



An
Bord
Pleanála

Inspector's Report ABP-307796-20

Development	The construction of a proposed urban park and urban street - a pedestrian and cyclist dominated street, including ancillary site works.
Location	Abbey Quarter (former Smithwick's Brewery site), Kilkenny City.
Planning Authority	Kilkenny County Council
Applicant(s)	Kilkenny County Council
Type of Application	Section 175 & Section 177AE Planning Application
Observer(s)	1. Health Services Executive 2. An Taisce 3. Kilkenny Archaeological Society 4. Transport Infrastructure Ireland 5. NCBI Services
Dates of Site Inspection	26 th January 2021
Inspector	Donal Donnelly

Contents

1.0 Introduction	4
2.0 Site Location and Description	5
3.0 Proposed Development	6
4.0 Planning History.....	8
5.0 Policy Context.....	9
5.1. National Planning Framework	9
5.2. Regional Spatial and Economic Strategy for the Southern Region	10
5.3. Kilkenny City Development Plan, 2014-2020	10
5.4. Urban Design Framework / Masterplan for Abbey Creative Quarter, 2015 .	12
5.5. Abbey Quarter Urban Design Code, 2018	13
5.6. Design Manual for Urban Roads and Streets, 2013.....	15
5.8. Natural Heritage Designations	15
6.0 Consultations.....	15
7.0 Assessment.....	20
7.2. Development Principle	21
7.3. Archaeology and Built Heritage.....	24
7.4. Public Realm and Amenity	26
7.5. Transport and Movement	31
8.0 Environmental Impact Assessment.....	35
8.1. Introduction	35
8.2. EIAR Content and Structure.....	36
8.3. Reasonable Alternatives	37
8.4. Likely Significant Effects on the Environment	39
8.5. Population and Human Health	39

8.6.	Biodiversity.....	42
8.7.	Land, Soil, Water, Air and Climate	49
8.8.	Material Assets.....	59
8.9.	Cultural Heritage and the Landscape.....	63
8.10.	Vulnerability of the Project to Major Accident and/ or Natural Disaster	71
8.11.	Cumulative Impacts & Environmental Interactions.....	72
8.12.	Monitoring	75
8.13.	Reasoned Conclusion.....	76
9.0	Appropriate Assessment.....	77
9.4.	Geographical Scope and Main Characteristics	78
9.5.	Screening the need for Appropriate Assessment.....	80
9.6.	The Natura Impact Statement and Associated Documents.....	85
9.7.	Appropriate Assessment of implications of the proposed development on each European Site	87
9.8.	In-Combination Effects.....	106
9.9.	Appropriate Assessment Conclusions.....	107
10.0	Conclusion	108
11.0	Recommendation	109
12.0	Reasons and Considerations	109
12.2.	Proper Planning and Sustainable Development	111
12.3.	Environment Impact Assessment.....	111
12.4.	Appropriate Assessