to enhance sectors such as agricultural and food, forestry, fishing and aquaculture, energy and extractive industries, the bioeconomy, tourism, and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage.

RPO 6.8: To support the sustainable development of tourism in the Region in line with the strategic objectives of both Ireland's Ancient East and Ireland's Hidden Heartlands experience brand propositions.

RPO 6.16: Support working with relevant landowners and recreational/ tourism agencies to increase access to the countryside and coastal areas to ensure maintenance of the existing network.

(SRA) Applicable for the following counties:

Wexford/Waterford/Kilkenny/Tipperary/Clare/Cork/Kerry

The Southern Regional RSES highlights that the region has a significant share of Ireland's premier tourism resources – both natural and man-made. The RSES recognises that a successful tourism sector creates significant benefits for many other sectors such as agriculture, food and drinks, transport and retail. The RSES supports the Department of Rural and Community Development's Action Plan for Rural Development (APRD) which seeks to increase tourist numbers to rural Ireland, support sustainable jobs through targeted rural tourism initiatives, develop activity tourism and leverage natural and built heritage assets. (Section 4.6)

The proposed development is supported by Regional Policy Objective 53

It is an objective to:

- ***a) Enhance provision of tourism and leisure amenity to cater for increased population in the Region including recreation, entertainment, cultural, catering, accommodation, transport and water infrastructure inter alia;***
- ***b) Promote activity tourism subject to appropriate site selection and environmental assessment processes;***

(NWRA) Applicable for the following counties – Donegal/Leitrim/Sligo/Mayo/Galway

It is a strategic objective of the Northern & Western Regional RSES to ensure across the family of Fáilte Ireland Brands that this region ensures adequate investment in the following areas:

1. Visitor Experience Development: Capital investment in flagship tourism products that can create scale.

2. Visitor Awareness: Experiences, products and places are appropriately and comparably marketed and that IWAK and our key seaports are promoted as international access points.

3. Enablers: Resources, Capital Programme and Capacity Building are three requirements to address the imbalance in tourist visitor numbers.

New proposals for activity tourism, particularly in rural areas, National Park's, uplands, coasts and rivers is a key element of the tourism strategy of the RSES (section 4.4 page 154)

The proposed development is supported by the following Regional Policy Objectives;

RPO 4.1

To support working with relevant landholders and recreational/tourism agencies to increase access to the countryside and our coastal areas, and to ensure maintenance and access to the existing network of trails, paths, ways etc.

RPO 4.12

Develop the water-based leisure sector in the region in a sustainable manner making the best use of existing and planned infrastructure and resources, in a manner that is sensitive to the natural and cultural heritage resources

County Development Plan

Each Local Authority to populate as appropriate also noting their Draft Plan if in preparation which may have specific supporting policies for these facilities.

County Tourism Strategy

Each Local Authority to populate accordingly

Appendix P – Visitor Management Plan (Ross Swift Ecology Ltd)

ROSS SWIFT ECOLOGY LTD.

VISITOR MANAGEMENT PLAN



Nore River Facilities Kilkenny

Kilkenny County Council
Comhairle Chontae Chill Chainnigh

DOCUMENT CONTROL SHEET	
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1.0 Introduction and Purpose

This Visitor Management Plan (VMP) sets out the operational controls required to manage visitor access, organised water-based recreation, pontoon use, riverside walking, spectators, school and group visits, events, deliveries, maintenance and incidental public use associated with the Nore River Facilities in Kilkenny. The plan protects the ecological sensitivity of the River Nore corridor, including the River Barrow and River Nore SAC and River Nore SPA, while allowing managed public and activity-provider use of the facilities.

The plan applies to the site operator, activity providers, instructors, clubs, event organisers, maintenance personnel, contractors, visitors, spectators and the wider public. Its core requirements are that visitors remain on approved routes, use only approved launch and landing points, avoid sensitive riverbanks and riparian vegetation, prevent disturbance to protected species, control litter and pollution, apply biosecurity measures and report incidents immediately.



Implementation before routine use:
Before routine operation commences, the site operator shall confirm that approved routes, no-go areas, controlled access zones, signage, pontoon controls, operator induction, visitor briefing material, incident reporting arrangements, spill kits, biosecurity/wash-down arrangements and the site layout appendix are in place and available to relevant staff and operators. The approved wash-down treatment train, including containment of wash-water, any required aquatic disinfectant dosing, silt chamber, UV sterilisation unit, hydrocarbon interceptor and discharge connection to the existing stormwater network, shall be inspected, tested and confirmed to be fully operational before water-based activity begins. Routine water-based activity shall not commence, and boats, boards, paddles or other water-sports equipment shall not be launched from the facility, unless the UV sterilisation unit and associated treatment train are functioning to specification and their operational status has been confirmed and recorded.

2.0 Site Context, Receptors and Visitor Risk Pathways

The principal receptors relevant to visitor management are the River Nore channel and water quality, aquatic fauna, Otter (*Lutra lutra)*, Kingfisher (*Alcedo atthis)*, bat species including Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Leisler's Bat (*Nyctalus leisleri*), Daubenton's Bat (*Myotis daubentonii*) and Brown Long-eared Bat (*Plecotus auritus*), other riparian birds, riparian vegetation, erosion-prone banks, designated European site interests and invasive species pathways.

The River Nore is a sensitive hydromorphological and ecological system. Visitor pressure, including bank trampling, unmanaged launching or landing, informal access, dogs entering the water, litter and accidental pollution, can affect flow patterns, sediment release, turbidity, water quality and the condition of marginal habitats. These changes can reduce ecological function and affect the qualifying interests and special conservation interests associated with the River Barrow and River Nore SAC and River Nore SPA.

Aquatic fauna

Aquatic fauna may include fish, lamprey, freshwater pearl mussel, white-clawed crayfish and macroinvertebrate communities, including Atlantic Salmon (*Salmo salar*), Brook Lamprey (*Lampetra planeri*), River Lamprey (*Lampetra fluviatilis*), Sea Lamprey (*Petromyzon marinus*), Twaite Shad (*Alosa fallax fallax*), Freshwater Pearl Mussel (*Margaritifera margaritifera*), Nore Freshwater Pearl Mussel (*Margaritifera durrovensis*) and White-clawed Crayfish (*Austropotamobius pallipes)* where present or relevant to the designated river system. These receptors are sensitive to changes in water quality, sedimentation, turbidity, accidental pollution, disturbance of marginal habitat and the spread of invasive species or pathogens.

Otter (Lutra lutra)

Otter (*Lutra lutra)* is a qualifying interest of the River Barrow and River Nore SAC and uses river corridors for foraging, commuting, resting and breeding. It is sensitive to human presence, dogs, night-time activity, light spill, noise and repeated disturbance near holts, couches, slides, sprainting areas and riverbank refuges. Visitor management shall therefore prevent access to potential resting places and maintain quiet, undisturbed banks where required.

Kingfisher (Alcedo atthis)

Kingfisher (*Alcedo atthis)* is a special conservation interest of the River Nore SPA and is associated with clean water, suitable perches, fish prey and vertical or friable riverbanks suitable for nesting. It is vulnerable to erosion, bank collapse, close approach, repeated congregation, unauthorised landing and disturbance at nest banks, particularly during the breeding season. Potential and confirmed nesting banks shall be treated as no-go areas and shall not be highlighted on public-facing signage where this could increase disturbance.

Bats

Riparian corridors provide important bat commuting and foraging habitat. Species that may use the river corridor include Common Pipistrelle (*Pipistrellus pipistrellus)*, Soprano Pipistrelle (*Pipistrellus pygmaeus*), Leisler's Bat (*Nyctalus leisleri*), Daubenton's Bat (*Myotis daubentonii*) and Brown Long-eared Bat (*Plecotus auritus*). These species are sensitive to light spill, vegetation loss, disturbance at dusk and fragmentation of dark corridors. The VMP shall therefore avoid unnecessary dusk-to-dawn activity and prevent lighting being directed onto water, trees, riparian vegetation or bat-sensitive corridors.

Other riparian birds

Other riparian birds may include Grey Wagtail (*Motacilla cinerea)*, Dipper (*Cinclus cinclus)*, Grey Heron (*Ardea cinerea*), Mallard (*Anas platyrhynchos)*, Moorhen (*Gallinula chloropus*) and other species associated with riverbanks, emergent vegetation, fish and aquatic invertebrates. Disturbance, dogs, litter, loss of vegetation, bank erosion and repeated close approach can reduce foraging opportunities and breeding success.



Waterfowl and riparian birds are sensitive receptors within the River Nore corridor. Species that may use the river include Mallard (*Anas platyrhynchos*), Teal (*Anas crecca*), Little Grebe (*Tachybaptus ruficollis)*, Mute Swan (*Cygnus olor)*, Grey Heron (*Ardea cinerea*), Cormorant (*Phalacrocorax carbo*) and Dipper (*Cinclus cinclus*). These species rely on quiet river sections, backwaters, marginal vegetation and shallow-water refuges for feeding, nesting, loafing and roosting.

Visitor pressures such as dogs off-lead, bank-side congregation, close approach, noise, watercraft activity, informal bank access, litter, discarded fishing line and food waste can cause flushing, displacement, nest disturbance, reduced feeding efficiency and habitat degradation, particularly during winter, the breeding season and high-flow events. The VMP shall manage these risks through defined access points, dog-control requirements, avoidance of sensitive banks and refuge areas, seasonal or temporary restrictions where required, visitor education, Leave No Trace messaging and the Fáilte Ireland waterbirds good-practice guidance referenced in this plan.





Riparian vegetation and bankside habitats



Riparian vegetation stabilises riverbanks, filters runoff, provides shade, supports invertebrates and creates cover for birds, bats and Otter (*Lutra lutra*). Riparian woodland along the River Nore typically comprises a mix of moisture-tolerant native trees and shrubs, including Willow (*Salix spp.*), Alder (*Alnus glutinosa*) and Ash (*Fraxinus excelsior*), often accompanied by Hawthorn (*Crataegus monogyna)* and Blackthorn (*Prunus spinosa*). Marginal vegetation forms a narrow but ecologically important band along the water's edge, commonly including Reed Canary-grass (*Phalaris arundinacea*), Meadowsweet (*Filipendula ulmaria*), Yellow Flag (*Iris pseudacorus*), Water Mint (*Mentha aquatica*), Purple Loosestrife (*Lythrum salicaria*), Great Willowherb (*Epilobium hirsutum*), Branched Bur-reed (S*parganium erectum*), Reedmace (*Typha latifolia*) and Common Reed (*Phragmites australis*). These riparian and marginal communities play a key role in stabilising banks, filtering runoff and supporting fauna; however, trampling, informal path creation, dog access and equipment storage can significantly reduce vegetation cover, damage root systems and accelerate bank erosion, making them priority receptors within visitor management planning.

Erosion-prone banks

Soft alluvial or friable riverbanks are vulnerable to repeated footfall, bank climbing, dogs entering and exiting the water, informal launching or landing, spectators and craft dragging. Bank collapse or surface erosion can increase sediment loads, damage riparian vegetation, reduce habitat quality and affect fish, macroinvertebrates and kingfisher nesting opportunities. Such banks shall be excluded from visitor access unless specifically designed and approved for access.



Designated European site interests



The River Barrow and River Nore SAC and River Nore SPA form part of the Natura 2000 network. The VMP avoids visitor-related pathways that could undermine the conservation condition of designated habitats and species, including aquatic species, Otter (*Lutra lutra*), Kingfisher (*Alcedo atthis*), riparian habitats, water quality and river corridor function. Visitor controls shall be implemented as mandatory operational requirements and reviewed where monitoring or ecological advice identifies risk.

Invasive species and biosecurity pathways

Visitors and operators can unintentionally spread invasive species, pathogens or contaminants through footwear, dogs, boats, boards, paddles, ropes, trailers, fishing gear, clothing and maintenance tools. Relevant invasive species and biosecurity risks may include Himalayan Balsam (*Impatiens glandulifera)*, Japanese Knotweed (*Reynoutria japonica*), Giant Hogweed (*Heracleum mantegazzianum*), Zebra Mussel (*Dreissena polymorpha*), Curly Waterweed (*Lagarosiphon major*), Water Fern (*Azolla filiculoides*) and Crayfish Plague (*Aphanomyces astaci*), where present or introduced from other waterbodies. Clean-check-dry procedures and controlled wash-down are required to reduce this risk.



These receptors may be affected by repeated footfall outside formal routes, informal launching or landing, congregation on sensitive banks, bank climbing, dog access, noise, light spill, litter, pollution and the transfer of invasive species on boats, boards, paddles, footwear or clothing.

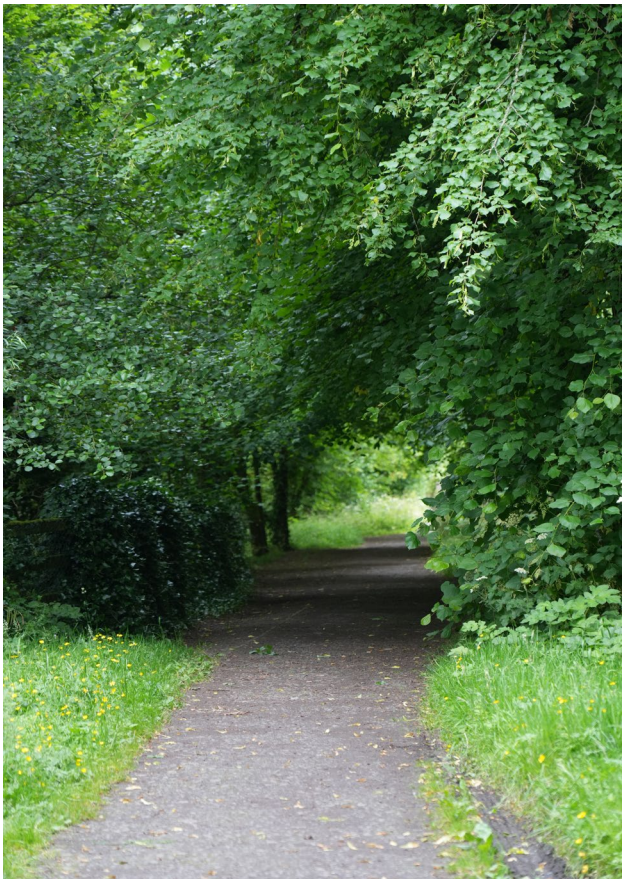
The VMP shall manage these pathways by directing users to approved routes and facilities, preventing access to sensitive banks and riparian vegetation, controlling group size and supervision, restricting unnecessary lighting and noise, applying waste and biosecurity controls, and using monitoring to adapt controls where visitor pressure or ecological risk is recorded.

3.0 Managed Activities and Access Arrangements

Activity	Management requirements
Organised water activities, boat/paddle craft launching, pontoon use and training	Normally 8–20 participants per session, with larger sessions by prior approval only. Activities shall be booked, supervised by a competent instructor or activity lead, use the water activities centre, approved storage, designated access route, raised walkway, pontoon and approved river activity area only, and apply clean-check-dry biosecurity
Riverside walking, spectators, school/group visits and incidental public use	Visitors shall remain on formal paths, hard-standing, designated viewing areas and approved routes. Groups shall normally be limited to 10–30 participants, briefed before activity, supervised where organised, and kept away from riparian vegetation, sensitive banks and pontoon access unless authorised.
Events, demonstrations, competitions and high-intensity activity	Events require prior approval and an event plan covering numbers, routes, stewarding, temporary signage, no-go areas, litter, noise, lighting, emergency access, ecological checks and post-event inspection. Events shall be reduced, postponed or refused where controls cannot protect sensitive receptors.
Fishing and angling-related access	Fishing is not promoted as part of the facility operation and may occur only where lawful public access permits. It shall not involve entry to no-go areas, sensitive banks, riparian vegetation, pontoon access routes during organised activity, or approved launch/landing areas where this would conflict with safe operation. Anglers shall follow IFI, Leave No Trace and biosecurity guidance, avoid disturbance to wildlife, remove all litter and fishing line, and clean/disinfect equipment where required.
Deliveries, loading, maintenance, inspections and emergency access	Use approved hardstanding, service routes and set-down areas only. Contractors shall be briefed on no-go areas, pollution prevention and biosecurity. Emergency access routes shall remain clear at all times

4.0 No-Go Areas, Controlled Access and Pontoon Management

No-go areas comprise riparian vegetation and planted river-edge margins outside formal routes; sensitive riverbanks not forming part of the approved pontoon or launch route; potential otter holts, couches, resting places and slides; confirmed or potential kingfisher nesting banks; bat-sensitive dark river corridors; informal paths, eroded access gaps and desire lines; and any area temporarily closed due to flooding, high flows, storm damage, bank instability, pollution, wildlife disturbance, nesting activity or ecological advice. Visitor access, landing, launching, mooring, congregation, craft dragging, dog access and informal paths are not permitted in no-go areas.



Controlled access zones comprise the water activities centre, storage and wash-down areas, central hardstanding, sloped access path, steps, raised walkway, pontoon, approved launch and landing face, managed waiting areas, approved river activity zone, riverside paths, viewing areas and maintenance/emergency routes. Activities may occur in these zones only in accordance with approved times, supervision requirements and environmental controls.

The pontoon and river access route shall be managed as controlled access infrastructure. All users shall approach the river from the water activities centre, approved storage or set-down areas via the designated hardstanding, sloped path, steps, raised walkway and pontoon route only. Waiting shall occur only in approved hardstanding, terrace, central space or managed waiting areas. Launching and landing shall occur only from the approved pontoon face or other approved point. Mooring shall be short-term only and limited to boarding, disembarkation, safety supervision or emergency response. Craft and equipment shall not be stored, dragged or dried on riverbanks, riparian vegetation, informal paths, the pontoon route or emergency access routes.



5.0 Operator Requirements, Visitor Code and Signage

All operators, clubs, instructors, coaches, event organisers and contractors shall complete an induction and sign-off before using the facilities. They shall brief staff and participants, use only approved routes and access points, avoid sensitive habitats, prevent disturbance to otter, kingfisher, bats and other wildlife, comply with group-size and booking controls, manage noise, avoid unnecessary lighting, control equipment and waste, apply biosecurity, report incidents and stop or modify activities if ecological disturbance or environmental risk is observed.



The Visitor Code of Conduct shall be communicated before arrival where possible and again on arrival through booking information, briefings, signage and staff direction. Visitors shall remain on designated routes, use only approved launch and landing points, avoid riverbanks and vegetation outside permitted areas, keep noise low, avoid unnecessary lighting, take litter home or use designated bins, avoid disturbing wildlife, keep dogs under control where permitted, follow staff instructions and report disturbance, injury, pollution, unauthorised access, uncontrolled dogs, bank damage, littering or unauthorised launching or landing. The Visitor Code shall also state that boats, boards, paddles, footwear, clothing, ropes, trailers, fishing gear and other equipment shall not be launched or used unless required Check, Clean, Dry and wash-down procedures have been completed and the approved wash-down treatment train, including the UV sterilisation unit, is confirmed to be operational.

Signage shall be located at arrival points, the water activities centre, storage/changing areas, pontoon access, raised walkway, riverside paths, viewing areas, event entrances and transition points near sensitive habitats. Signs shall explain the sensitivity of the River Nore corridor, identify permitted and prohibited routes, highlight protected species including otter, kingfisher and bats, and provide simple do-and-do-not messages. Public-facing signs shall avoid identifying exact protected-species locations where this could increase disturbance. Signage at the water activities centre, wash-down area, launch-route entrance and biosecurity information point shall identify the approved wash-down area, summarise Check, Clean, Dry requirements, explain that wash-water must pass through the operational treatment train including the UV sterilisation unit, and state that launching or use of water-sports equipment is prohibited where the UV unit or associated treatment train is not operational, not available or cannot be confirmed as functioning to specification.



Fáilte Ireland has published guidance for people engaged in water sports on inland waterbodies titled Good Practice Behaviours for Water-Based Recreational Users Relating to Waterbirds. This guidance, or any subsequent updated version, shall be made available to all operators, clubs, companies, instructors and organisations using the Nore River Facilities where participants undertake water-based recreation. The information may be provided as the original Fáilte Ireland leaflet or incorporated into site-specific briefing material for the Nore River Facilities and River Nore corridor. The key messages shall also be made available to members of the public through notice boards, printed information, QR codes and web links at the facility. A copy of the leaflet, or a reference to the current online version, is included in Appendix B to this VMP.

6.0 Visitor Numbers, Scheduling, Events and Seasonal Controls

Visitor numbers and activity intensity shall be managed through booking, registration, supervision, scheduled access windows, peak-time controls, quiet periods and ecological stop or reduction procedures. Organised water activities shall normally be limited to 8–20 participants per session; school, youth, community and group visits to 10–30 participants; and training sessions to 4–16 participants unless otherwise approved by the site operator. Larger groups shall be split, staggered or refused where ecological controls cannot be maintained.



All organised activities, events, demonstrations, competitions, school visits and large spectator gatherings shall be booked or registered with the site operator. Records shall include the activity type, operator or group lead, date and time, expected participants and spectators, supervision arrangements, equipment, access route, areas used and ecological controls. Peak periods shall be managed through staggered arrival, briefing, equipment collection, launching, landing and departure. Routine water-based activity shall not occur from dusk to dawn unless separately assessed and approved. Any activity between dusk and dawn will require a full ecological assessment before activity can go ahead.

The site operator may reduce, pause, reroute, reschedule or suspend activities during sensitive ecological periods or following advice from a suitably qualified ecologist. Triggers include disturbance to otter, kingfisher, bats, nesting birds or aquatic fauna; suspected active nesting or resting places; excessive noise or lighting; littering; pollution; abnormal turbidity; bank erosion; vegetation damage; informal access; unauthorised launching or landing; uncontrolled dogs; flooding; high flows; storm damage; or repeated non-compliance.



7.0 Environmental Controls: Disturbance, Lighting, Noise, Waste, Pollution and Biosecurity

Artificial lighting shall be kept to the minimum required for safe access and operation. No lighting, torches, headlamps, vehicle lights or event lighting shall be directed onto the River Nore, riparian vegetation and trees, sensitive banks or wildlife refuge areas except where required for emergency response. Lighting shall be positioned, angled or shielded to avoid light spill onto water and vegetation and to maintain dark river corridors wherever practicable.

Group noise shall be managed at arrival points, changing areas, pontoon access, launching and landing areas, riverside paths and viewing areas. Amplified sound, public address systems, music, megaphones or event commentary shall only be used with prior approval and shall not be directed towards the river, riparian vegetation, sensitive banks or wildlife refuge areas. Where excessive noise or wildlife disturbance is observed, activity shall be reduced, moved away, paused or stopped. Litter and pollution controls shall reflect the Leave No Trace approach promoted in Ireland by Fáilte Ireland and partner organisations, including the principles of disposing of waste properly, respecting wildlife and being considerate of other users. Waste, food waste, fuel, oil, detergent, cleaning chemicals, wash water, sediment or other contaminants shall not enter the river, drains, planted margins or riparian habitats. Visitors and operators shall follow a "pack it in, pack it out" approach by taking litter home or using designated bins only. Operators shall remove all activity waste. Routine refuelling shall not take place on the pontoon, riverbank, access route or any location where spills could reach the river or drainage system. Spill kits shall be available at appropriate operational locations. Visitor behaviour, litter prevention and outdoor recreation messaging should be informed by the Leave No Trace Ireland principles. Further information is available at www.leavenotraceireland.org



Source: Leave No Trace Ireland

Biosecurity shall follow the Check, Clean, Dry approach promoted by Invasives.ie and the National Biodiversity Data Centre. Transfer of invasive species, pathogens or contaminants on boats, boards, paddles, footwear, dogs, clothing, ropes, trailers, fishing gear, tools or maintenance equipment shall be prevented through mandatory biosecurity controls for all water users and operators. All water users and operators shall apply Check, Clean, Dry biosecurity before and after use where equipment or clothing has been used in or near another waterbody. Equipment shall be checked for mud, plants, animals, fragments, sediment and standing water; material shall be removed and left at the source waterbody; and equipment shall be cleaned in the approved wash-down area only where the full treatment train is operational. A dedicated information point shall be provided at the facility, in a prominent location associated with the water activities centre, wash-down area or launch-route entrance, to explain water biosecurity requirements, Check, Clean, Dry procedures, invasive species and pathogen risks, wash-down requirements, reporting arrangements and the prohibition on launching equipment where biosecurity controls have not been completed. Wash-water from the designated wash-down area shall be contained, treated with the approved aquatic disinfectant where required,

passed through the silt chamber and UV sterilisation unit, and then through the hydrocarbon interceptor before discharge to the existing stormwater network. The wash-down area, silt chamber, UV sterilisation unit and hydrocarbon interceptor shall be inspected and maintained in accordance with manufacturer requirements. If the UV sterilisation unit stops working, is operating below specification, or its operational status cannot be confirmed, the facility shall not open for water-based activity and no boats, boards, paddles or other water-sports equipment shall be launched from the facility until the UV unit and associated treatment train have been inspected, repaired, tested and confirmed to be fully operational. No wash-water shall be discharged while the UV system is not operational. Equipment and clothing shall be dried for as long as practicable, preferably at least 48 hours before reuse in another waterbody, or disinfected where drying is not possible and current guidance requires it. Suspected invasive species, Crayfish Plague risk, contaminated equipment, treatment-system failure or biosecurity failure shall be reported immediately. The site operator shall maintain inspection, maintenance, UV failure, repair, recommissioning, incident and biosecurity monitoring records. Further information on Check Clean Dry biosecurity procedures and invasive species prevention is available from Invasives.ie, the National Biodiversity Data Centre's invasive species information portal, at www.invasives.ie/checkcleandry/.

Fishing and angling good practice: Fishing and angling can create visitor-management and ecological pressures where anglers access informal banks, trample riparian vegetation, disturb waterbirds or protected species, leave discarded line, bait packaging or hooks, move between waterbodies with wet gear, or disturb fish habitat and spawning or nursery areas. Anglers shall use only permitted access points and durable surfaces, avoid sensitive banks and no-go areas, keep noise low, remove all litter including line and tackle, avoid disturbance to otter, kingfisher, bats, nesting birds and fish, and follow current Inland Fisheries Ireland, Leave No Trace and biosecurity guidance. Angling equipment, including rods, nets, waders, boots, boats, keep nets and landing nets, shall be inspected, cleaned, dried and disinfected where required to reduce the risk of transferring invasive species, fish pathogens or Crayfish Plague. Any fish kill, dead fish, pollution, invasive species, bank damage or wildlife disturbance observed during fishing shall be reported immediately to the site operator and, where required, to Inland Fisheries Ireland.



Source: Check, Clean, Dry, Ireland

8.0 Monitoring, Incident Response and Adaptive Management

The site operator shall monitor visitor numbers, operator logs, incident records, complaints, informal access, trampling, erosion, litter, pollution, wildlife disturbance, vegetation damage, signage effectiveness, biosecurity compliance and the operational status of the approved wash-down treatment train, including wash-water containment, disinfectant dosing where required, silt chamber, UV sterilisation unit, hydrocarbon interceptor and discharge connection to the existing stormwater network. Activity logs shall record the date, activity type, participant numbers, supervising person, access route, areas used, weather or river constraints, controls applied, confirmation that biosecurity and wash-down controls were available where required, and incidents or corrective actions.



Action thresholds include any new informal route; repeated shortcutting; bare ground, compaction, bank slumping or vegetation damage; litter or pollution entering sensitive areas; failure to apply biosecurity; failure, malfunction, unavailability or unconfirmed operational status of the approved wash-down treatment train, including the UV sterilisation unit; any discharge or potential discharge of untreated wash-water; disturbance to otter, kingfisher, bats, nesting birds, fish or other wildlife; ineffective signage; repeated complaints; uncontrolled dogs; unauthorised launching or landing; excessive noise or lighting; or operator failure to follow the VMP.

Incidents shall be reported immediately to site staff, the activity lead, event steward, maintenance lead or site operator. Immediate environmental risks, including pollution, protected-species disturbance, entry to sensitive no-go areas, dead fish, serious erosion, serious operator non-compliance, biosecurity failure, treatment-system failure, UV sterilisation unit failure or any situation where the operational status of the UV unit or associated treatment train cannot be confirmed, shall trigger immediate action to stop or reroute activity, move visitors away, prevent further access, deploy spill or litter controls where safe, install temporary barriers or signs and seek ecological or specialist advice where required. Where the UV sterilisation unit or associated treatment train is not operational, is operating below specification, is unavailable or cannot be confirmed as functioning to specification, the facility shall not open for water-based activity, no boats, boards, paddles or other water-sports equipment shall be launched, and no wash-water shall be discharged until the treatment train has been inspected, repaired, tested and confirmed to be fully operational.

Incident records shall include the date, time, location, reporter, activity, number of people present, receptor affected, description, weather or river conditions, immediate response, corrective action, advice received, authority notification where required, follow-up action and recommencement decision. For biosecurity or treatment-train incidents, records shall also include the nature of the failure, whether the UV sterilisation unit was affected, whether any wash-water was generated or discharged, inspection findings,

repair actions, test results, recommissioning confirmation and the person authorising recommencement of water-based activity. Corrective actions may include visitor instruction, operator re-briefing,litter or spill response, temporary closure, barriers, planting, signage changes, group-size reduction, additional supervision, suspension of operator access, specialist maintenance, UV unit repair or replacement, treatment-train testing, ecological review or other measures required to prevent further risk.

9.0 Roles, Responsibilities, Review and Updating

The site operator shall have overall responsibility for implementing the VMP, coordinating bookings, enforcing access controls, maintaining signage and records, reviewing monitoring data, responding to incidents and updating the plan. Activity providers, instructors and group leaders shall brief and supervise participants, keep groups on approved routes, manage launching and landing, control noise, equipment, waste and biosecurity, and report incidents. Maintenance personnel and contractors shall follow no-go, pollution prevention and biosecurity controls. Event organisers shall prepare event plans and provide stewarding where required. A suitably qualified ecologist shall advise on protected species, sensitive habitats, seasonal restrictions, new constraints and the effectiveness of mitigation. The site operator, or named deputy, shall be authorised to suspend, reduce, reroute, reschedule or amend activities where environmental risk, protected-species disturbance, pollution, unsafe access, flooding, erosion, uncontrolled visitor pressure or non-compliance is identified. Activity leads may pause their own sessions immediately pending site-operator confirmation.



Operational responsibility placeholders: Site Operator: VMP Lead / Named Deputy, Ecological Advisor, Incident Reporting Contact. These details shall be completed before routine use commences and updated whenever responsibilities change. The VMP shall be reviewed following commencement of operations, at least annually thereafter, and sooner where required. Review triggers include changes in visitor numbers or activity intensity; introduction of new activities, operators, equipment or events; ecological monitoring findings; incidents; complaints; changes to site layout, pontoon operation, access arrangements, signage, lighting, drainage, wash-down or storage; updated ecological advice; new ecological constraints; or requirements from the planning authority, statutory bodies or relevant authorities. Updates shall be recorded with version number, date, reason, sections amended, person approving the change and follow-up monitoring required.



10.0 Appendices

Appendix A: Site Layout





Appendix B: Relevant Visitor Management, Water Recreation, Biosecurity and Fisheries Guidance Links

Fáilte Ireland. Environmental Protection and Promotion resources. Available from: www.failteireland.ie/

Product-development/Activities/national-environmental-monitoring-programme.aspx. These resources should be used to support responsible tourism messaging, visitor education and environmental protection measures for activity providers and public users.

Fáilte Ireland. *Good Practice Behaviours for Water-Based Recreation Users Relating to Waterbirds*. Available from: https://www.failteireland.ie. This guidance should inform operator briefings, visitor signage, notice-board material and QR-code information on avoiding disturbance to waterbirds during water-based recreation.

Blueways Ireland. Water trail standards and visitor experience guidance. Available from: https://www.blue-waysireland.org. This guidance should inform water trail planning, visitor experience, signage, access management and responsible use of blueway or water-based recreation facilities.

Canoeing Ireland. River grading, access and safety resources. Available from: https://www.canoe.ie. These resources should inform paddling-related safety, river access, activity planning, participant briefing and operator procedures for canoeing, kayaking and related paddle sports.

Check, Clean, Dry Ireland. Aquatic biosecurity guidance. Available from: https://www.checkcleandry.ie. This guidance should inform practical biosecurity messaging and procedures for preventing the transfer of invasive species and contaminants between waterbodies.

Inland Fisheries Ireland. *Invasive Species Biosecurity Guidelines for Anglers*. Available from: www.fisherie-sireland.ie/media/invasive-species-biosecurity-guidelines-for-anglers-leaflet. This guidance should inform any angling-related use of the facility, including cleaning and disinfection of rods, nets, waders, boats, trailers and other fishing equipment.

Inland Fisheries Ireland. Leave No Trace and responsible angling resources. Available from: www.fisheriesire-land.ie/what-we-do/education-and-outreach/safeguarding-and-governance/leave-no-trace. These resources should support responsible angling messaging, waste prevention, respect for watercourses and visitor education where fishing or angling-related access occurs.

Inland Fisheries Ireland. Fish habitat, biosecurity and river access resources. Available from: https://www.fisheriesireland.ie. These resources should inform fish habitat protection, river access management, angling-related controls, biosecurity requirements and responsible use of inland waters.

Invasives.ie / National Biodiversity Data Centre. Check Clean Dry guidance. Available from: https://invasives.ie/checkcleandry/. This guidance should inform biosecurity procedures for boats, boards, paddles, footwear, clothing, trailers, tools and other equipment moving between waterbodies.

Invasive Species Ireland. National guidance and species profiles. Available from: https://invasivespeciesireland.com. This source should be used for invasive species awareness, species identification, pathway management and biosecurity messaging.

Irish Sailing. Small craft safety and environmental guidance. Available from: https://www.sailing.ie. These resources should inform small craft safety, water-user behaviour and environmental good practice where sailing or small craft use is relevant.

Invasives.ie. *Angling Pathway Action Plan 2022–2027*. Available from: www.invasives.ie/pathways/pathway-action-plans/anglingpap/. This action plan should inform controls for anglers, angling clubs, fishing events and angling equipment that could transfer invasive species or pathogens between waterbodies.

Leave No Trace Ireland. Leave No Trace principles. Available from: https://www.leavenotraceireland.org. These principles should inform the visitor code, litter prevention, “pack it in, pack it out” messaging, respect for wildlife and responsible outdoor recreation.

Leave No Trace Ireland and Waterways Ireland. Inland Waterways Guide. Available from: www.leavenotraceireland.org/inland-waterways-guide/. This guide should inform public-facing messaging for inland waterway users, including walking, boating, paddling and shared-use behaviour.

National Biodiversity Data Centre. Check-Clean-Dry and invasive species reporting resources. Available from: www.biodiversityireland.ie/check-clean-dry/ and records.biodiversityireland.ie/record/invasives. These resources should support awareness of invasive species risks, reporting of suspected invasive species and use of current biosecurity materials.

National Parks and Wildlife Service. Protected sites and species information. Available from: https://www.npws.ie. NPWS resources should inform protected-site context, qualifying interests, special conservation interests, protected species, conservation objectives and ecological constraints relevant to the River Nore corridor.

National Biodiversity Data Centre. Species records and invasive species resources. Available from: https://biodiversityireland.ie. These resources should support review of species records, invasive species information and biodiversity data relevant to monitoring and adaptive management.

Rowing Ireland. Waterway use and safety resources. Available from: https://www.rowingireland.ie. These resources should inform waterway safety, club activity planning, participant briefing and responsible shared use of inland waters where rowing activity is relevant.

Sport Ireland Outdoors. Trails, recreation standards and infrastructure resources. Available from: https://www.sportireland.ie/outdoors. These resources should inform trail design, outdoor recreation standards, infrastructure planning, visitor management and responsible access.

Water Safety Ireland. Water safety, signage and risk management resources. Available from: https://watersafety.ie. These resources should inform water safety messaging, signage, risk management, public information and emergency-preparedness measures.

Appendix Q.1 – Method Statement for Archaeological Test Excavation (AMS)

AMS Archaeological Management Solutions

Method Statement for Archaeological Test Excavation at Nore River Facility, Kilkenny



By John Channing

Applicant: John Channing

For Kilkenny County Council

June 2026

TITLE PAGE

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Summary

This Method Statement accompanies an application for Section 14 for Ministerial Consent and application for a Section 26 licence to excavate application to carry out archaeological test excavation in advance of construction of a proposed development of a facility centre for water-based activities at Johns Street Lower, Collegepark, Kilkenny. It has been prepared by Archaeological Management Solutions (AMS) in their role as Archaeological Contractor to Kilkenny County Council. The archaeological test excavation is being undertaken in support of a part of planning application due diligence.

The request for further information requires submission of an Archaeological Impact Assessment (AIA) with both test excavation and geophysical survey. Geophysical Survey (Melia & O'Neill 2026) of the proposed development was conducted by (AMS) and informs on precise trench location. An Underwater Archaeological Impact Assessment is also included in the request for further information. This will be the subject of a separate Method Statement and report.

Reports already undertaken for this development include an Archaeological Desktop Assessment (ADA) by John Cronin & Associates (Brännström 2024). This report noted that the subject lands can be considered to possess a high archaeological potential. The northwest portion of the development has the potential to encroach on the projected line of the medieval town defences of Kilkenny (KK019-026001-), a national monument while the southern portion will encroach on the Zone of Notification (ZoN) of a Recorded Monument, dovecote (KK019-026238-).

Previous archaeological works undertaken thus far at the development site have comprised the excavation of a medieval structure, listed as a dovecote in 2001 (Doyle 2005) and the *Kilkenny City (River Nore) Drainage scheme*[1] in 2000–2003 (Stevens 2000).

The test excavation works outlined in this document are scheduled to commence on 22 August 2026 and are expected to be completed within two weeks. The programme of archaeological test excavation is to cover at least 5% of the total area (0.24Ha, 2,400m^2) of the proposed development site; totalling 66.6[2] linear metres. A total of five trenches are proposed, equating to 70 linear metres covering an area of 126m^2 or 5.25% of the development area. The locations of test trenches are informed by the previous programme of geophysical survey (Melia & O'Neill forthcoming). Some variation of trench layout may be required due to fluctuating river levels and services.

In the event that archaeological objects, features or deposits are discovered, an appropriate mitigation strategy (i.e., preservation *in situ* and/or preservation-by-record) will be implemented in consultation with the National Monuments Service (NMS).

This Method Statement sets out the background to the works, summarises relevant aspects of the receiving environment, and outlines the proposed project team and methodology for the testing.

John Channing of AMS will undertake the testing works funded by Kilkenny County Council (Appendix 1: Funding Letter).

The proposed archaeological works are subject to the agreement of the National Monuments Service of the Department of Housing, Local Government and Heritage, the National Museum of Ireland and the local planning authority where required and should only be carried out in accordance with the necessary approvals. Please note that the statutory and local authorities may issue alternative and/or additional recommendations/conditions.

[1] https://excavations.ie/report/2000/Kilkenny/0005354/

[2] 5% of 2,400m^2 is 120m^2 that would comprise of 66.6 linear metres as a trench width of 1.8m

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Abbreviations and Acronyms

Abbreviation/Acronym	Definition
AIA	Archaeological Impact Assessment
AMS	Archaeological Management Solutions
DAHGI	Department of Arts, Heritage, Gaeltacht and the Islands
DEHLG	Department of Environment, Heritage and Local Government
DHLGH	Department of Housing, Local Government and Heritage
DIER	Database of Irish Excavation Reports
EIAR	Environmental Impact Assessment Report
GIS	Geographic Information System
HEV	Historic Environment Viewer
IAI	Institute of Archaeologists of Ireland
ITM	Irish Transverse Mercator
KKAP	Kilkenny Archaeological Project
NIAH	National Inventory of Architectural Heritage
NMI	National Museum of Ireland
NMS	National Monuments Service
OD	Ordnance Datum
OS	Ordnance Survey
RMP	Record of Monuments and Places
RPS	Record of Protected Structures
SAC	Special Areas of Conservation
SMR	Sites and Monuments Record
T	Trench
UAS	Urban Archaeological Survey
ZoN	Zone of Notification

Coordinate Reference System

All grid coordinates in this document use the Irish Transverse Mercator (ITM) coordinate reference system unless otherwise stated.

1 Introduction

This Method Statement accompanies a Section 26 application for a licence to excavate and Section 14 application for Consent to undertake archaeological test excavations (the latter in the proximity of Kilkenny Town defences (KK019-026001-) and the former near a medieval dovecote (KK019-026238-).

The application is in advance of construction of a proposed facility centre for water-based activities at College Park, John Street Lower, Kilkenny City, Co. Kilkenny (Figure 1 andFigure 2). It has been prepared by Archaeological Management Solutions (AMS) in their role as Archaeological Contractor to Kilkenny County Council. The site is of particular interest as the precise line of the city defences and possible outworks is yet to be confirmed and these may be encroached upon by the development.

The archaeological test excavation is being undertaken in support of a planning application. John Channing of AMS will undertake the test excavation works funded by Kilkenny County Council Appendix 1: Funding Letter).

The request for further information requires submission of an Archaeological Impact Assessment (AIA) with both test excavation and geophysical survey. In addition, the AIA will include site inspection and will detail the historical and archaeological background of the site. The test trench layout is informed by the geophysical Survey and site plan. Geophysical survey (Melia & O'Neill forthcoming) of the proposed development was conducted by (AMS) and informs on precise trench location.

The AIA will comment on the degree to which the extent, location and levels of all proposed foundations, service trenches and other subsurface works will affect the archaeological remains. Should archaeological material be shown to be present, further mitigation will be required.

In addition, an Underwater Archaeological Impact Assessment is included in the request for further information. This will include a licensed archaeological diver/wade survey accompanied by a hand-held metal detection survey. Should the project be granted planning permission it is likely that Archaeological Monitoring (under section 26 licence) of all riverine works will be required.

2 Description of the Project

The proposed development involves the construction of the 'Nore River Facilities Kilkenny' at a site of approximately 0.24 hectares, located within the grounds of County Hall at Collegepark, John Street Lower, Kilkenny City, Co. Kilkenny, comprising the following:

Proposed Fáilte Ireland platforms for growth shared community facilities at Johns street lower, Collegepark, Kilkenny City, Co. Kilkenny.

Pursuant to Section 177AE of the Planning & Development Act 2000 (as amended) and the requirements of the Planning & Development Regulations 2001 (as amended),Kilkenny County Council intends to seek the approval of An Coimisiún Pleanála under Section 177AE of the Planning and Development Act 2000 (as amended) for the proposed development which involves the construction of the 'Nore River Facilities Kilkenny' at a site of approximately 0.24 HA, located within the grounds of County Hall at Johns Street Lower, Collegepark, Kilkenny City, Co. Kilkenny.

a) *The proposed development will consist of: Construction of a riverside facilities centre comprising the following;*
b) *Demolition of an existing single-storey maintenance store,*
c) *Removal of selected on-site vegetation to facilitate the works,*
d) *Single-storey facilities block with a flat, intensive green roof build-up, containing toilets, universally accessible bathroom, changing places facility, showering / changing cubicles, cleaner's store, outdoor showers, an external plant area, storage lockers, wash trough, and a drying room,*
e) *Single-storey adjoining community block with an asymmetrical pitched roof containing a community room, associated kitchenette, and a plant room / central information point,*
f) *Adjoining external covered terrace area with a flat intensive green roof build-up,*
g) *A single-storey storage block with an asymmetrical pitched roof containing equipment storage, a dragon-boat / rowing boat storage, and a maintenance store,*
h) *A single-storey adjoining block with a mono-pitched roof containing a boat / general storage area,*
i) *A hard landscaped pedestrian central space with raised central planter / seating, planted areas, boat wash-down area and associated surface water UV filtration system,*
j) *Proposed shared surface including a central set-down / vehicular turning area for boat loading / unloading and pedestrian use generally,*
k) *Access route to river over berm comprising a sloped access path with associated retaining wall, steps, landings, balustrading, and associated handrails,*
l) *Raised walkway from top of berm to pontoon with associated balustrading / handrails,*
m) *Part fixed / part floating access pontoon within the river,*
n) *Site services connections and drainage works, including connection to existing public foul and stormwater system,*
o) *Universally accessible parking bay and covered bicycle parking area,*

p) Public lighting to all pedestrian / vehicular / parking areas,

Associated archaeological investigations, including test excavations and underwater surveys

All necessary landscaping, site boundary and site development works.

3 Receiving Environment

3.1 Site Location Overview

The proposed development site (PDS) is located on the left bank of the River Nore c.120m above an existing weir. The site lies within the grounds of County Hall in Collegepark, John Street Lower, Kilkenny, (Figure 1 and Figure 2). The area is currently a mix of grass, trees and carparking, with flood defences, in the form of raised banks, to north and south but is otherwise flat. The southern site boundary is formed by the River Nore with parkland to the east and the walled rear plots of properties along John Street to the northwest.

The underlying geology of this area comprises Crinoidal wackestone/packstone limestone of the Ballyadams Formation, and the underlying subsoil consists of gravels derived from limestones (Geological Survey Ireland 2026[3]).

The PDS is located within the city of Kilkenny and may impinge upon the presumed line of the town defences on the left bank of the River Nore at their southeastern extent (Figure 3 to Figure 7). Kilkenny Castle is located directly across the river and its associated Zone of Notification (ZoN) skirts the southeastern edge of the PDS.

The proposed development site is located in the townlands of Collegepark and Gardens, and in the civil parish of of St. Johns Ward, within the barony of Kilkenny[4] (Table 1). The townland once hosted a grammar school which is described by Lewis (Lewis 1837, Vol. 2, p113)

Table 1: Townlands intersected by the proposed development and its suggested placename meaning.[5]

Townland Name (English)	Barony	Civil Parish	Townland Name (Irish)	Suggested Translation
Collegepark	Kilkenny	St Johns Ward	Páirc an Choláiste	College park or field
Gardens	Kilkenny	St Johns Ward	Ghairdíní an Chaisleáin	Castle Gardens

3.2 Archaeological and Historical Background

The historical and archaeological background of Kilkenny is dominated by the Norman settlement and development of the walled city. The city is located at a natural fording point on the River Nore, Green's Bridge area, with natural elevations on the right bank of the river, Castle area.

[3] https://gsi.geodata.gov.ie/portal/apps/webappviewer/index.html?id=f1b130022e7146a7b76e1010c7efb2a9 [Accessed: 12 May 2026]

[4] Logainm appears to incorrectly record the townland in the civil parish of Saint Patrick's while Townlands.ie records it as within the civil parish of St. Johns, within the barony of Kilkenny

[5] https://www.logainm.ie/27100.aspx; https://www.logainm.ie/en/27101 [Accessed: 12 May 2026]

Two pre-Norman monasteries were sited of the river Nore. The earlier monastery was located in the vicinity of St Patrick's graveyard and may date to the fifth century (Bradley 2000). By the seventh century a new ecclesiastical centre located in the vicinity of St Canice's was dominant and gave Kilkenny its name '*Cill Chainnigh'* or Canice's church (Bradley2000). These monasteries suggest the early development of a settlement or town before the Norman arrival.

The early medieval political landscape, in particular the ambitions of King 'Cerball mac Dunlainge' in the 870s and 880s and his successors in the tenth and eleventh centuries made Kilkenny a power centre in Leinster (Bradley 2000).

Excavation at Kilkenny Castle recorded pre-Norman evidence (Murtagh 1993), and the site has been proposed as the location of a pre-Norman settlement and fortress associated with the aforementioned King 'Cerball mac Dunlainge' (Hogan 1861).

The importance of Kilkenny in the ninth and tenth centuries is highlighted by the early construction of Norman fortifications on the site of the existing castle. Presumably this was to secure and control an existing political centre and intersection of existing routeways. The early Norman castle, an earth and wood structure, was constructed in the twelfth century by Richard De Clare, the second Earl of Pembroke (Strongbow). The initial Norman fortifications were substantially reinforced by William Marshal in 1195. The castle later became the seat of the Butler dynasty, the Earls of Ormonde, who lived in Kilkenny Castle until the twentieth century, (Bradley 2000).

Construction of the town wall surrounding Norman Kilkenny is evidenced by surviving murage grants which date from c.1250 and continued to be made until 1460. The precise construction date is unclear as the earliest recorded petition for murage grant is too early a date.[6] The nature of the petition is recorded: "*The Earl of Gloucester requests: 1) that the King grant his burgesses of Kilkenny murage for seven years to enclose the town according to the form of the murage of Bristol"* (Calendar of Documents Relating to Ireland, 1171–1307).[7]

The town defences are traditionally split into three sectors, The High Town being the main city with Irishtown located around St Canice's Cathedral and St John's being a suburb located across the river on the left bank of the Nore. The PDS is located in St John's, which Cromwell described in 1650 as "another walled town on the other side of the river" (Bradley 1975)

[6] https://archive.org/details/calendardocumen00sweegoog/page/111/mode/1up [Accessed: 13 May 2026]

[7] https://discovery.nationalarchives.gov.uk/details/record?catid=-4814350&catln=7 [Accessed: 13 May 2026]

The gradual absorption of Norman and English families into Gaelic culture is evidenced by the Statutes of Kilkenny.[8] A series of 35 acts, sometimes described as a blueprint for apartheid that was passed in 1336. The statutes set out strict segregation between the 'English' and 'Irish' of Kilkenny, to enforce cultural, legal and religious separation. Though much ignored, the statutes could carry the penalty of death.

Following the 1641 rebellion, the Confederation of Kilkenny[9] (1642–1652), was an independent Irish Assembly based in Kilkenny that coined money, levied taxes, and appointed agents to foreign countries such as France, Spain, and the Papal States.

The confederate wars and Cromwell's invasion are of particular relevance to the investigations within the PDS, as the medieval defences were supplemented to afford protection from cannon fire. Cromwell's forces took Kilkenny in 1650, breaching the area of the PDS, St. John's Ward, before Kilkenny surrendered.

Rocque's 'A Survey of the City of Kilkenny' map c.1758 (Figure 3), shows a clear division running on a southwest–northeast in the area of the site. While the division appears to run to the northwest of the PDS, locations of features depicted by Rocque can only be relative. Rocque's map formed the basis of Hogan's map of Kilkenny, (Hogan 1861). Hogan interprets this division as the line of a 'Town Ditch' running from the River Nore to the line of the Magdalan Mill Stream (KKAP-369, UAS-76, UAS-77). The remaining defensive circuit around St John's Ward is depicted by Hogan as 'Town Wall'. A series of land divisions and likely garden plots are depicting inside the 'Town Ditch' while the area outside is referred to Hogan as 'pigeon House Park now College Lawn' . Hogan also notes the 'Old College' and that the 'New College' occupies the garden of the 'Old College'. Suggesting the presence of the college along the northwest boundary of the PDS and accounting for the townland name. The 'New College' and a tree lined ditch or drain along the line of the 'Town Ditch' are depicted on the five-foot to one-mile historical map (Figure 4), surveyed 1871m, (O.S. City of Kilkenny sheet XIX.47 printed 1872)

The townland name likely reflects the presence of the college, indeed Hogan refers to the area of the PDS as 'College Lawn' noting an earlier name of 'Pigeonhouse Park'. The earlier name fits with the known presence of a possible dovecote[10] at the southwest of the site, (KK019-026238, 01E0821). The Calendar of Ormond Deeds, a six-volume collection of primary medieval documents, records dovecotes in a park opposite the castle in 1374 (Curtis 1954):

[8] https://www.irishmanuscripts.ie/wp-content/uploads/2025/11/Preview-Statute-of-Kilkenny.pdf?x80640 [Accessed: 13 May 2026]

[9] https://historyireland.com/the-confederation-of-kilkenny/ [Accessed: 13 May 2026]

[10] https://excavations.ie/report/2003/Kilkenny/8010062/ [Accessed: 14 May 2026]

> *Letter of William Ilger. " Whereas Alice who was the wife of Hugh le Despenser, Lady of a third pourparty of the county Kilkenny, in her liege viduity granted to me the constableship of the castle of Kilkenny, a great park opposite the gate of the castle there, a dovecot in the same park, a garden, a fishery of the river, a weir there, six acres of land in ' le Inches ' and ' castel* orchard,' eleven acres of meadow called ' Rebetismede,' an acre of land called ' Bartounheye ' and a garden opposite the gate of the castle and my serjeanty of Overk, to have and to hold for the life of the abovesaid Alice know that I, William Ilger, have given and granted to my friend William Lumbard, all the claim and right which I have in the above constableship, park, etc., etc., to him and his heirs for the life of the said Alice, for 2gl. silver paid in hand to me."
>
> Given at London on Monday next after the feast of Pentecost in the 4Qth year of Edward III. June 11, 1375.

The possible dovecote (KK019-026238, 01E0821) was likely constructed sometime at or before the fifteenth–sixteenth centuries while the earliest deposits on the site appear to date to the thirteenth–fourteenth centuries (Doyle 2003). Following excavations (01E0821), a radiocarbon date of 819 ± 34 BP (UB-6052) was obtained from an oak post which calibrates to Cal AD 1168 - 1268 at two sigma level (Doyle 2005) which suggests a possible earlier date and alternative interpretation. The structure was circular in plan, it had an external diameter of 8.50m, with foundations up to 1.75m thick which compare favourably with that of the thirteenth century Talbot Bastion[11] located 490m south of the PDS (Ó Drisceoil; Excavation Licence number: E3646; C240 . Sites and Monuments Record No.: KK019–026).

3.2.1 Previously Recorded Archaeological Sites and Monuments

The PDS lies within the City of Kilkenny, which is a designated historic town that contains several specific national monuments, including the city walls. The city's medieval core is heavily protected, with many individual structures and archaeological sites under State guardianship. While a listing of individual sites is presented below (Table 2, Figure 6), it should be noted that a Zone of Archaeological Potential for Kilkenny City (KK019-026-), extends over the PDS.

The Archaeological Survey of Ireland records 46 sites within a 200m of the PDS (Brännström 2024). Two sites (town defences KK019-026001-, dovecote KK019-026238-) are located on the northwestern and southern site boundaries respectively. The PDS impinges upon the northern extent of the ZoN surrounding one of these sites, a possible Dovecote (KK019-026238)

[11] https://excavations.ie/report/2010/Kilkenny/0021630/#:~:text=The%20name%20'Talbot's%20Tower'%20is,with%20building%20the%20city's%20walls. And https://kilkennyheritage.ie/2019/05/kilkenny-citys-medieval-walls/ [Accessed 16 June 2026]

Table 2: Recorded archaeological sites and monuments in vicinity of PDS.

SMR/RMP Ref. No.	Site Type	Townland	ITM (centroid)	Approx. Distance
KK019-026001	Town defences	Collegepark, Gardens (Kilkenny City By., St. Patrick's Par.), Gardens (Kilkenny City By., St. Mary's Par.), Gardens (Kilkenny City By., St. Canice Par.), Bishopsmeadows (Crannagh By., Kilkenny Rural ED), Gardens (Kilkenny City By., St. John's Par.)	650201, 656315	Within ZoN
KK019-026024-	House - 16th/17th century	Gardens (Kilkenny City By., St. John's Par.)	650807, 656072	235m NW
KK019-026066-	House - 16th/17th century	Gardens (Kilkenny City By., St. John's Par.)	650814, 655962	138m NW
KK019-026067-	House - 16th/17th century	Gardens (Kilkenny City By., St. John's Par.)	650763, 655908	140m NW
KK019-026068-	Religious house - Augustinian Canons	Gardens (Kilkenny City By., St. John's Par.)	650847, 656112	238m NNW
KK019-026069-	House - 16th/17th century	Collegepark	650850, 656007	128m NW
KK019-026070-	Bridge	"Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)"	650725, 655918	140m ENE
KK019-026071-	Bridge	Gardens (Kilkenny City By., St. John's Par.)	650845, 656025	141m NNW
KK019-026074-	Towerhouse	Gardens (Kilkenny City By., St. John's Par.)	651104, 655983	233m ENE
KK019-026075-	Church	Gardens (Kilkenny City By., St. John's Par.)	651166, 656046	305m NE
KK019-026076-	Water mill - unclassified	Collegepark, Gardens (Kilkenny City By., St. John's Par.)	651186, 655918	282m E
KK019-026114-	House - 16th/17th century	"Gardens (Kilkenny City By., St. Mary's Par.)"	650656, 655873	215m W
KK019-026165-	Graveyard	Gardens (Kilkenny City By., St. John's Par.)	651185, 656045	430m S
KK019-026166-	Graveslab	Gardens (Kilkenny City By., St. John's Par.)	651188, 656041	305m NE
KK019-026167-	Graveslab	Gardens (Kilkenny City By., St. John's Par.)	651188, 656041	305m NE
KK019-026219-	Stable	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	651027, 655677	236m SE

SMR/RMP Ref. No.	Site Type	Townland	ITM (centroid)	Approx. Distance
KK019-026220-	Fortification	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650879, 655672	130m S
KK019-026221-	Walled garden	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650879, 655672	196m S
KK019-026225-	"Designed landscape - summer house"	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650946, 655720	151m SE
KK019-026233-	Castle - ringwork	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650794, 655734	140m SSW
KK019-026235-	Graveyard	Gardens (Kilkenny City By., St. John's Par.)	650850, 656083	195m N
KK019-026238-	Dovecote	Collegepark	650869, 655823	Within ZoN
KK019-026239-	Bridge	"Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Mary's Par.)"	650727, 655918	140m ENE
KK019-026240-	Weir - fish	Dukesmeadows (Shillelogher By., St. Patrick's Par.)	650709, 655897	150m W
KK019-026242-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.)	650844, 656114	125m W
KK019-026253-	Excavation - miscellaneous	Gardens (Kilkenny City By., St. John's Par.)	650889, 656144	125m W
KK019-026261-	Well	Gardens (Kilkenny City By., St. Mary's Par.)	650681, 655845	125m W
KK019-026266-	Water mill - vertical-wheeled	Gardens (Kilkenny City By., St. John's Par.)	650900, 656006	120m NNE
KK019-026420-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104, 655984	260m NE
KK019-026421-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104, 655984	260m NE
KK019-026422-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104, 655984	260m NE
KK019-026423-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104, 655984	260m NE
KK019-026424-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104, 655984	260m NE
KK019-026425-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104, 655984	260m NE

SMR/RMP Ref. No.	Site Type	Townland	ITM (centroid)	Approx. Distance
KK019-026426-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104, 655984	260m NE
KK019-026428-	Graveslab (present location)	Gardens (Kilkenny City By., St. John's Par.)	651104, 655984	260m NE
KK019-026430-	Graveslab	Gardens (Kilkenny City By., St. John's Par.)	650727, 655920	180m W
KK019-026431-	Graveslab	Gardens (Kilkenny City By., St. John's Par.)	650727, 655920	180m W
KK019-026432-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.)	650727, 655920	180m W
KK019-026271-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.)	650727, 655920	180m W
KK019-026272-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.)	KK019-026272-	180m W
KK019-026273-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.)	650727, 655920	180m W
KK019-026274-	Tomb - effigial	Gardens (Kilkenny City By., St. John's Par.)	650727, 655920	180m W

3.2.2 Previous Archaeological Investigations

A map search of archaeological excavations within close proximity (c.100m) to the PDS and listed on Excavations.ie is detailed below (Table 3Table 3: Previous archaeological investigations in close proximity to the PDS., Figure 7).

Archaeological test trenching was undertaken in advance of the River Nore (Kilkenny City) Drainage Scheme (Licence no. 00E0405, KKAP-078). Trenches 6–8 were excavated on the banks of the river in Collegepark townland. No features were identified but a seventeenth century ceramic sherd and one sherd of medieval coarseware were recovered from the river gravel deposits. Subsequent archaeological monitoring of the scheme identified a structure immediately west of the PDS. Subsequent excavation revealed a circular masonry structure with associated wooden piles set into riverine deposits. The structure is interpreted as a possible dovecote (01E0821, KK019-026238-, KKAP-077). Artefactual evidence points to a thirteenth to fourteenth century date, but subsequent radiocarbon dating suggest a possible earlier date.

Archaeological test trenching, in advance of renovations to the former college (Kilkenny College) and the construction of a new office building and linkway east of the college attempted to locate the line of the city defences and uncovered a probable boundary wall. Further testing of the parkland outside the assumed line of the city defences revealed dumps of redeposited sixteenth-eighteenth-century

material and modern drains which the director interpreted as attempts to raise and drain a floodplain (King 1991 unpublished, DIER 1991:079, KKAP-094[12]).

The remaining excavations have revealed suburban structures and likely millrace.

Table 3: Previous archaeological investigations in close proximity to the PDS.

DIER Ref.	Licence No.	Townland	Results	Proximity
2020:434[13]	20E0097	Gardens	Multi-period. 18–19th century features	100m W
2002:1019[14]	01E1212	Gardens	Wall of the late medieval building that formed the northern part of Bridge House	100m W
2020:516[15]	20E0479	Gardens	Identification of architectural features at Bridge House, 88–89 John Street Lower,	100m W
2012:357[16]	E4417; C523	Gardens	Garden deposits and likely millrace	100m NW
2003:1021[17]	01E0821	College Park and Gardens	Circular tower structure of masonry associated with stabilising wooden piles.	25m SW
ID: 5376	00E0405	Banks of the river Nore, Townparks/ Gardens/Collegepark, Kilkenny	Medieval/post-medieval complex	10m S

3.2.3 Previous Geophysical Investigations

Geophysical survey (Melia & O'Neill forthcoming) has provided a comprehensive assessment of subsurface conditions through the combined application of magnetometry and electromagnetic induction (EMI) survey techniques, (Figure 8 to Figure 11). The results demonstrate a highly disturbed subsurface environment dominated by strong magnetic responses and widespread interference.

While the survey identified multiple anomalies of potential archaeological interest, the interpretative confidence is constrained by the pervasive influence of modern disturbance and infrastructure; resulting in anomalies of unclear origin.

[12] https://share.google/EqIRxmi9wue2gAk9z

[13] https://excavations.ie/report/2020/Kilkenny/0030516/ [Accessed: 14 May 2026]

[14] https://excavations.ie/report/2002/Kilkenny/0008337/ [Accessed: 14 May 2026]

[15] https://excavations.ie/report/2020/Kilkenny/0030750/ [Accessed: 14 May 2026]

[16] https://excavations.ie/report/2012/Kilkenny/0023399/ [Accessed: 15 June 2026]

[17] https://excavations.ie/report/2003/Kilkenny/0010062/ [Accessed: 15 June 2026]

The magnetometry survey dataset identified five anomalies (M1–M5) as having uncertain origin that may be of potential archaeological interest. The EMI dataset, both resistivity (ERa) and magnetic susceptibility (MSa), revealed several anomalies (R1–R4 and S1–S3) that may be of archaeological significance.

The test trench layout has been informed by the anomalies identified by geophysical survey (Figure 11), and by the possible presence of archaeological features associated with the town defences outlined above in the Archaeological and Historical Background.

3.2.4 NMI Topographical Files

The National Museum of Ireland's (NMI) Topographical Files archive (digital database) was consulted.[18] The archive contains a single stray find, (NMI 1959:759, KKAP-291), with an undefined find spot in the vicinity of the PDS and Collegepark. The precise find location of the artefact remains uncertain. The find is listed as a medieval buckle "found in a field at Kilkenny College in 1959".

3.2.5 Designated Built Heritage

Three structures (see Table 4) are listed on the National Inventory of Architectural Heritage (NIAH) within Collegepark. These include Kilkenny College[19] associated gates[20] and an outbuilding[21] also associated with Kilkenny College. The structures appear to date to 1780–1839. None of the structures will be directly or visually impacted by the development.

Table 4: Recorded built heritage assets within Collegepark townland.

NIAH/ RPS Ref. No.	Site Type	Townland	ITM (centroid)	Status/ Designation	Approx. Distance
12000164	Gates/railings/walls	Collegepark	250904, 155965	Regional	140m NNE
12000165	College	Collegepark	250945, 155919	National	10m N
12000166	Outbuilding	Collegepark	250911, 155952	Regional	120m NNE

[18] https://experience.arcgis.com/experience/ca514d04c83c453e9469d0263d30a72c/page/Viewer#data_s=id%3Awidget_50_output_config_0%3A0 [Accessed 15 June 2026]. It is intended to visit and review the National Museum Topographical Files prior to final report.

[19] https://www.buildingsofireland.ie/buildings-search/building/12000165/kilkenny-county-hall-john-street-lower-collegepark-kilkenny-kilkenny [Accessed: 15 June 2026]

[20] https://www.buildingsofireland.ie/buildings-search/building/12000164/kilkenny-county-hall-john-street-lower-collegepark-kilkenny-kilkenny [Accessed: 15 June 2026]

[21] https://www.buildingsofireland.ie/buildings-search/building/12000166/kilkenny-county-hall-john-street-lower-collegepark-kilkenny-kilkenny [Accessed: 15 June 2026]

3.2.6 Cartographic Analysis

The approximate location of Collegepark townland is depicted by a triangular area on the Down Survey map (c.1655). A rectangular structure is depicted on the southern edge of this triangular area on the left bank of the river.

John Rocque's map of Kilkenny, (c.1758), shows the area of the PDS under trees with garden plots to the western side of the PDS and a millrace to the north (Figure 3). Hogan's interpretative map shows the line of a town ditch running to the rear of these garden plots to the west of the PDS along with a millrace to the north.

The first edition six-inch Ordnance Survey (OS) map (Sheet 19, 1842, Figure 4), shows an orchard, at the PDS. The subsequent 5-foot OS map (Published 1872, Sheet XIX 47), provides greater detail with the line of both an open ditch in the presumed location of the town ditch and the millrace clearly depicted.

The 25-inch OS map (1902) shows a reduction in the number of trees and the addition of a footpaths. A rectangular enclosure or playing field is depicted at the centre of the proposed development.

4 Project Team

The archaeological excavation team will consist of one Site Director (John Channing), supported where necessary by additional AMS staff, including an AMS surveyor who be available as required. Specialists will be consulted where necessary (Table 6; see Section 6.5 below).

In the event that potential human remains are encountered, the AMS osteoarchaeologist (Dr Mara Tesorieri) will be available to provide the necessary assessment and services.

5 Aim of the Archaeological Test Excavation

The key aim of archaeological testing is to ascertain the location, nature, date, character, extent, and significance of whatever archaeological features, objects or deposits may be discovered by this method and to perform an adequate amount of archaeological testing in all relevant areas so as to reveal the horizontal extent of all archaeological sites/features/deposits and the vertical extent of any archaeological stratigraphy and to allow an assessment to be made of the archaeological impact of the proposed development (DAHGI 1999a). If archaeological features, objects, or deposits are encountered during the testing works, a mitigation strategy will be agreed in consultation with the National Monuments Service (NMS) regarding how to proceed (i.e. preservation *in situ* and/or preservation by record).

6 Archaeological Testing Strategy

The test excavation will be carried out under the direct and continuous supervision and control of a suitably qualified licensed archaeologist John Channing under the licence issued by the NMS. The archaeological test excavation will be carried out to best practice and will fully comply with the most up-to-date guidelines and standards.

AMS excavation practices are informed and guided by the Department's *Policy and Guidelines on Archaeological Excavation* (DAHGI 1999b), the Institute of Archaeologists of Ireland (IAI) *Code of Conduct for Archaeological Excavation* (IAI 2006a), as well as AMS's in-house Fieldwork Procedures and Guidelines (AMS 2024).

The test trench layout (Table 5, Figure 11 and Figure 12), is informed by results of geophysical survey, (Melia & O'Neill forthcoming) together with previous excavation results and background research, detailed above. The approximate line of the southeastern town wall or ditch may run on a north–south line, immediately west of the PDS and a series of trenches are proposed to capture any defences or defensive outworks that may be present.

At least 5% of the PDS area will be tested with the proposed strategy comprising five trenches totalling 70 linear metres of test trench at a width of 1.8m, giving a proposed test area of 126 square metres or 5.25% of PDS area. The additional 0.25% buffer is to allow a reduction of area which may be anticipated given the close proximity of the river and existing services and proximity of a Special Area of Conservation (SAC). The southern extent of the PDS is likely subject to the EU Habitats Directive.

The River Barrow and River Nore SAC (Site Code: 002162) cuts through the heart of Kilkenny City, closely following the riverbanks of the Nore. Test trenching or ground excavation within or near a river SAC may require formal consent under the EU Habitats Directive. An Appropriate Assessment Screening (potentially a full Natura Impact Statement) may need to be submitted to the local authority or the EPA.

Table 5: Proposed test trenches.

Trench Number	Aim	Length (m)	Area (m^2)
T1	Test possible anomaly identified by geophysics. Specifically anomalies R2 (possible curvilinear), M2 (possible archaeological material or an area of burning)	5	9
T2	Test possible anomaly identified by geophysics. Specifically anomalies R3 (R3 possible archaeological feature, wall or path), S2 (possible archaeological feature corresponding with R3)	25	45
T3	Test possible anomaly identified by geophysics. Specifically anomalies R3 (R3 possible	15	27

Trench Number	Aim	Length (m)	Area (m^2)
	archaeological feature, wall or path), S2 (possible archaeological feature corresponding with R3)		
T4	Test for possible town ditch or defence and possible anomaly identified by geophysics. Specifically anomalies R1 (possible archaeological material associated with town defences), S1 (possible archaeological material associated with town defences), M1 (possible archaeological material associated with town defences)	20	36
T5	Test possible anomaly identified by geophysics	5	9
Total		70	126

The trenches will be georeferenced to the Ordnance Survey of Ireland (OSI), National Grid (ITM) and Ordnance Datum (OD).

The trenches will be dug by a tracked excavator equipped with a 1.8m wide toothless ditching bucket. Each trench will be excavated to the surface of archaeological features, deposits or structures, or to the surface of the undisturbed natural soil or bedrock. Topsoil will be removed from the test trenches in horizontal levels of not more than 0.20m in thickness until sterile subsoil or the surface of possible archaeological features/deposits are exposed throughout. The mechanical excavator shall be monitored by the licensee at all times and will be stopped once the first archaeologically significant horizon is encountered. If archaeology is discovered, the NMS will be informed, and a strategy for mitigating the impact will be proposed.

6.1 Recording Methods

A full and detailed record of the testing will be maintained throughout by the Site Director. Recording shall include written descriptions, photographs with appropriate scale and north point, drawings and survey. More specifically, any archaeological features revealed will be recorded using customised field record sheets or 'context sheets', as well as supporting pro forma context, finds, samples, drawing and photograph registers, as appropriate. The location of any newly identified archaeological features and/or finds will be precisely georeferenced using a differential GPS. Comprehensive plans and cross-sectional drawings will be produced at a scale of 1:10, 1:20 or 1:50 as appropriate.

6.2 Constraints on the Archaeological Methods

The PDS is located on a floodplain with the southern edge of the PDS being the River Nore. Flooding and sinking may affect access depending on naturally fluctuating river levels. The close proximity of the river may require ameliorative action to stop silt entering the river and any nearby watercourse. The southern portion of the PDS lies under mixed parkland with the remainder under an existing carpark.

6.3 Object and Sample Retrieval Strategy

6.3.1 Object Retrieval, Treatment and Conservation

Every effort will be made to ensure the highest possible level of identification and retrieval of archaeological objects. The treatment of archaeological objects will comply with the policies of the NMI as set out in their *Standards for the Care and Treatment of Archaeological Objects from Excavations* (NMI 2022) and will conform to the *Code of Conduct for the Treatment of Archaeological Objects* ratified by the IAI (IAI 2006b).

Any artefacts retrieved during the test excavation works will be catalogued, analysed, conserved, packed, and stored in appropriate conditions in a secure location. Significant finds ('special finds') will be recorded three-dimensionally. Where necessary, any finds requiring immediate conservation will be referred to a specialist (private consultant and/or NMI, subject to advice), usually Susannah Kelly (UCD). All archaeological objects will be numbered in accordance with the NMI's *Standards for the Care and Treatment of Archaeological Objects from Excavations* (NMI 2022) and the IAI's *Code of Conduct for the Treatment of Archaeological Objects* (IAI 2006b). Any organic artefacts retrieved will be stored in appropriate conditions and assessed by a qualified archaeological conservator. The NMI Excavation Finds Register Database will be completed, and archaeological objects will be submitted to the NMI.

Finds will be housed temporarily in secure accommodation by the licensed archaeologist and following this at the AMS Head Office in Kilrush, Co. Clare. The storage of artefacts and other archaeological objects will be in accordance with NMI's *Standards for the Care and Treatment of Archaeological Objects from Excavations* (2022). The museum storage boxes specified in these standards will be provided and used from the commencement of the work. Ultimately, finds will be transferred to the NMI following post-excavation and final reporting. Directions for the curation or disposal of such finds will be sought from the NMI.

6.3.2 *Environmental Samples*

Bulk soil samples may be retrieved from select archaeological contexts where necessary for subsequent environmental analysis and radiocarbon dating, where appropriate. Retrieval and analysis of environmental samples will be in accordance with the following:

- TII's Palaeo-environmental Sampling Guidelines (McClatchie et al. 2015); and
- IAI's *Environmental Sampling: Guidelines for Archaeologists* (IAI 2007).

6.4 Human Remains

In the event that suspected human remains are encountered, the AMS osteoarchaeologist (Dr Mara Tesorieri) will be immediately notified to confirm their nature and context. Human remains shall be left *in situ* and protected in the first instance. The discovery of human remains will be reported to An Garda Síochána, who will refer the discovery to the coroner in accordance with the Coroner's Act 1962.

Excavation of human remains shall only be carried out where it is absolutely necessary, following consultations and agreement with the NMS and the NMI, and under the guidance of a qualified osteoarchaeologist. All human remains of archaeological significance will be treated/excavated and analysed in accordance with relevant guidelines and policies including:

- the Heritage Council's *Human Remains in Irish Archaeology* (O'Sullivan & Killgore 2003);
- the Irish Association of Professional Osteoarchaeologists and IAI's *Guidance on the Treatment of Human Remains* (Keating 2024); and
- the NMI's *Human Remains Policy* (NMI 2019).

6.5 Specialist Analysis

Specialist analysis will be undertaken where necessary. The following is a preliminary list of available specialists for the project, where the need arises.

Table 6: Table of Specialists.

Specialism	Specialist
Animal Bone Assemblage	Dr Ruth Carden
Archaeobotanical Assemblage	Dr Kevin Kearney
C14 Assessment/Bayesian C14 Analysis	Dr Kevin Kearney
Radiocarbon Dating	Queen's University Belfast
Charcoal Assemblage	Dr Lorna O'Donnell
Clay Tobacco Pipe Assemblages	Elaine Lynch
Environmental Wood	Dr Lorna O'Donnell
Finds Conservation	Dr Susannah Kelly – University College Dublin
Finds Illustration	Elaine Lynch
Finds Photography	Richard Hinchy

Specialism	Specialist
Human Bone Assemblage	Dr Mara Tesorieri
Industrial Residue	Dr Paul Rondelez
Lithic Assemblage	Dr Conor Brady
Medieval Pottery Assemblage	Elaine Lynch
Metal Assemblage	Órla Scully
OSL Dates	Dr Aayush Srivastava – University of St Andrews
Post-Medieval Glass Assemblage	Rosanne Meenan
Post-Medieval Pottery Assemblage	Elaine Lynch
Prehistoric Pottery Assemblage	Elaine Lynch
Stone Assemblage/Petrographical Analysis	Dr Stephen Mandal

6.6 Storage and Archiving

Temporary secure accommodation will be provided for any finds or samples or other archaeological materials that may be recovered during the archaeological testing, pending deposition with the NMI (see Section 6.3 above).

7 Safety, Health & Welfare at Work

All archaeological works will be carried out in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013.[22] A project-specific Risk Assessment Method Statement (RAMS) will be in place at the commencement of on-site services.

[22] https://www.hsa.ie/eng/Legislation/New_Legislation/SI_291_2013.pdf [Accessed: [22 June 2026]

8 Reporting

A report on the testing will be prepared and submitted to the NMS and the NMI within four weeks of completion of on-site works. This will be submitted in two parts as per licence condition 11 (2).[23] The first part will contain purely archaeological content and will be produced to the standards set out by the NMS in their *Guidelines for Authors of Reports on Archaeological Excavations* (DEHLG 2006) and *Policy and Guidelines on Archaeological Excavation* (DAHGI 1999b).

The report will include:

- a statement of the project background (i.e., the circumstances of the works, the works locations, dates of works etc.);
- archaeological context;
- methods of the archaeological work;
- results of the archaeological testing, including a detailed description (supported by photographs, figures, and drawings as appropriate) of any identified archaeological remains;
- an assessment of their significance; and
- recommendations/measures taken to mitigate the impact of the development on this archaeology.

Should no archaeological remains be encountered, or if archaeological remains are encountered which require no further analyses, then this may be deemed a final report. However, if archaeological remains are encountered that require further post-excavation specialist analyses, including conservation, then a final report incorporating the results of these works will be submitted within twelve months of the archaeological testing having been completed. The second part of the report will contain other information (where appropriate) regarding the archaeological works (owner of the site, reasons for carrying out the archaeological works etc.).

8.1 Database of Irish Excavation Reports

A summary of the results of the archaeological testing will be submitted to the Database of Irish Excavation Reports (DIER) (https://excavations.ie/).

[23]See: https://www.archaeology.ie/app/uploads/2024/12/excavation-license-info-submission.pdf [Accessed: [22 June 2026].

9 Archiving

The excavation archive will be initially maintained by the licence holder and AMS in their offices in Kilrush, with its final place of deposition being the NMS archive. The excavation archive will be ordered, arranged, boxed and deposited with the NMS in accordance with their *Guidelines for the Transfer of Excavation Archives to National Monuments Service Archive* (Barrett 2023) and *Guidelines for producing database record, for Archaeological Archives presented to National Monuments Service Archive* (NMS 2012).

All archaeological objects will be treated in accordance with the *Standards for the Care and Treatment of Archaeological Objects from Excavations* (NMI 2022) and the *Code of Conduct for the Treatment of Archaeological Objects* (IAI 2006b). In addition, the NMI Excavation Finds Register Database will be completed, and archaeological objects will be deposited with the NMI following completion of the final report.

10 Programme

The works are scheduled to commence on 22 August 2026 and are expected to be completed within two weeks.

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Figures

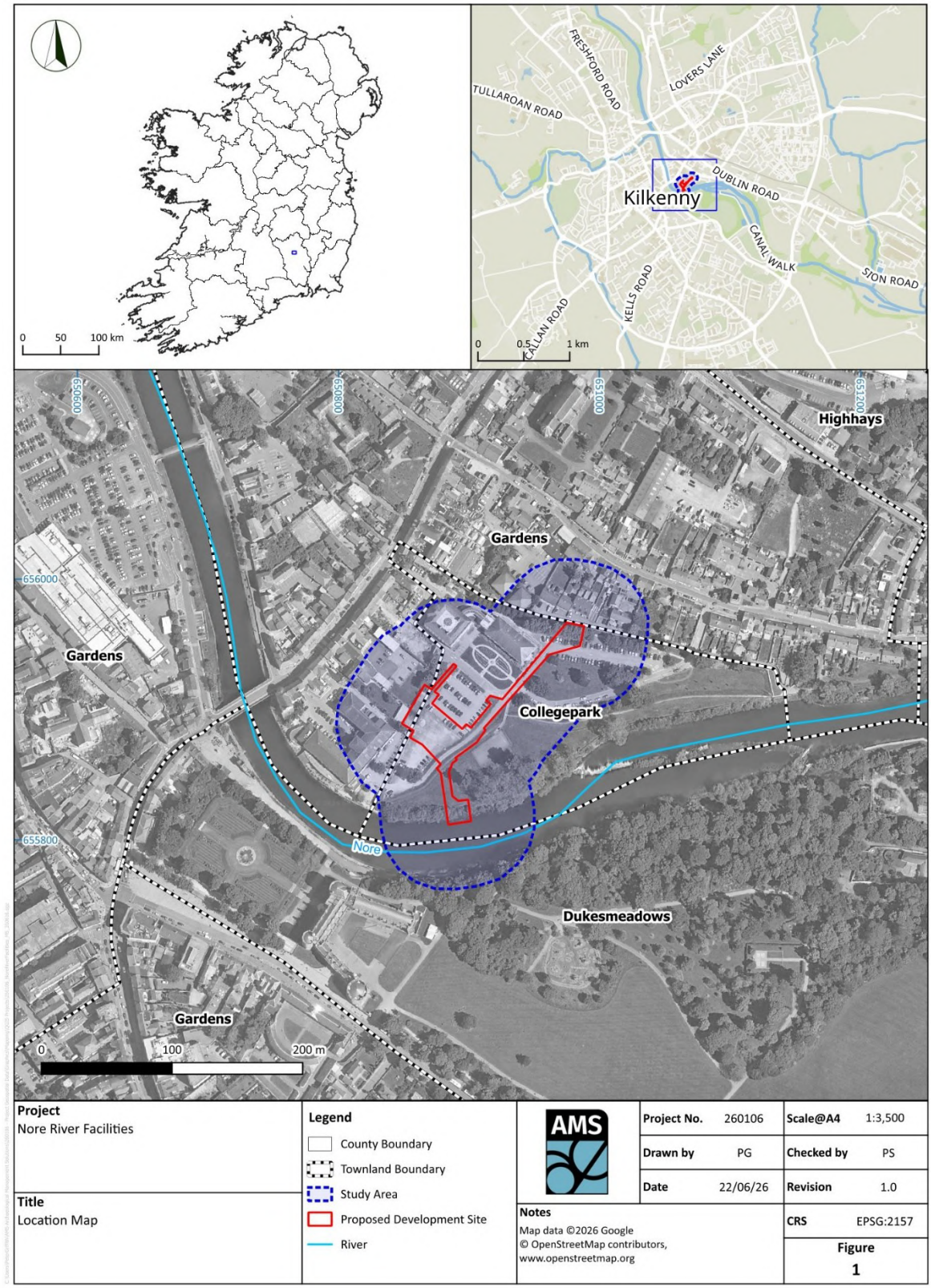


Figure 1: Location Map

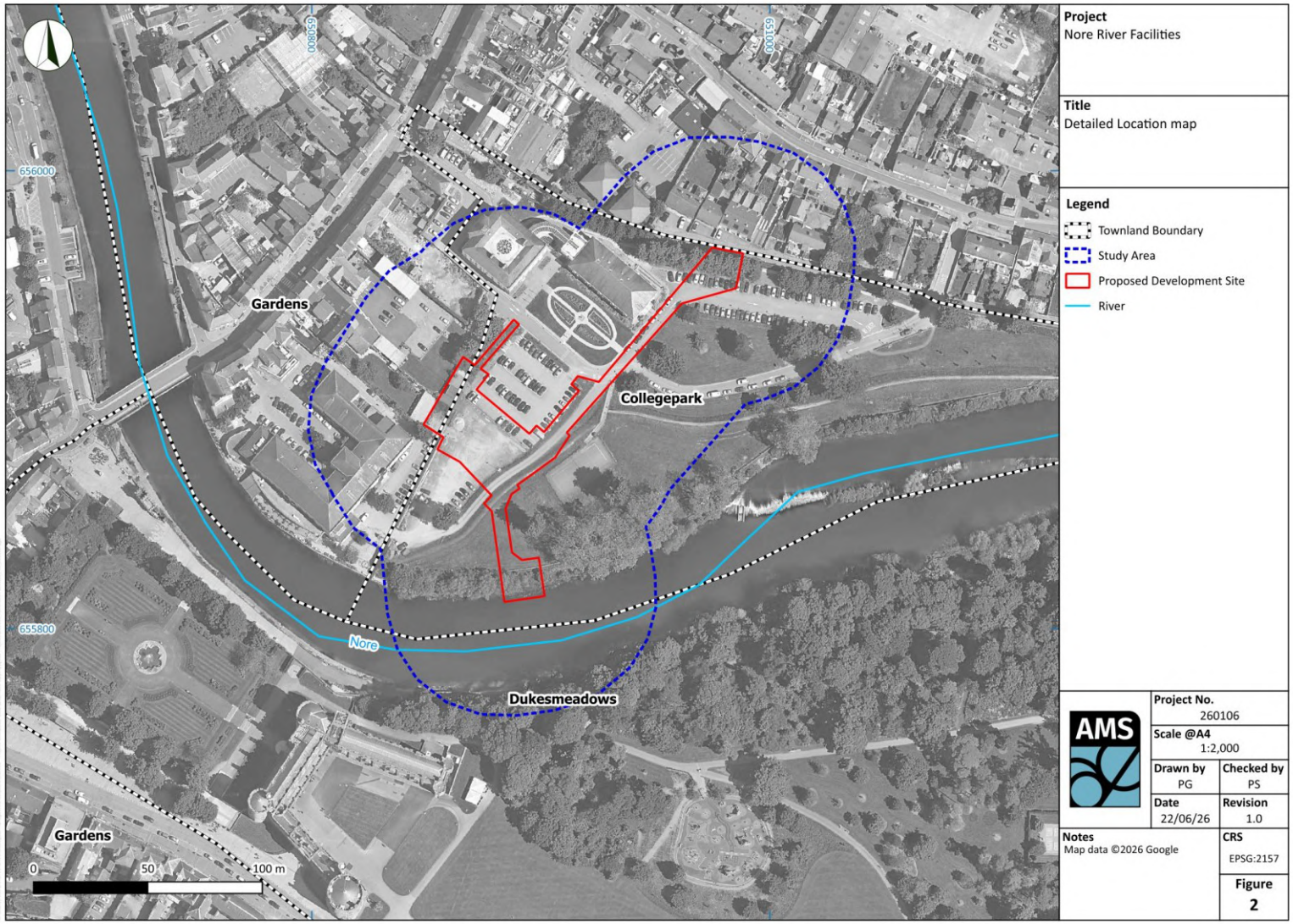


Figure 2: Detailed location map

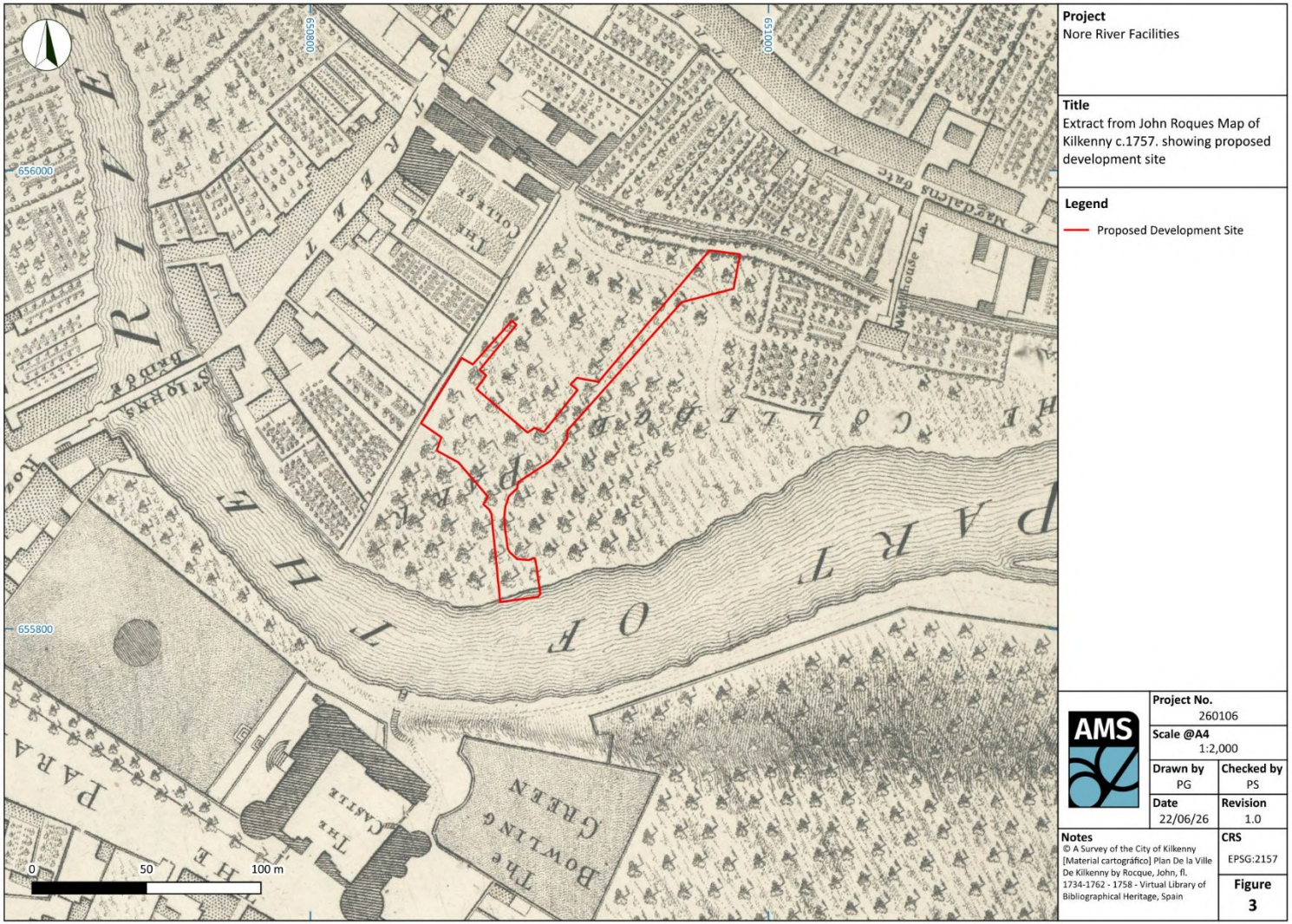


Figure 3: Extract from John Roques Map of Kilkenny c.1757, showing proposed development site

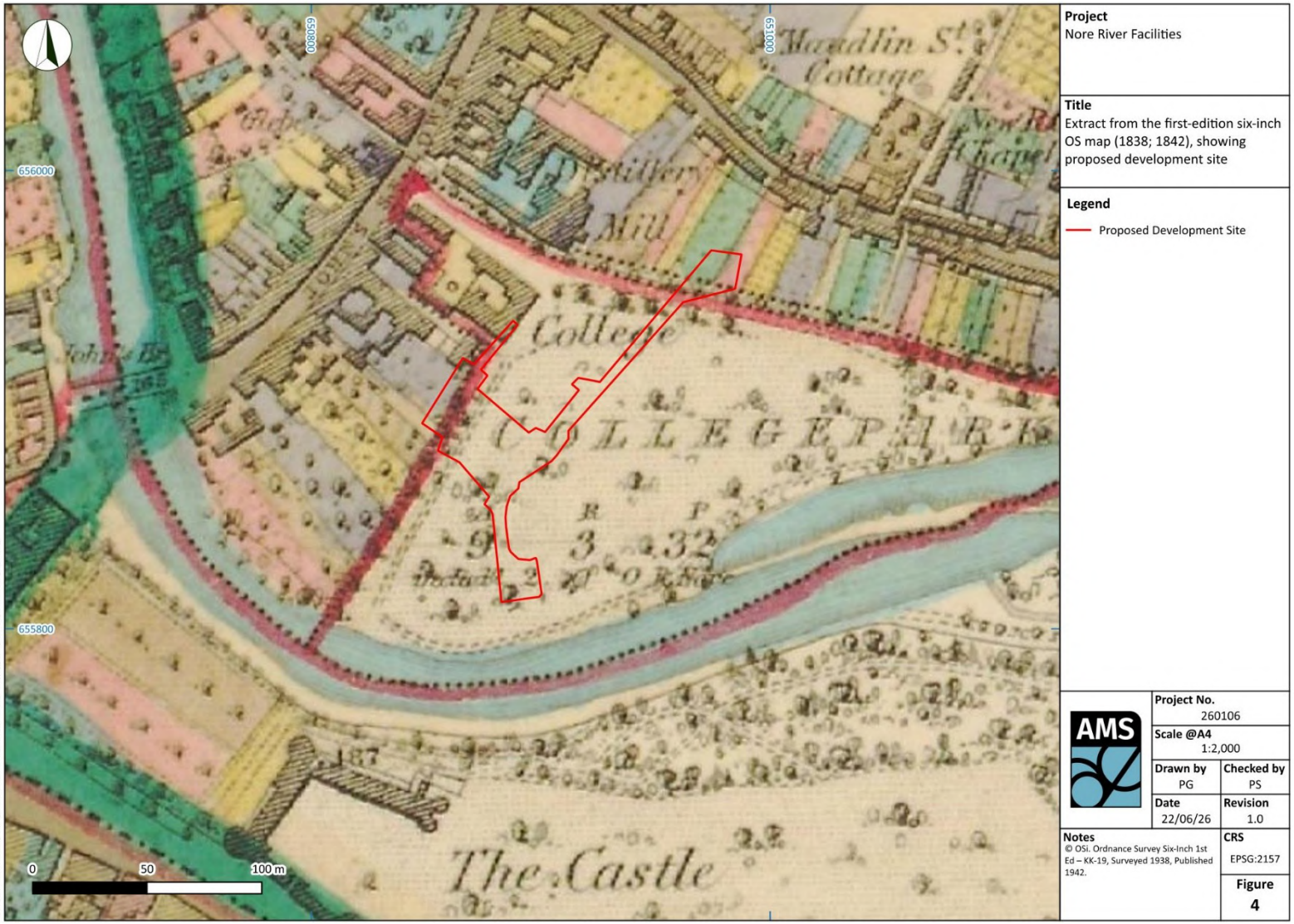


Figure 4: Extract from the first-edition OS map (1838; 1842), showing proposed development site.

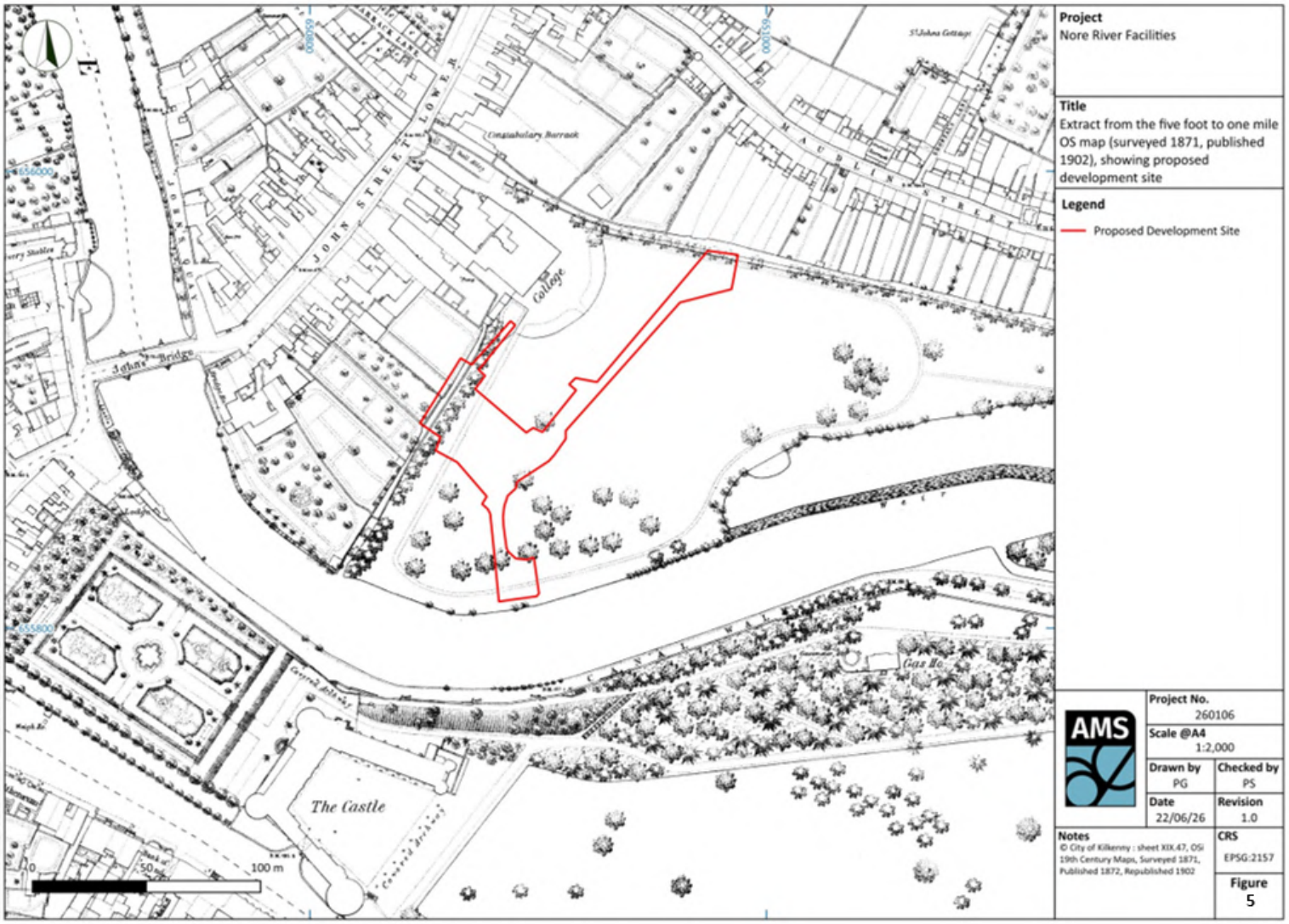


Figure 5: Extract from First edition Six-inch Ordnance Survey map

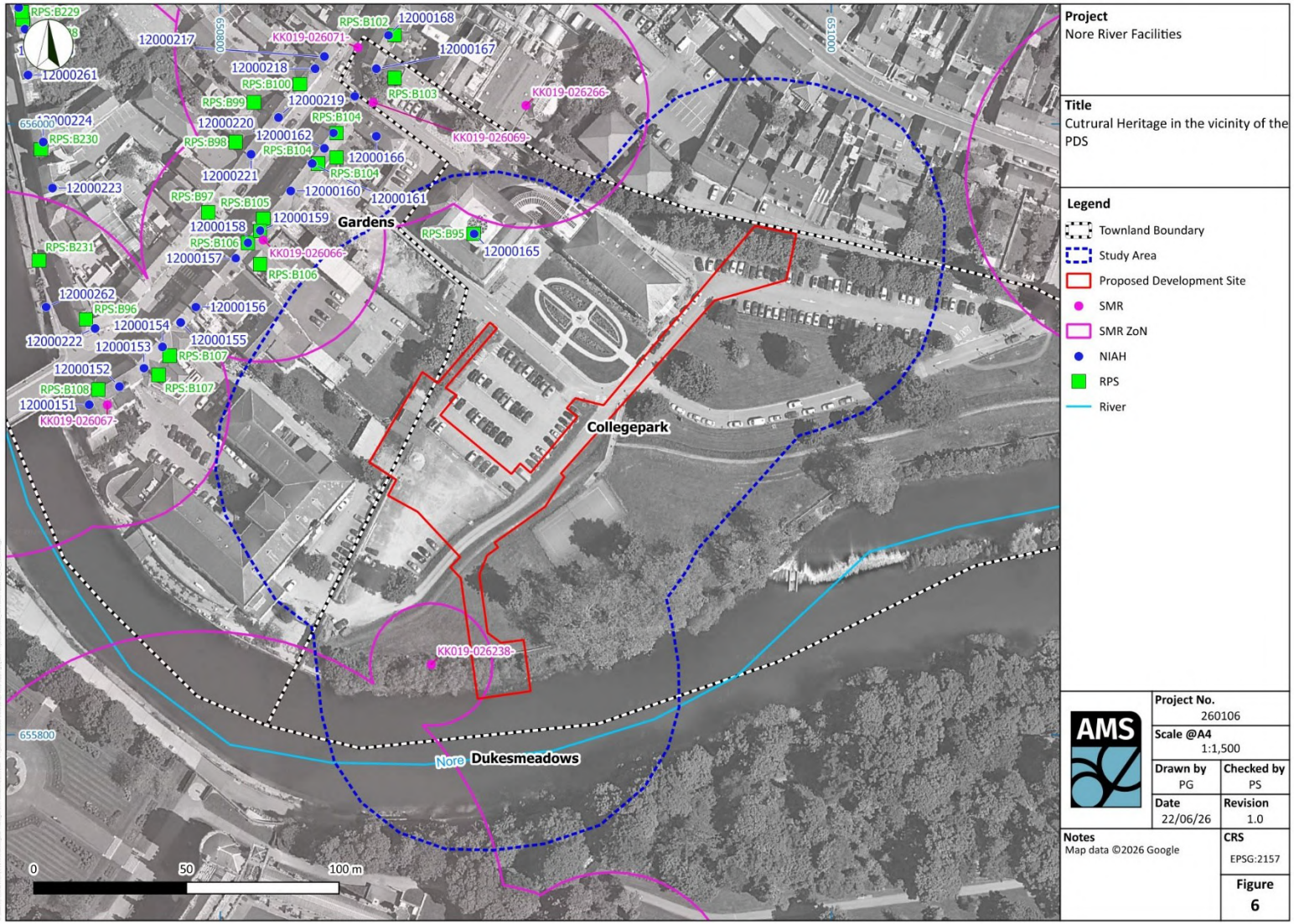


Figure 6: Cultural Heritage in the vicinity of the PDS

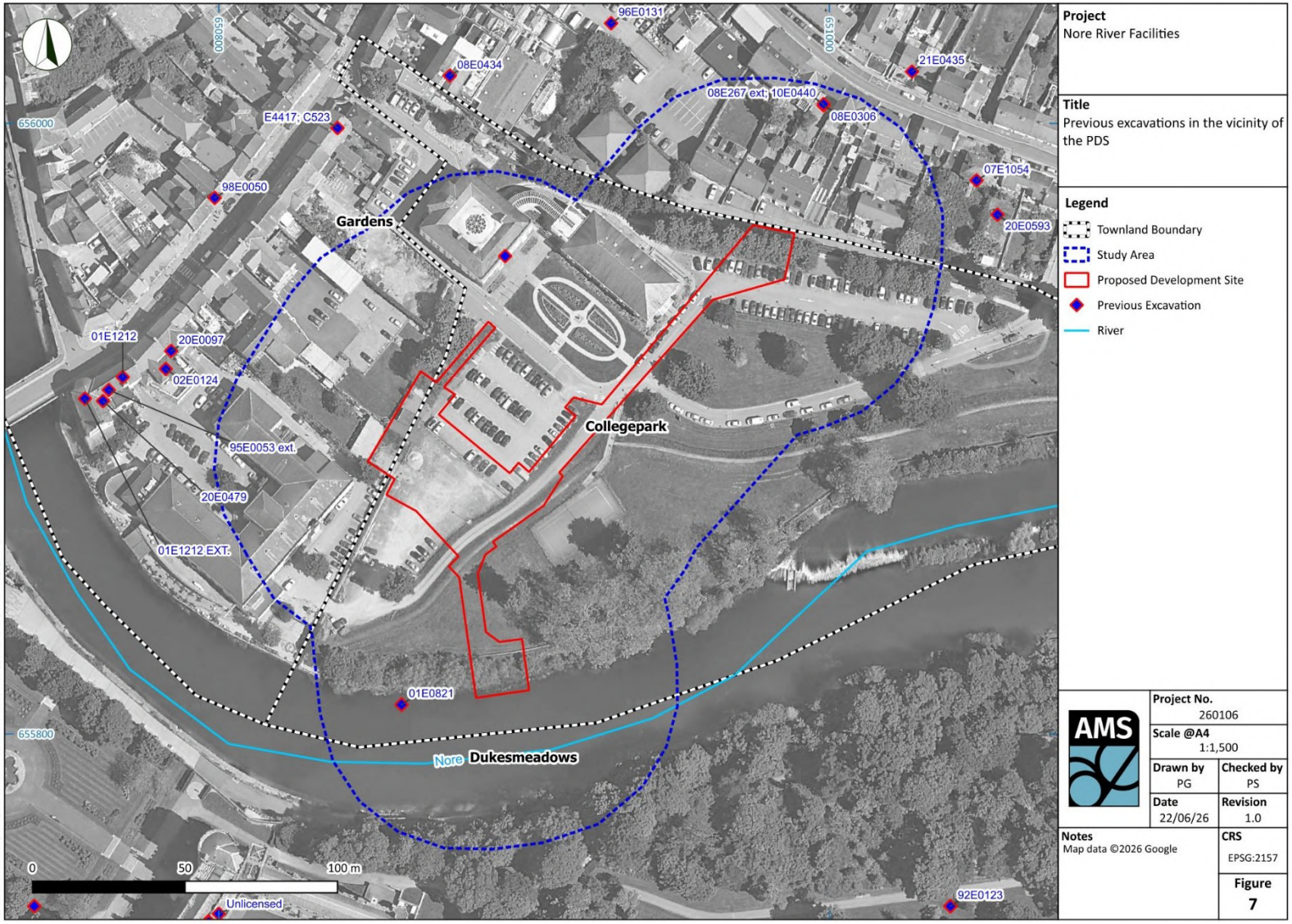


Figure 7: Previous excavations in the vicinity of the PDS

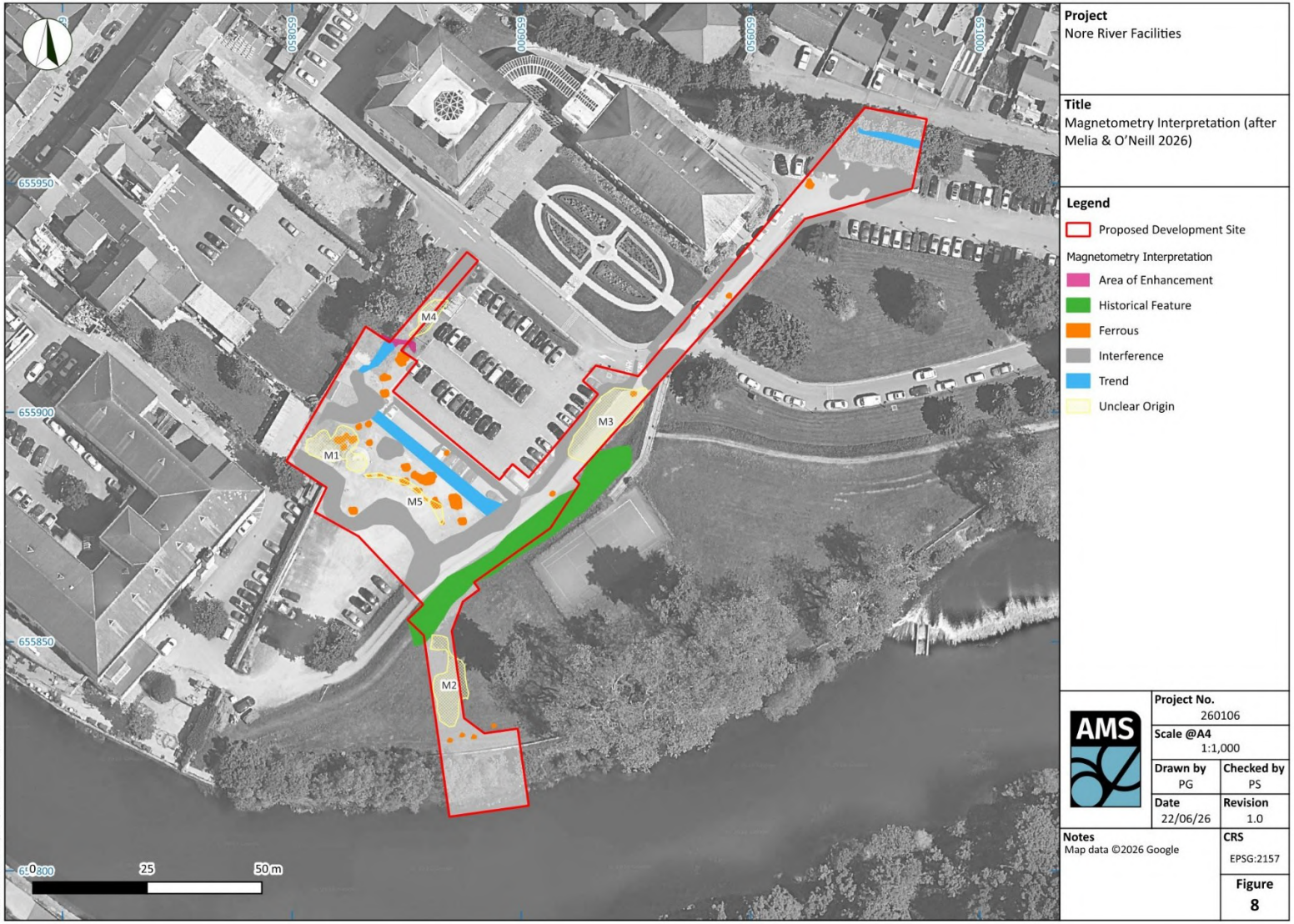


Figure 8: Magnetometry Interpretation (after Melia & O'Neill 2026)

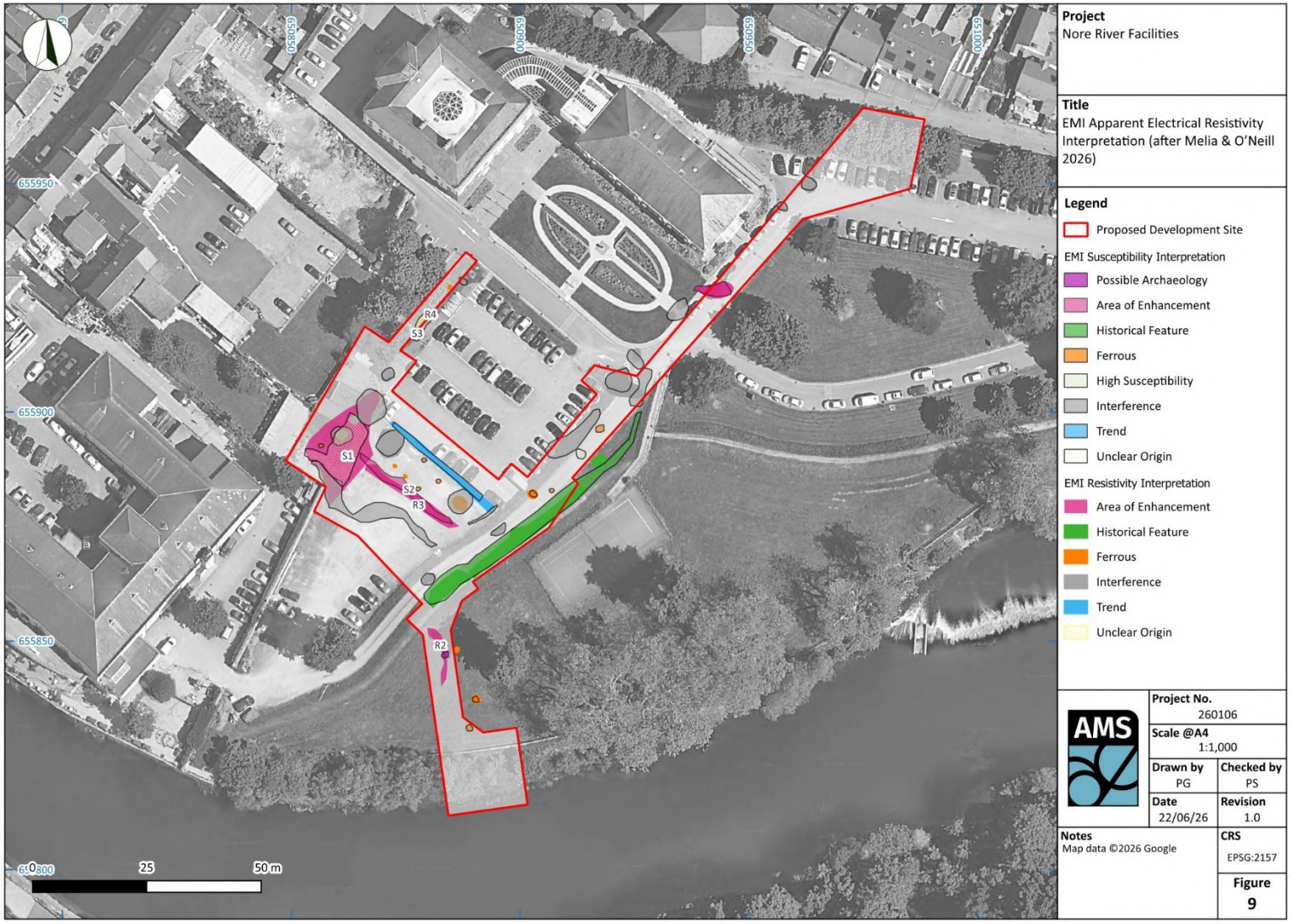


Figure 9: EMI Apparent Electrical Resistivity Interpretation (after Melia & O'Neill 2026)

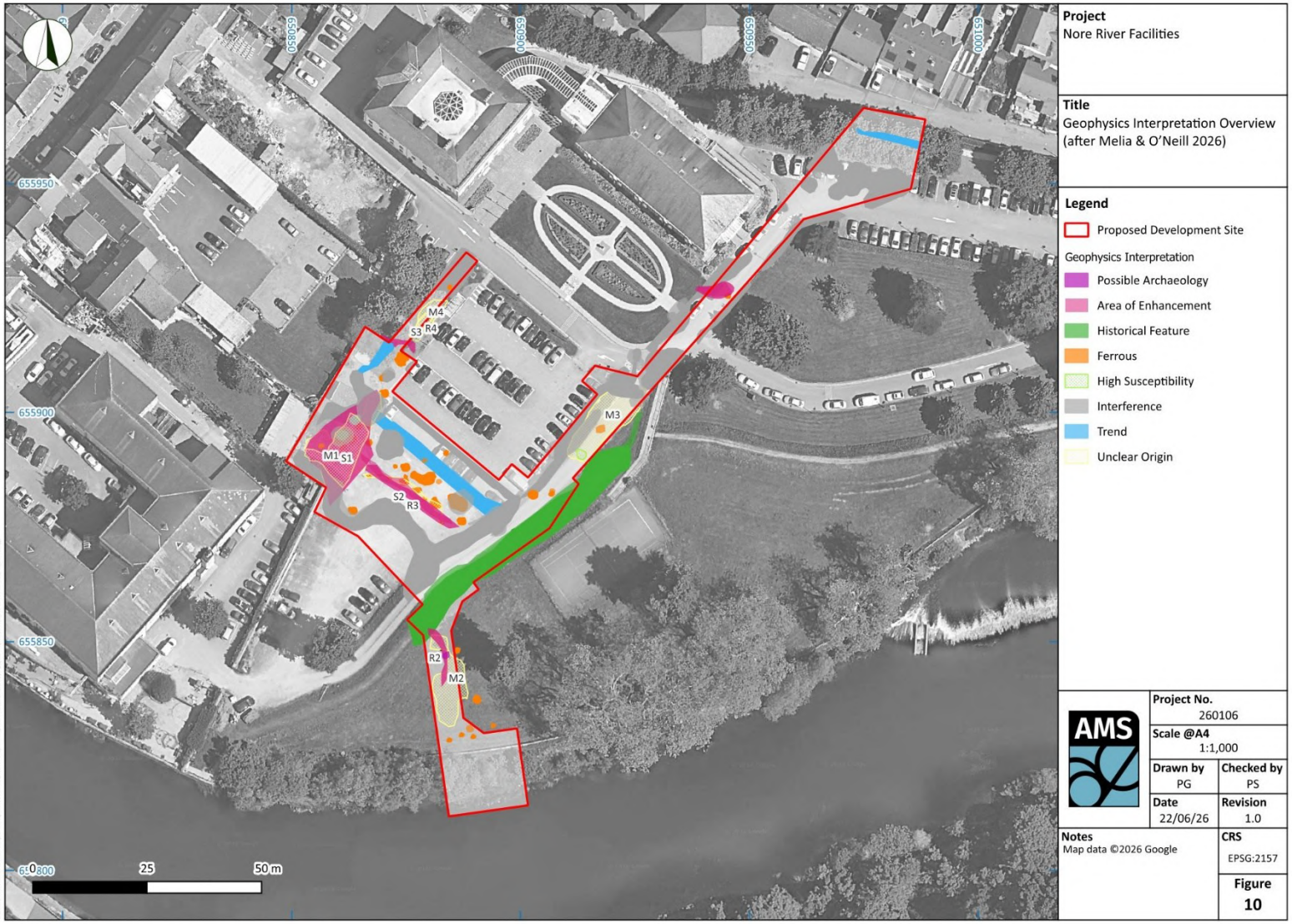


Figure 10: Geophysical Interpretation Overview (after Melia & O'Neill 2026)

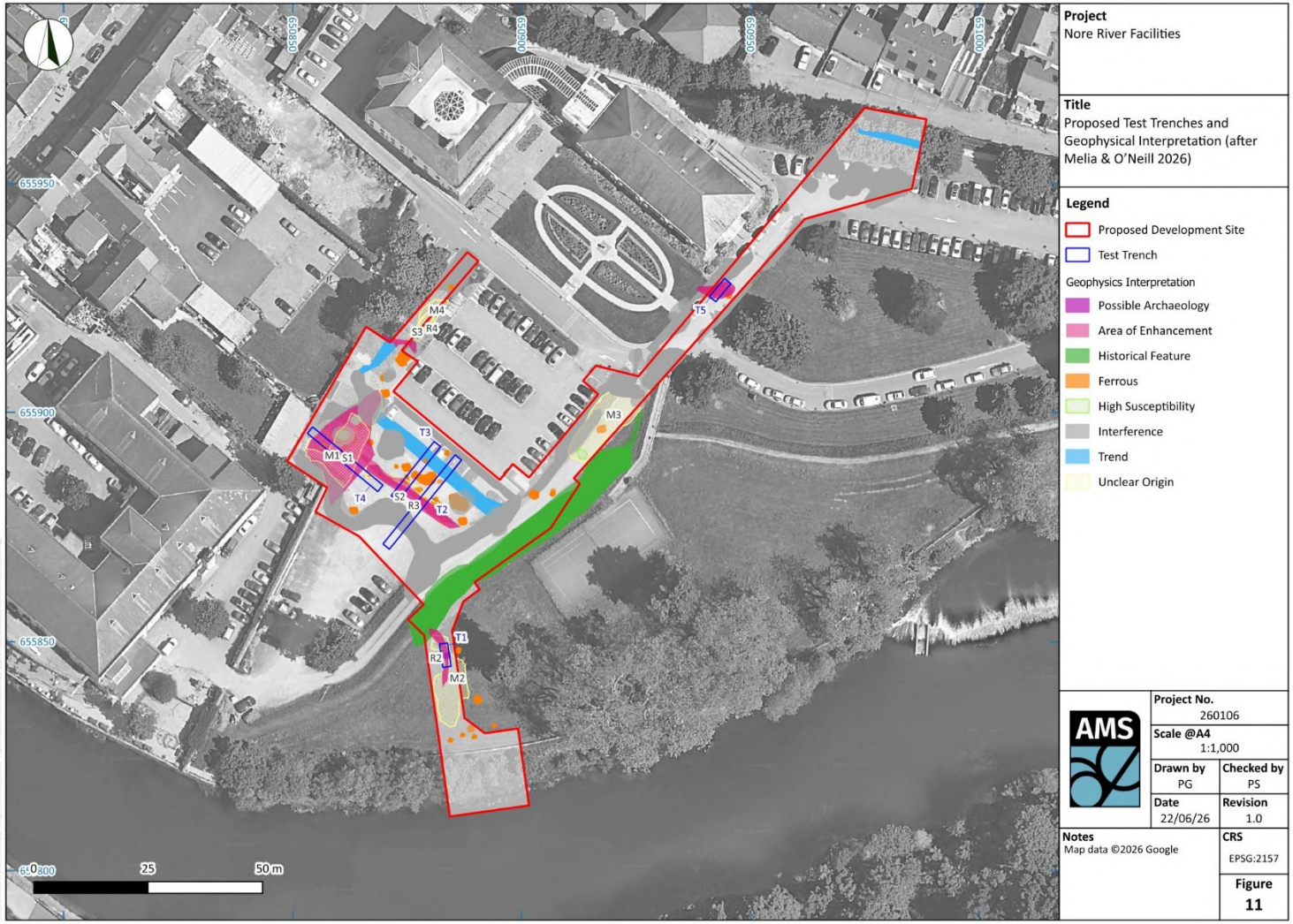


Figure 11: Proposed Test Trenches and Geophysical Interpretation (after Melia & O'Neill 2026)

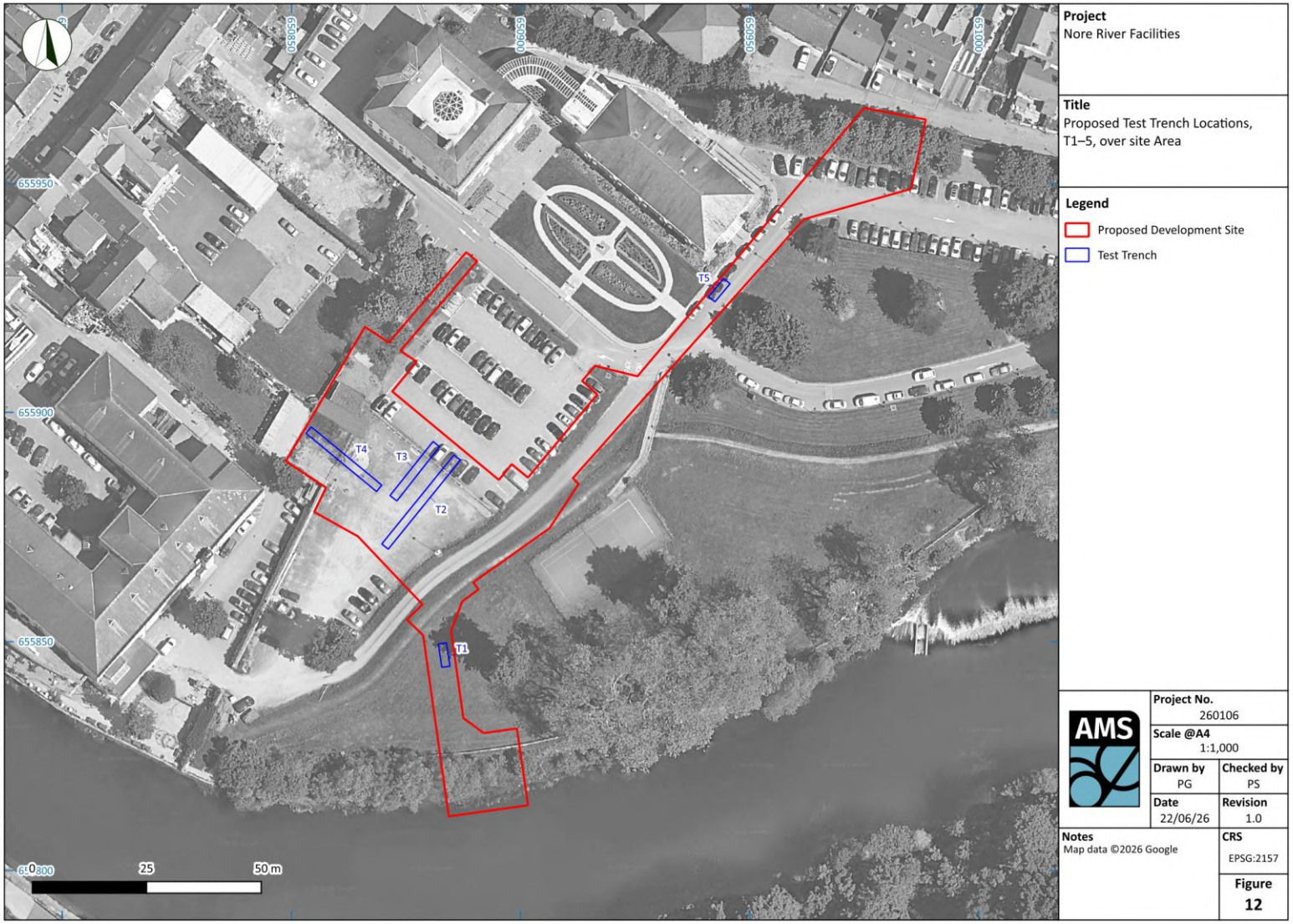


Figure 12: Proposed Test Trench Locations, T1–5, over site Area

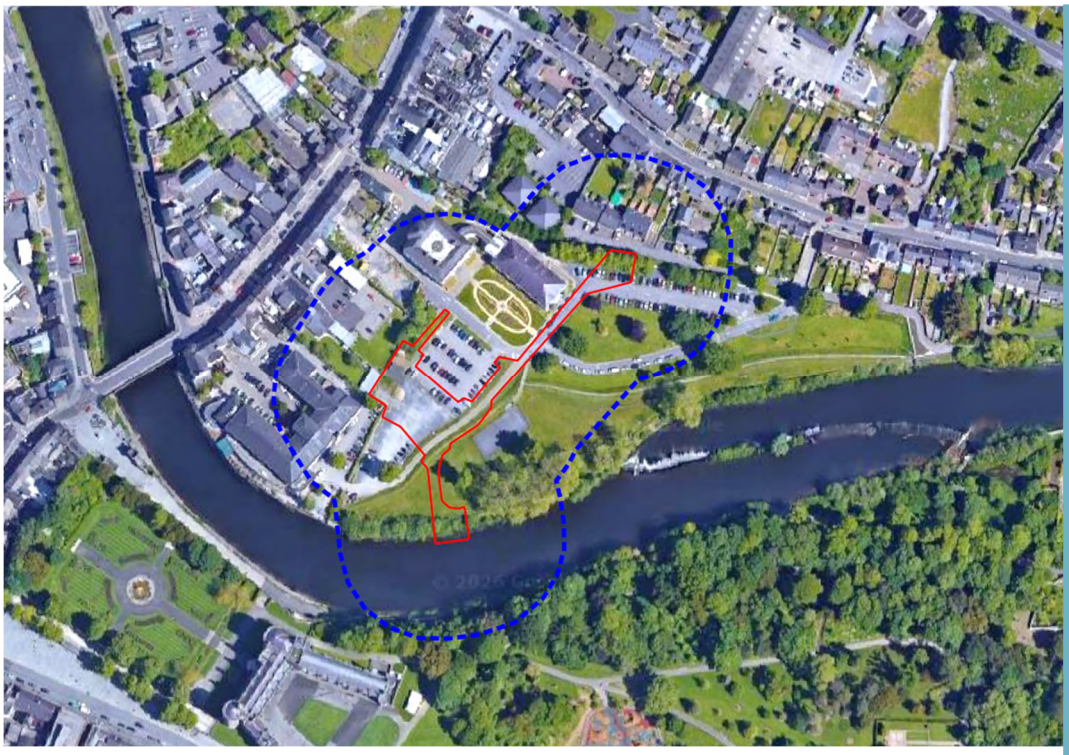
Appendix 1: Funding Letter

**Kilkenny County Council to supply.*

Appendix Q.2 – Method Statement for Archaeological Dive & Detection Survey (AMS)

AMS Archaeological Management Solutions

Method Statement for Archaeological Dive & Detection Survey: River Nore Facilities, Kilkenny



Applicant: Dr Conn Herriott

For Kilkenny County Council

June 2026

TITLE PAGE

AMS Job No.:	260106_MAR
Project Name:	River Nore Facilities, Kilkenny
Document Name:	Method Statement for Archaeological Dive & Detection Survey: River Nore Facilities, Kilkenny
Client Name:	Kilkenny County Council
Townland Names:	Collegepark and Gardens
Grid Reference (ITM):	650904, 655886
Document Status/Revision:	FINAL
Revision Date:	23 June 2026
Document Author:	Brigid Melloy
Technical Reviewer:	Dr Dan Atkinson
Editor:	Anne-Marie Hardy
Approved By:	Dr Dan Atkinson
File Name:	AMS_260106_RiverNore_Kilkenny_Underwater Survey MS_FINAL

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Summary

Archaeological Management Solutions (AMS) have been engaged by Kilkenny County Council (KCC) to carry out a targeted Underwater Survey in response to a request for further information by An Bord Pleanála [ABP] Ref:ABP-321143-24 (An Bord Pleanála [ABP])[1] on a section of riverbank and channel of the River Nore at John Street, Collegepark, Kilkenny, in Co. Kilkenny. The proposed development comprises the construction of a new water sports activity centre on *c.*0.24 hectares of land currently in use as car parks and landscaped parkland. The site is situated on a bend in the River Nore, which forms its southern boundary, and is bounded to the north and southwest by existing car parks, parkland to the east, and walled rear plots of properties along Johns Street to the northwest.

The request for further information requires submission of an Archaeological Impact Assessment (AIA) with both test excavation and geophysical survey, and an Underwater Archaeological Impact Assessment (UAIA) for the underwater survey. A programme of geophysical survey was undertaken by AMS (Melia & O'Neill forthcoming) noting several anomalies which will be investigated by the upcoming test excavations.

Reports already undertaken for this development include an Archaeological Desktop Assessment (ADA) by John Cronin & Associates (Brännström 2024), an Environmental Impact Assessment Screening (EIAS) by Ross Swift Ecology Ltd (Donnelly-Swift 2024a), and a Natura Impact Statement (NIS) also by Ross Swift Ecology Ltd (Donnelly-Swift 2024b).

Previous archaeological works undertaken thus far at the development site have comprised the excavation of a medieval structure, listed as a dovecote in 2001 (Doyle 2005) and the River Nore flood alleviation scheme[2] in 2000–2003 (Stevens 2000).

The ADA found that the proposed development area possesses a **high** archaeological potential and recommended that the site be subject to a programme of licensed archaeological monitoring (Brännström 2024, 22). The EIAS found that the proposed development will not have any significant impacts on the environment and will not require an Environmental Impact Assessment Report (EIAR) (Donnelly-Swift 2024a, 32). The NIS found that with mitigation measures (outlined in Section 8 of the NIS) in place, the proposed development would not have an adverse effect on any European sites (the Natura 2000 network) (Donnelly-Swift 2024b, 85).In order to identify any subsurface archaeological objects, features or deposits that may potentially exist within the proposed development area, it is proposed to conduct a dive survey under licence from the National Monuments Service (NMS) to investigate the underwater area of the proposed development within the River Nore. In the event that archaeological objects, features or deposits are discovered, an appropriate mitigation strategy (i.e., preservation *in situ* and/or preservation-by-record) will be implemented in consultation with the NMS.

The dive survey is programmed for a date to be confirmed in 2026 and is expected to take one day to complete, subject to licence. The dive survey will be undertaken by the applicant, underwater archaeologist and HSE Part III diver Dr Conn Herriott (AMS) supported by fellow underwater archaeologist and HSE Part IV diver Dr Alexander von Lünen (AMS), using commercial SCUBA equipment and operating within a professional dive team (Scubadive West [SDW]).

The preliminary report on this archaeological dive survey will be submitted to the NMS and National Museum of Ireland (NMI) within four weeks of the survey's completion. The results of the archaeological dive survey (and overarching UAIA) will be reported on following the completion of the underwater survey. The UAIA will present a comprehensive desktop analysis and the results of the dive survey, highlighting the cultural heritage sites and features that lie within or in proximity to the

[1] Now An Coimisiún Pleanála

[2] https://excavations.ie/report/2000/Kilkenny/0005354/

proposed works as well as appropriate archaeological strategies to avoid/mitigate adverse impacts on the cultural heritage.

Services shall be carried out in accordance with conditions of licences as issued by the National Monuments Service (NMS) of the Department for Housing, Local Government and Heritage and this Method Statement, unless otherwise agreed with the NMS.

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Abbreviations and Acronyms

Abbreviation/Acronym	Definition
AIA	Archaeological Impact Assessment
AAP	Area of Archaeological Potential
ABP	An Bord Pleanála[3]
ACA	Architectural Conservation Area
ADA	Archaeological Desk-top Assessment
AMS	Archaeological Management Solutions
CHIA	Cultural Heritage Impact Assessment
DGPS	Differential Global Positioning System
DHLGH	Department of Housing, Local Government and Heritage
DTM	Digital Terrain Model
EDM	Electronic Distance Measurement
EIAR	Environmental Impact Assessment Report
EIAS	Environmental Impact Assessment Screening
IAI	Institute of Archaeologists of Ireland
ITM	Irish Transverse Mercator
NIAH	National Inventory of Architectural Heritage
NIS	Natura Impact Statement
NMI	National Museum of Ireland
NMS	National Monuments Service
RMP	Record of Monuments and Places
RPS	Record of Protected Structures
SID	Strategic Infrastructure Development
SMR	Sites and Monuments Record
WIID	Wreck Inventory of Ireland Database
ZoN	Zone of Notification
UAIA	Underwater Archaeology Impact Assessment

Coordinate Reference System

All grid coordinates in this report use the Irish Transverse Mercator (ITM) coordinate reference system unless otherwise stated.

[3] Now An Coimisiún Pleanála

1 Introduction

Archaeological Management Solutions (AMS) have been engaged by Kilkenny County Council (KCC) to carry out a targeted Underwater Survey in response to a request for further information by An Bord Pleanála [ABP] Ref:ABP-321143-24 (An Bord Pleanála [ABP])[4] on a section of riverbank and channel of the River Nore at Johns Street, Collegepark, Kilkenny, in Co. Kilkenny (Figure 1).

The request for further information requires submission of an Archaeological Impact Assessment (AIA) with both test excavation and geophysical survey, and an Underwater Archaeological Impact Assessment (UAIA) for the underwater survey. A programme of geophysical survey was undertaken by AMS (Melia & O'Neill forthcoming) noting several anomalies which will be investigated by the upcoming test excavations.

Reports already undertaken for this development include an Archaeological Desktop Assessment (ADA) by John Cronin & Associates (Brännström 2024), an Environmental Impact Assessment Screening (EIAS) by Ross Swift Ecology Ltd (Donnelly-Swift 2024a), and a Natura Impact Statement (NIS) also by Ross Swift Ecology Ltd (Donnelly-Swift 2024b).

Previous archaeological works undertaken thus far at the development site have comprised the excavation of a medieval structure, listed as a dovecote in 2001 (Doyle 2005) and the River Nore flood alleviation scheme[5] in 2000–2003 (Stevens 2000).

The ADA found that the proposed development area possesses a **high** archaeological potential and recommended that the site be subject to a programme of licensed archaeological monitoring (Brännström 2024, 22). There was a total of 46 archaeological sites identified within 200m of the proposed development. Two of these sites, the town defences (KK019-026001-) and a dovecote (KK019-026238-), are located in close proximity to the proposed development boundary (*ibid.*, 6). All town defences are designated national monuments. The dovecote is listed on the Sites and Monuments Record (SMR).

In order to identify any subsurface archaeological objects, features or deposits that may potentially exist within the proposed development area, it is proposed to conduct a dive survey under licence from the National Monuments Service (NMS) to investigate the underwater area of the proposed development within the River Nore. In the event that archaeological objects, features or deposits are discovered, an appropriate mitigation strategy (i.e., preservation *in situ* and/or preservation-by-record) will be implemented in consultation with the NMS.

[4] Now An Coimisiún Pleanála
[5] https://excavations.ie/report/2000/Kilkenny/0005354/

The dive survey is programmed for a date to be confirmed in 2026 and is expected to take one day to complete, subject to licence. The dive survey will be undertaken by the applicant, underwater archaeologist and HSE Part III diver Dr Conn Herriott (AMS) supported by fellow underwater archaeologist and HSE Part IV diver Dr Alexander von Lünen (AMS), using commercial SCUBA equipment and operating within a professional dive team (Scubadive West [SDW]).

The preliminary report on this archaeological dive survey will be submitted to the NMS and National Museum of Ireland (NMI) within four weeks of the survey's completion. The results of the archaeological dive survey (and overarching UAIA) will be reported on following the completion of the underwater survey. The UAIA will present a comprehensive desktop analysis and the results of the dive survey, highlighting the cultural heritage sites and features that lie within or in proximity to the proposed works as well as appropriate archaeological strategies to avoid/mitigate adverse impacts on the cultural heritage.

2 Proposed Works

The proposed development comprises the construction of a water sports activity centre and associated public realm development on existing lands currently in use as car parking facilities and landscaped parkland, as part of the Platform for Growth scheme under Fáilte Ireland. Pursuant to Section 177AE of the Planning & Development Act 2000 (as amended) and the requirements of the Planning & Development Regulations 2001 (as amended), Kilkenny County Council intends to seek the approval of An Coimisiún Pleanála under Section 177AE of the Planning and Development Act 2000 (as amended) for the proposed development which involves the construction of the 'Nore River Facilities Kilkenny' at a site of approximately 0.24ha, located within the grounds of County Hall at John Street Lower, Collegepark, Kilkenny City, Co. Kilkenny (Figure 2).

The proposed development will consist of the construction of a riverside facilities centre comprising the following:

a) Demolition of an existing single-storey maintenance store,
b) Removal of selected on-site vegetation to facilitate the works,
c) Single-storey facilities block with a flat, intensive green roof build-up, containing toilets, universally accessible bathroom, changing places facility, showering / changing cubicles, cleaner's store, outdoor showers, an external plant area, storage lockers, wash trough, and a drying room,
d) Single-storey adjoining community block with an asymmetrical pitched roof containing a community room, associated kitchenette, and a plant room / central information point,
e) Adjoining external covered terrace area with a flat intensive green roof build-up,
f) A single-storey storage block with an asymmetrical pitched roof containing equipment storage, a dragon-boat / rowing boat storage, and a maintenance store,
g) A single-storey adjoining block with a mono-pitched roof containing a boat / general storage area,
h) A hard landscaped pedestrian central space with raised central planter / seating, planted areas, boat wash-down area and associated surface water UV filtration system,
i) Proposed shared surface including a central set-down / vehicular turning area for boat loading / unloading and pedestrian use generally,
j) Access route to river over berm comprising a sloped access path with associated retaining wall, steps, landings, balustrading, and associated handrails,
k) Raised walkway from top of berm to pontoon with associated balustrading / handrails,
l) Part fixed / part floating access pontoon within the river,
m) Site services connections and drainage works, including connection to existing public foul and stormwater system,
n) Universally accessible parking bay and covered bicycle parking area,
o) Public lighting to all pedestrian / vehicular / parking areas,
p) Associated archaeological investigations, including test excavations and underwater surveys
q) All necessary landscaping, site boundary and site development works.

3 Receiving Environment

3.1 Location Overview

The proposed development area is located mostly within Collegepark townland, with a small portion extending into Gardens townland, on a bend of the River Nore within Kilkenny City. The proposed development overlaps an area currently in use as car parks and landscaped parkland and is adjacent to the Kilkenny County Hall.

This site is located within Collegepark and Gardens townlands, in the civil parish of Saint Patrick's, within the barony of Kilkenny (Table 1; Figure 1).

Table 1: Townlands intersected by the proposed development and their suggested placename meanings.[6]

Townland Name (English)	Barony	Civil Parish	Townland Name (Irish)	Suggested Translation
Collegepark	Kilkenny	Saint Patrick's	*Páirc an Choláiste*	College park
Gardens	Kilkenny	Saint Patrick's	*Gairdíní San Eoin*	Garden of Saint John

3.2 Archaeological and Historical Background (after Brännström 2024)

A full archaeological and historical background has been compiled as part of the ADA (Brännström 2024) and is summarised here.

Although there are no known Neolithic or Mesolithic sites located within the Study Area looked at as part of the ADA, the River Nore has produced finds dating to these periods during archaeological monitoring at different points within the river. These finds include flints and polished stone axes (Brännström 2024, 13). Evidence of activity dating to the later prehistoric period can be found closer to the area of proposed development. A post-and-wattle fish weir (KK019-026240-) was discovered in the River Nore at the twentieth-century Saint John's Bridge (Record of Protected Structures [RPS] D3; National Inventory of Architectural Heritage [NIAH] 12000229) in 2003 (Licence No. 01E0980ext.) as part of the River Nore (Kilkenny City) Drainage Scheme. Two collapsed post-and-wattle fences were found and these later produced Late Bronze Age radiocarbon dates.[7]

Similarly, there are no known early medieval sites located within the Study Area. In the wider area of Kilkenny City, the early medieval period is represented primarily by the ecclesiastical site of St. Canice's, now occupied by St. Canice's Cathedral (KK019-02602-). The earlier church (possibly KK019-026265-) likely represents the earliest major settlement in the area of Kilkenny City and it is from this early

[6] https://www.logainm.ie/en/ [Accessed: June 2026].

[7] https://excavations.ie/report/2003/Kilkenny/0010063/ [Accessed: June 2026].

Christian site that Kilkenny (*Cill Chainnigh* in Irish) takes its name: 'Cell/Church of Cainneach or Canice'.[8] St. Canice's, located *c.*800m to the northeast of the proposed development, was established in the fifth century AD. Kilkenny would see significant expansion in the later medieval period, when it developed as an Anglo-Norman stronghold, beginning with the construction of a castle (KK019-026233-) by Richard de Clare (also known as 'Strongbow'), Earl of Leinster, in 1173. This castle would be replaced by a masonry castle (KK019-026078-) in the fourteenth century. William Marshal, Earl of Pembroke, continued Kilkenny's development and founded St. John's Priory (National Monument Nos. 344 & 331; Preservation Order No. 46/1936; KK019-026068-) in 1211. Later, the town wall (KK019-026001-) would enclose the priory and the surrounding suburb which had grown up around it (Brännström 2024, 14). Part of the projected path of the town defences overlaps with the northwestern extent of the site boundary (see Figure 6 in Brännström 2024, 10). Within the Study Area, there is only one other known archaeological site dating to the medieval period. This is a twelfth–thirteenth century dovecote (KK019-026238-) which was excavated in 2003 (Licence No. 01E0821) and is located only 12m to the west of the boundary of the proposed development (the Zone of Notification [ZoN] overlaps the proposed development).

Kilkenny in the post-medieval period saw further development and there are numerous structures dating to the sixteenth and seventeenth centuries in the area. The city also saw military activity—the suburb of St. John's near the proposed development area was mentioned in the accounts of Cromwell during the Siege of Kilkenny in 1650. Kilkenny Castle (KK019-026078-), located just across the River Nore, was later largely rebuilt in the nineteenth century (RPS B197; NIAH 12001066). St. John's Bridge (RPS D3; NIAH 12000229), approximately 105m to the east of the proposed development, was constructed in 1910. The previous bridge (KK019-026239- and KK019-026070-) was one of a series of bridges constructed in the medieval period but which was destroyed in the 'Great Flood' of 1763 (Brännström 2024).

On the first-edition six-inch Ordnance Survey (OS) map (1842), the proposed development area is depicted as comprising mostly landscaped parkland associated with Kilkenny College (RPS B95, NIAH 12000165) (Figure 6). An arm of the proposed development which extends to the northeast overlaps with the gardens of two terraced houses located along Maudlin Street. The northwestern portion of the proposed development also overlaps with a garden of a terraced house on John Street Lower as well as part of Kilkenny College. The gardens of the terraced houses are depicted as having some landscaping with trees. A distillery and a mill are noted to the north of the proposed development. There is a footpath which runs along the border of the parkland.

[8] https://www.logainm.ie/en/1399926 [Accessed: June 2026].

On the second-edition six-inch OS map (1903), the proposed development area now overlaps only Kilkenny College's parkland (Figure 7). This parkland still has a footpath following the border, but there is now a small structure depicted within the parkland, approximately 21m from the riverbank. The boundary of the proposed development now only borders the back gardens of the terraced houses along Maudlin Street and John Street Lower and no longer overlaps the college building. It is possible that the gardens were shortened, and the college building saw substantial renovation in the late nineteenth century; however, it is more likely that the first-edition six-inch OS map (1842) is slightly off.

3.2.1 Underwater Cultural Heritage

There are no recorded sites in the Wreck Inventory of Ireland Database (WIID) from the River Nore in the vicinity of Kilkenny. There are no recorded logboats either within Kilkenny or in the wider vicinity (Gregory 1997).

3.2.2 Previously Recorded Archaeological Sites and Monuments

There are two previously recorded sites listed within the 50m Study Area (Figure 3; Table 2), the town defences are a national monument and listed on the Record of Monuments and Places (RMP), the dovecote is listed on the SMR. However, the Study Area also overlaps the ZoN for a further six sites as well as the RMP Constraints Zone for the Historic Town of Kilkenny (KK019-026----). The six sites include three sixteenth/seventeenth-century houses (KK019-020066-, RPS B106, NIAH Nos. 12000157–12000159; KK019-026067-, RPS B108, NIAH Nos. 12000151 and 12000152; and KK019-026069-), Kilkenny Castle (KK019-026078-, KK019-026233-; RPS B197; NIAH 12001066), and one water mill (KK019-026266-). All six are listed on the SMR but not the RMP.

Table 2: Recorded archaeological sites and monuments within 50m of the proposed development.

SMR/RMP Ref. No.	Site Type	Townland	ITM (centroid)	Status/ Designation	Approx. Distance
KK019-026001-	Town defences	Collegepark, Bishopsmeadow (Crannagh By., Kilkenny Rural ED), Gardens (Kilkenny City By., St. Patrick's Par.), Gardens (Kilkenny City By., St. Mary's Par.), Gardens (Kilkenny City By., St. John's Par.), Gardens (Kilkenny City By., St. Canice Par.)	650201, 656315	National Monument, Recorded Monument	0m
KK019-026238-	Dovecote	Collgepark	650869, 655823	Listed on the SMR	12m

3.2.3 Previous Archaeological Investigations

According to the Database of Irish Excavation Reports (DIER), four previous archaeological investigations are recorded as having taken place within the 50m Study Area (Figure 4; Table 3). One

of these investigations (Licence No. 08E267 ext. and 10E0440)[9] did not uncover anything of an archaeological nature, although another excavation which took place in the same area in the same year (Licence No. 08E0306)[10] uncovered a nineteenth century waste pit. Both excavations were located in Gardens townland and to the rear of houses on Maudlin Street to the northeast of the proposed development.

Several excavations were carried out as part of the wider River Nore (Kilkenny City) Drainage Scheme. They began in July 2002 and continued seasonally until 2004 and comprised test trenching (Licence no. 00E0405). Two trenches were excavated on the banks of the river in Collegepark townland. While no features were identified, a seventeenth century ceramic sherd and one sherd of medieval coarseware were recovered from the river gravel deposits. Subsequent archaeological monitoring of the scheme (under Licence No. 01E0821)[11] identified a stone structure later interpreted as a dovecote (KK019-026238-) and confirmed the structural characteristics of the fish weir (KK019–028-) in the vicinity (Doyle and O'Meara 2004).

The earliest, excavation which took place within the Study Area comprised test trenching carried out at Kilkenny College (RPS B95, NIAH 12000165) in March 1991 (DIER Ref. No. 1991:079) ahead of the proposed renovation of the former college for use as the KCC Office and the construction of a new office building and linkway east of the college. The excavation uncovered numerous archaeological features, including a layer of thirteenth-century deposits, a layer of thirteenth-century refuse, a boundary wall, and dumps of redeposited sixteenth- to eighteenth-century material.[12]

Table 3: Previous archaeological investigations.

DIER Ref.	Licence No.	Townland	Results
1991:079	N/A	Collegepark	Historic town
2006:1058	01E0821	River Nore	Fish weir
2008:716	08E0306	Gardens	Nineteenth-century pit
2010:417	08E267 ext; 10E0440	Gardens	No archaeology found

3.2.1 Previous Geophysical Investigations

Geophysical survey (Melia & O'Neill forthcoming) identified multiple anomalies of potential archaeological interest with the proposed development site which will be subject to test excavation by AMS.

[9] https://excavations.ie/report/2010/Kilkenny/0021626/ [Accessed: June 2026].

[10] https://excavations.ie/report/2008/Kilkenny/0019730/ [Accessed: June 2026].

[11] https://excavations.ie/report/2006/Kilkenny/0015802/ [Accessed: June 2026].

[12] https://excavations.ie/report/1991/Kilkenny/0001138/ [Accessed: June 2026].

3.2.2 National Museum of Ireland (NMI) Topographical Files

The National Museum of Ireland's (NMI) Topographical Files archive (digital database) was consulted.[13] The archive contains a single stray find (NMI 1959:759, KKAP-291), with an undefined find spot in the vicinity of the proposed development and Collegepark. The precise find location of the artefact remains uncertain. The find is listed as a medieval buckle "found in a field at Kilkenny College in 1959".

3.2.3 Designated Built Heritage

There is one designated built heritage site within the 50m Study Area. This site comprises the KCC office building, which was formerly Kilkenny College (RPS B95, NIAH 12000165) (Figure 5; Table 4). The structure was built between 1782 and 1784 and occupied the site of an earlier college established in 1667 by James Butler. Former students include Jonathan Swift, Bishop George Berkeley, John Banim, Archbishop William Connor Magee, and Admiral David Beatty.

The Study Area is also within the Architectural Conservation Areas (ACAs) of John Street and Kilkenny Castle.

Table 4: Recorded built heritage asset within the 50m Study Area.

RPS/NIAH Ref. No.	Site Type	Townland	ITM (centroid)	Status/ Designation	Approx. Distance
RPS B95; NIAH 12000165	College	Collegepark	650883, 655964	Protected Structure, listed on the NIAH	10m

[13] https://experience.arcgis.com/experience/ca514d04c83c453e9469d0263d30a72c/page/Viewer#data_s=id%3Awidget_50_output_config_0%3A0 [Accessed 15 June 2026]

4 Project Team

The Underwater Surveys will be carried out by Dr Conn Herriott and Dr Alexander von Lünen of AMS. Conn is a licence-eligible underwater archaeologist and HSE Part III certified commercial diver and emergency First Aid Responder, with 20 years' experience in commercial archaeology. Alex is an archaeologist with an academic and commercial background, and experience and training in marine archaeology and commercial diving (HSE Part IV). Alex is also an experienced surveyor.

Conn and Alex will conduct the dive surveys, within the framework of a four-person commercial SCUBA dive team, including a dive supervisor and standby diver provided by Scubadive West. Conn and Alex will be the working divers in that team. As licence-holder, Conn will be responsible on site for the Underwater Surveys. Conn and Alex will plot the location and extent of any identified cultural heritage structures, features, deposits or objects found. Internal AMS support will be available to them, and additional archaeological staff will be consulted and deployed as required, in agreement with the Client. The project will be managed by Dr Dan Atkinson, Head of Coastal, Marine & Inland Waters (AMS).

In the event that potential human remains are encountered, the AMS osteoarchaeologist (Dr Mara Tesorieri) will be available to provide the necessary assessment and services.

5 Aims and Methodology

5.1 Introduction

This archaeological dive survey will investigate all locations within the River Nore which will potentially be impacted by the proposed development. The aims of the underwater archaeological survey will be:

- to ascertain the character, condition and extent of any cultural heritage and archaeological features, deposits and objects likely to be affected by the proposed project, including any associated temporary works and subsequent increased riverine activity as a result of the construction of the proposed pontoon, and the likely impact of the proposed works and increased riverine activity on these remains;
- to accurately locate these archaeological features, deposits and objects, and to present the findings in map form;
- to describe same and discuss their likely provenance;
- to recommend appropriate measures for the avoidance of these remains or, where this cannot be achieved, to recommend measures to mitigate the impact of the works; and
- to incorporate all of the above into a report.

The archaeological dive survey will be carried out to best practice, fully complying with the most up-to-date guidelines and standards. The survey will be carried out by a suitably qualified marine archaeologist (Dr Conn Herriott) under dive survey and detection device licences issued by NMS and working within a commercial diving team (SDW). All biosecurity measures outlined in Section 7 below will be strictly adhered to.

5.2 Archaeological Dive Survey Methodology

The survey will comprise an underwater visual and metal detector survey (subject to a separate consent). The area of the proposed development in the River Nore will be subjected to a systematic visual and metal detector inspection (subject to dive survey licence and detection device consent), encompassing the maximal underwater area to be impacted by the proposed pontoon (Figure 2).

The dive team will be fitted with commercial SCUBA diving equipment (Interspiro Divator with hardwire audio and verbal communication) and will operate from a dive vessel (5m Humber inflatable RIB) moored over the survey area. Due to the limited visibility (as low as 0.5m), the survey may need to employ a number of appropriate underwater survey methodologies including jackstay searches, transects, circular and pendulum swims. If conditions allow, a jackstay baseline will be set along the riverbed and the surveying archaeologist will swim horizontal transects to identify any evidence for archaeological remains (structures/features/deposits) and archaeological objects located in or adjacent to the waterbody.

Any constraints encountered (e.g., the presence of immovable obstacles or areas unsuitable for survey) which impede completion of the survey will be recorded and described. Where possible and accessible, 100% of the proposed development area will be archaeologically inspected.

The dive survey will be carried out with the aid of Differential Global Positioning System (DGPS) equipment, in order to record the location and extent of cultural heritage remains on the riverbed. Any identified or potential archaeological remains or objects will be described, recorded, photographed *in situ* (using underwater digital cameras) and their location, extent and condition recorded. All underwater features of potential archaeological interest will be accurately positioned using a weighted surface marker buoy positioned on the centre of the target and a DGPS position of the buoy recorded from the surface. Following the discovery of any archaeological remains, NMS will be notified immediately and will be consulted with regard to any necessary mitigation measures (i.e., preservation *in situ* and/or preservation by record).

The underwater metal detector survey (using high-performance Minelab Excalibur II metal detector with 11-inch elliptical search waterproof coil, 1.5–40kHz frequency range and with discrimination mode for non-ferrous, ferrous or all metals) will record the location of all ferrous and non-ferrous material within the survey area. In doing so, the metal detector survey will provide a quantitative estimate of the amounts of metals in the area to be impacted by the proposed development. The DGPS position of any metal objects located within the survey area will be recorded.

A full and detailed record of the survey will be maintained throughout by the licence holder. Recording shall include written descriptions, high-resolution photographs with appropriate scale and north point, drawings, and plans showing the extent of survey. More specifically, any archaeological features revealed will be recorded using customised field record sheets (i.e., 'context sheets'), as well as supporting *pro forma* context, finds, samples, drawing and photograph registers, as appropriate. Comprehensive plans, elevations and cross-sectional drawings will be produced at a scale of 1:10, 1:20 or 1:50 as appropriate. The survey results of any structures/features/deposits encountered will be processed using AutoCAD and QGIS. All drawings and survey data will be saved in *.dwg* and *.dxf* format.

5.3 Programme

Subject to licence, it is intended that the archaeological dive survey will take place at a date to be confirmed in 2026. The survey is expected to take one day to complete.

5.4 Constraints on the Archaeological Methods

All potential constraints have been considered and have informed the archaeological dive survey strategy. There are no known constraints on the archaeological methods proposed within the survey

areas. As noted above, any constraints encountered which impede completion of the survey will be recorded and described.

5.5 Finds and Samples

Under Condition 10 of dive survey licences, sampling and finds retrieval are not permitted. However, upon consultation during the course of the survey, should NMS decide that due to unforeseen circumstances, it is necessary to recover artefacts or samples, this will be carried out. Also, as noted above, finds of archaeological significance that are in threat of being damaged or irretrievably lost will be retrieved (NMS and NMI will immediately be informed of the find). To that end, AMS will have a finds retrieval strategy in place.

In such circumstances, every effort will be made to ensure the highest possible level of identification and retrieval of archaeological objects. Archaeological objects of all periods will be retained, including those relating to relatively recent structures and historical events. Advice on finds retrieval and conservation will be sought from NMI if any particular circumstances or need should arise.

Artefacts retrieved during the survey will be catalogued, analysed, conserved, packed and stored in appropriate conditions in a secure location. Significant finds ('special finds') will be recorded three-dimensionally. The treatment of artefacts will comply with the requirements of NMI as set out in *Standards for the Care and Treatment of Archaeological Objects from Excavations* (NMI 2022) and will conform to the *Code of Conduct* for the *Treatment of Archaeological Objects* ratified by the Institute of Archaeologists of Ireland (IAI 2006). Where necessary, any finds requiring immediate conservation will be referred to a specialist (private consultant and/or NMI, subject to advice). Conservation of submerged archaeological remains from a lacustrine environment need specialist treatment and therefore a conservator who is suitably qualified and experienced in underwater finds (Dr Susannah Kelly) will be engaged. Each archaeological object recovered will be entered into the NMI Excavation Finds Register Database.

Where deemed necessary and/or potentially informative, samples will be collected from appropriate contexts. All environmental samples, dating samples, animal bone, etc., will be bagged and labelled on-site and sent for further analysis as necessary.

5.6 Human Remains

In the event that suspected human remains are encountered, the AMS osteoarchaeologist (Dr Mara Tesorieri) will be immediately notified to confirm their nature and context. Human remains will be left *in situ* and protected in the first instance. The discovery of human remains will be reported to the

coroner in accordance with the Coroner's Act 1962 and their direction shall be sought as to whether the discovery should be referred to An Garda Síochána.

Excavation of human remains will only be carried out where it is absolutely necessary, following consultations and agreement with the NMS and the NMI, and under the guidance of a qualified osteoarchaeologist. All human remains of archaeological significance will be treated/excavated and analysed in accordance with relevant guidelines and policies including:

- the Heritage Council's *Human Remains in Irish Archaeology* (O'Sullivan & Killgore 2003);
- the Irish Association of Professional Osteoarchaeologists and IAI *Guidance on the Treatment of Human Remains* (Keating 2024); and
- the NMI's *Human Remains Policy* (NMI 2019).

5.7 Specialist Analysis

Specialist analysis will be undertaken where necessary. The following is a preliminary list of available specialists for the project, where the need arises.

Table 5: Table of Specialists.

Specialism	Specialist
Animal Bone Assemblage	Dr Ruth Carden
Archaeobotanical Assemblage	Dr Kevin Kearney
C14 Assessment/Bayesian C14 Analysis	Dr Kevin Kearney
Radiocarbon Dating	Queen's University Belfast
Charcoal Assemblage	Dr Lorna O'Donnell
Clay Tobacco Pipe Assemblages	Elaine Lynch
Environmental Wood	Dr Lorna O'Donnell
Finds Conservation	Dr Susannah Kelly
Finds Illustration	Elaine Lynch
Finds Photography	Richard Hinchy
Human Bone Assemblage	Dr Mara Tesorieri
Industrial Residue	Dr Paul Rondelez
Lithic Assemblage	Dr Conor Brady
Medieval Pottery Assemblage	Elaine Lynch
Metal Assemblage	Órla Scully
OSL Dates	Dr Aayush Srivastava – University of St Andrews
Post-Medieval Glass Assemblage	Rosanne Meenan
Post-Medieval Pottery Assemblage	Elaine Lynch
Prehistoric Pottery Assemblage	Elaine Lynch
Stone Assemblage/Petrographical Analysis	Dr Stephen Mandal

5.8 Storage and Archiving

Every archaeological object recovered will be entered into the NMI Excavation Finds Register Database. Pending their final deposition with NMI, artefacts and samples will be housed temporarily in secure accommodation by the licensed archaeologist and following this at the AMS Head Office in Kilrush, Co. Clare. The storage of artefacts will be in accordance with *Standards for the Care and Treatment of Archaeological Objects from Excavations* (NMI 2022) and the museum storage boxes recommended in these advice notes will be provided from the commencement of the survey. Ultimately, all archaeological objects will be transferred to NMI (subject to agreement) following post-excavation and final reporting. Directions for the disposal or curation of such objects will be sought from NMI.

The site archive will be initially maintained by the licence-holder, with its final place of deposition being NMS Archive Unit. The site archive will be ordered, arranged, boxed and deposited with NMS in accordance with their *Guidelines for the Transfer of Excavation Archives to National Monuments Service Archive* (Barrett 2023) and *Guidelines for Producing Database Record, for Archaeological Archives presented to National Monuments Service Archive* (NMS 2012).

6 Safety, Health & Welfare at Work

All archaeological works will be carried out in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI no. 291 of 2013),[14] the Safety, Health & Welfare at Work (Diving) Regulations 2018 (SI no. 254 of 2018),[15] and the *Code of Practice for Inland Diving and Inshore Diving* (HSA 2019).[16] Copies of the above will be kept on site. A Health and Safety plan—a project-specific Dive Project Plan (DPP) with Risk Assessment Method Statement (RAMS)—will be in place at the commencement of the archaeological dive survey.

The survey will be taking place in a challenging riverine environment, involving the use of a boat and a range of obstacles and unpredictable ground conditions. Health and safety are at the core of AMS and SDW operations, and the heightened risk when conducting archaeological dive surveys in such environments as the River Nore is clearly understood by all involved. Consideration of associated site-specific risks will be included in the Dive Project Plan and RAMS.

[14] https://www.hsa.ie/eng/Legislation/New_Legislation/SI_291_2013.pdf [Accessed: March 2026].

[15] https://enterprise.gov.ie/en/legislation/legislation-files/si-no-254-of-2018.pdf [Accessed: March 2026].

[16] https://www.hsa.ie/eng/publications_and_forms/publications/codes_of_practice/code_of_practice_for_inland_diving_and_inshore_diving.html [Accessed: March 2026].

7 Biosecurity

At AMS we are keenly aware of the need to stop the spread of invasive species and fish diseases in our aquatic and riparian systems. Below are some basic procedures that are implemented after each of our Coastal, Marine and Inlands Waterways archaeological fieldwork projects:

1. Each field vehicle carries a 'disinfection box'. This contains either Virkon Aquatic or another proprietary disinfectant, a spray bottle, cloths or sponges, a scrubbing brush and protective gloves.
2. On completion of any field operation, all equipment used is treated according to the procedures listed below. Equipment in this respect includes boats, trailers, outboard motors, anchors and rope, weights, tanks, buckets and bins, as well as Personal Protective Equipment (PPE—including boots, wellingtons, waders, wetsuits, drysuits, waterproof clothing, life jackets, diving apparatus, etc.) and any technical or sampling apparatus used as part of the survey. Protective gloves are always worn when using any disinfectant solution in any of the procedures.
3. A visual inspection is carried out on all equipment that has come into contact with the water for evidence of attached plant or animal material, or adherent mud or debris. This must be done before leaving a site of operation. Any attached or adherent material (fish, fish scales, vegetation and debris) is removed before leaving the site of operation.
4. All water is drained from boats, live wells and other water retaining compartments, outboard motors, tanks and other equipment before transportation elsewhere.
5. High-pressure steam cleaning (with water >40°C) is carried out on boats (including oars, row locks, attachment ropes, anchors and buoys), trailers and outboard motors that are being moved from one watercourse to another. This is carried out at a roadside garage, where available. If it is not possible to steam clean the equipment, a normal power hose is used. After cleaning, a visual inspection is carried out on all equipment to ensure that where possible all adherent material and debris has been removed.
6. Using the spray bottle from the 'disinfection box', disinfectant is applied to the undercarriage and wheels of the vehicle and trailer after steam cleaning or power hosing.
7. Wet or live wells and other water retaining compartments in survey boats are cleaned, rinsed or flushed with a 1% solution of Virkon Aquatic or another proprietary disinfection product. Alternatively, a 5% solution (100ml / 20l solution) of chlorine bleach is used. All surfaces are then rinsed thoroughly with clean water.
8. Outboard motors are flushed with a 1% solution of Virkon Aquatic or another proprietary disinfection product, or with water > 40°C. Alternatively, a 5% solution (100ml / 20l solution) of chlorine bleach is used.
9. Footwear is dipped in or scrubbed with a disinfectant solution (e.g. 1% solution of Virkon Aquatic or another proprietary disinfection product) and thoroughly dried afterwards.
10. All PPE is visually inspected, and any attached vegetation or debris removed. Where appropriate, the gear is wiped down with a cloth soaked in 1% solution of Virkon Aquatic or another proprietary disinfection product. Alternatively, a 5% solution (100 ml / 20l solution) of chlorine bleach is used. Rubber gloves are always worn when undertaking this procedure.
11. Sampling equipment is cleaned, rinsed or wiped down with or dipped in a suitable disinfectant solution.

12. All field equipment is suitably disinfected before being returned to the AMS storage facilities.

8 Reporting

The preliminary report on this archaeological dive survey will be submitted to NMS and NMI within four weeks of the survey's completion. This report will adhere to licence conditions and relevant guidelines. The report will be submitted in PDF format, as well as hard copies (two to NMS, one to NMI). A summary of the results of the survey will also be submitted to the Database of Irish Excavation Reports (DIER; https://excavations.ie/) within this calendar year (2026). The UAIA will present a comprehensive desktop analysis and the results of the dive survey—as well as the geophysical survey and test excavations (subject to separate licences)—highlighting cultural heritage sites and features that lie within or in proximity to the proposed works and recommending appropriate archaeological strategies to avoid/mitigate adverse impacts on that cultural heritage.

Should no archaeological remains be encountered, or should NMS decide that any archaeological remains found be left *in situ* undisturbed, the preliminary report may be deemed to be a final report. Should archaeological remains be encountered and NMS request that they be lifted/sampled, specialist analysis will likely be required. In this event, such analyses will be combined with the survey findings to produce a final report which will be submitted following the proposed Underwater Survey.

The report(s) on the results of this archaeological dive survey will include:

- A description of the location of any material culture remains which may be present on the riverbed. In addition to this, the survey will record relevant details relating to the general setting of these remains, including water depth, current flow rate, visibility, and bottom type and conditions. Any material of archaeological or possible archaeological significance will be fully recorded in writing.
- High-resolution digital photographs, which will be used to record the general setting as well as the condition of any features or finds of an archaeological nature. All photographs appearing in the required reports will be represented by a high-resolution image file (> 400 dpi) in the digital archive of the project records. Such digital images will be date-stamped and collated in digital folders that are appropriately labelled.
- Illustrations of the topography of the harbour, including contours and surface details, which will be depicted in plan and section at appropriate scales (1:10, 1:20, or 1:50). Survey data will be georeferenced in ITM and with reference to recorded levels (OPW data or equivalent). All survey drawings will be fit for publication. Survey data on any structures/features/deposits encountered will be processed using AutoCAD/GIS, with elevations and plans produced at scales appropriate to the features surveyed (1:10, 1:20 or 1:50). All drawings and survey data will be saved in *.dwg* and *.dxf* format.
- The report will place the area surveyed within its wider landscape to include the nature, extent and use over time of the River Nore through Kilkenny. Sufficient historical mapping will be included in the report to illustrate the changing nature of the area through time and assist in contextualising any archaeological features or objects identified during the survey.

All reports and other deliverables will be subject to AMS quality control procedures. Any comments on draft reports will be addressed prior to verification by the client.

8.1 Programme

The Underwater Survey is scheduled to commence at a juncture to be confirmed in 2026 and is expected to be completed within one day.

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Figures



Figure 1: Site location

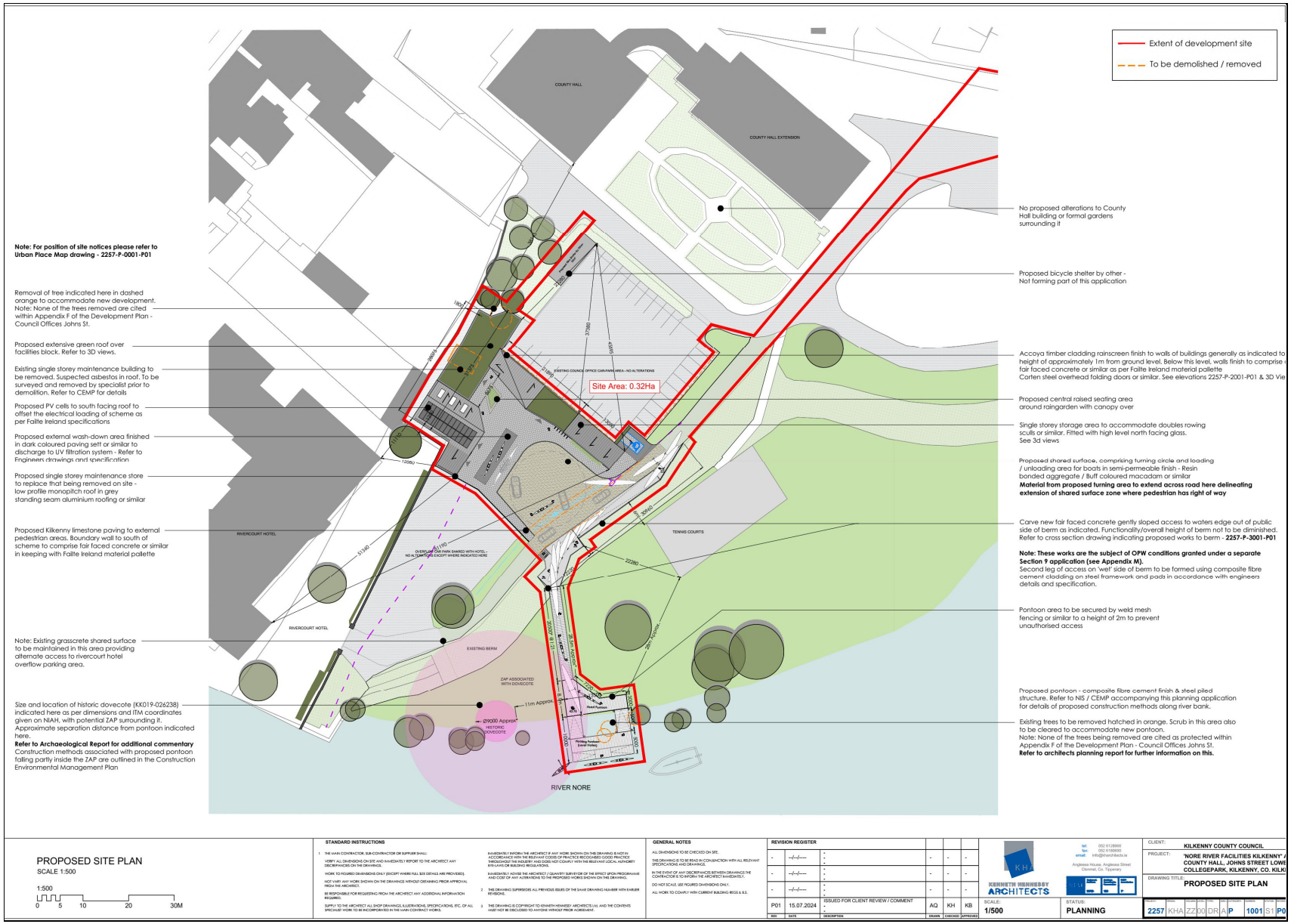


Figure 2: Proposed site plan (provided by client).

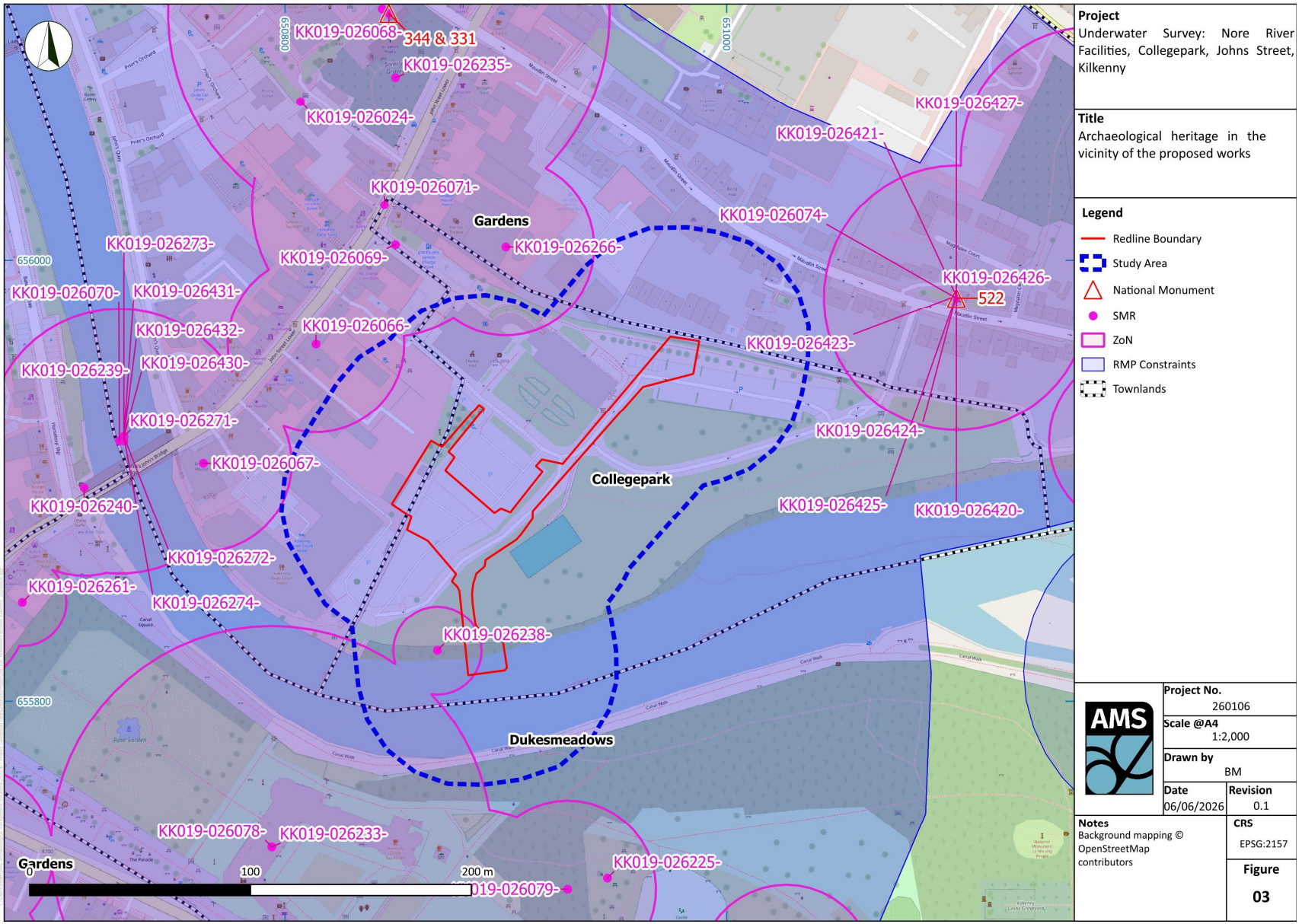
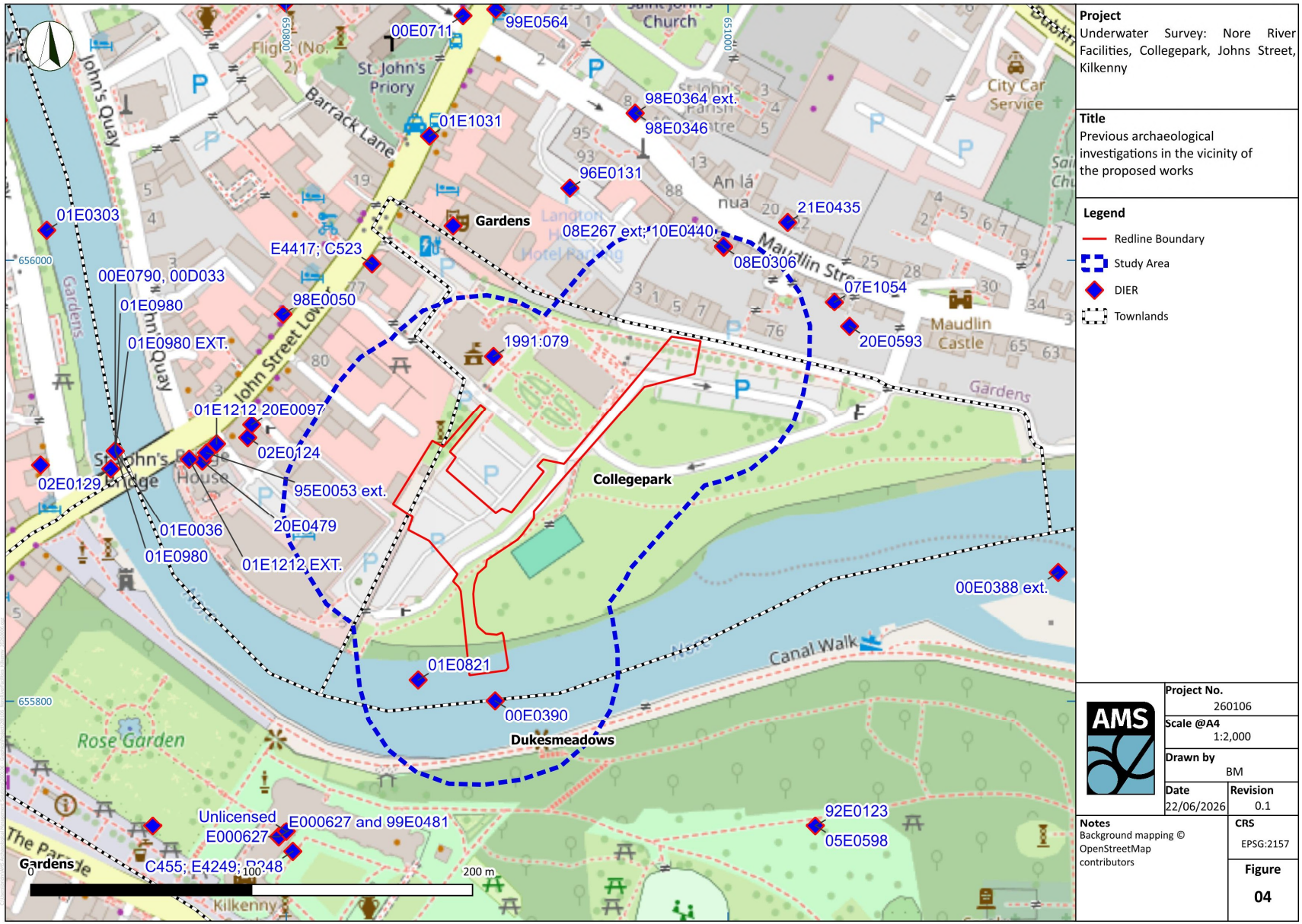


Figure 3: Archaeological heritage in the vicinity of the proposed works.



Project
Underwater Survey: Nore River Facilities, Collegepark, Johns Street, Kilkenny

Title
Previous archaeological investigations in the vicinity of the proposed works

Legend
- Redline Boundary
- Study Area
- DIER
- Townlands

Project No.	260106
Scale @A4	1:2,000
Drawn by	BM
Date	22/06/2026
Revision	0.1
Notes	Background mapping © OpenStreetMap contributors
CRS	EPSG:2157
Figure	04

Figure 4: Previous archaeological investigations in the vicinity of the proposed works.

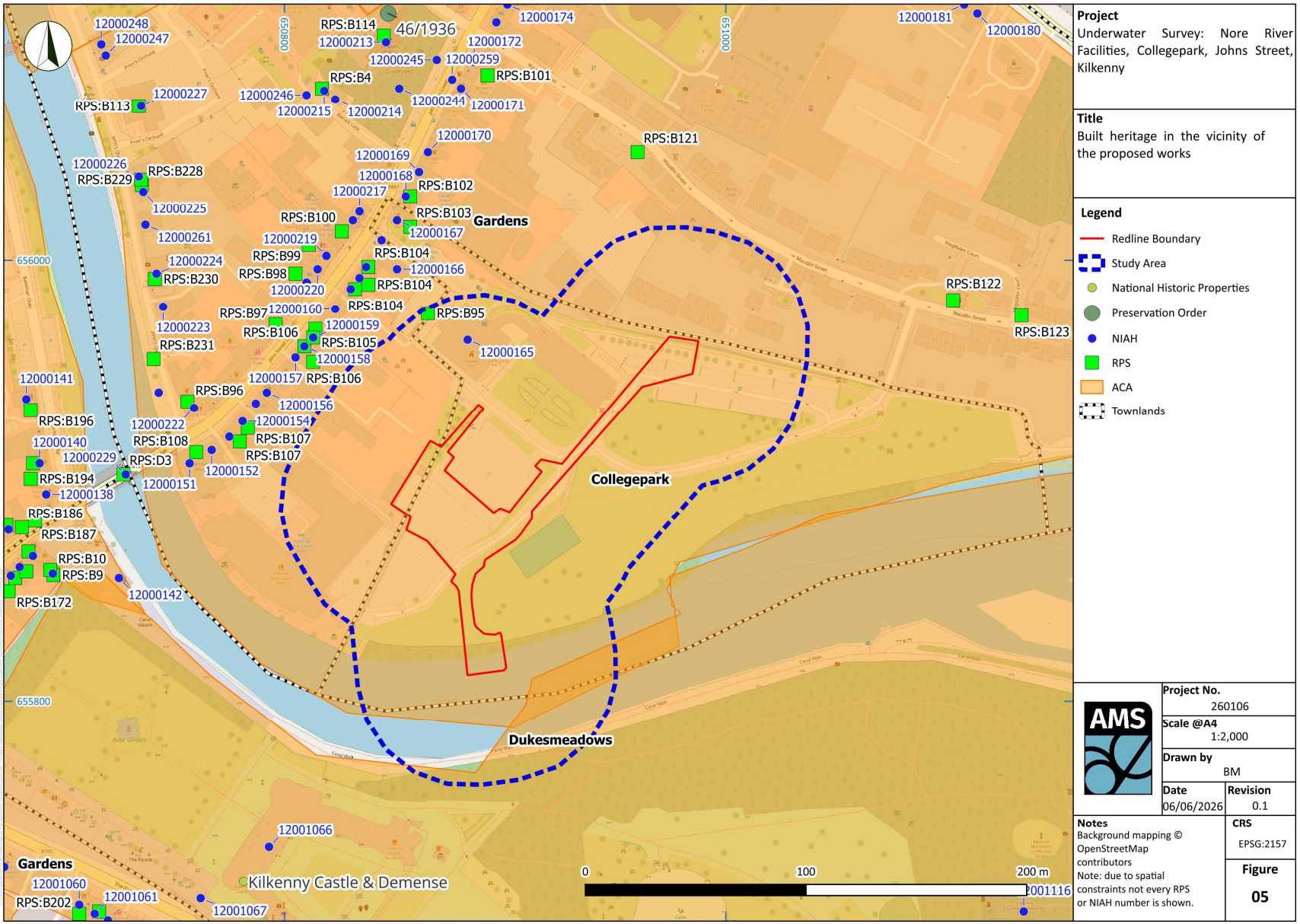


Figure 5: Built heritage in the vicinity of the proposed works.

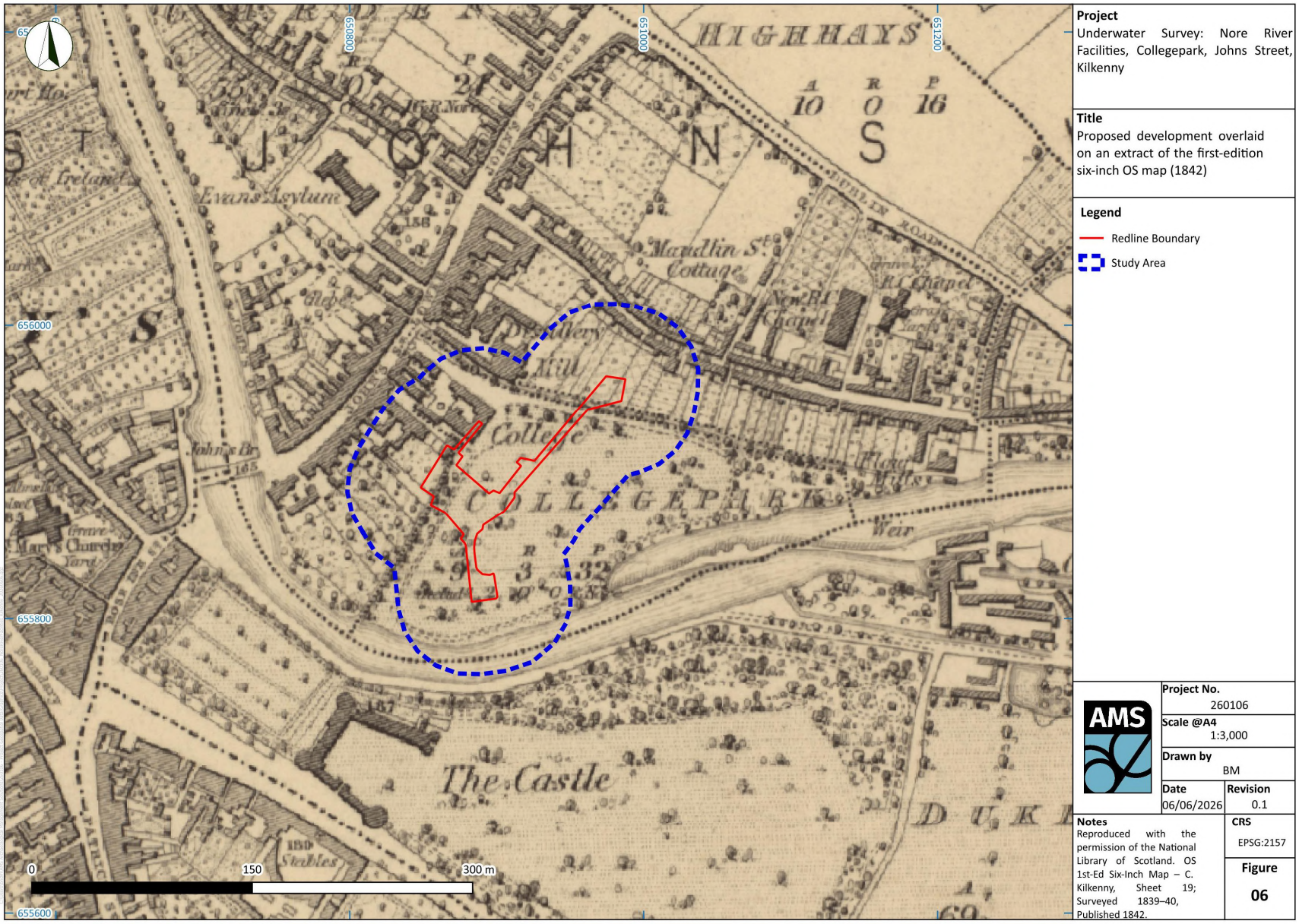


Figure 6: Proposed development overlaid on an extract of the first-edition six-inch OS map (1842).



Figure 7: Proposed development overlaid on an extract of the second-edition OS map (1903).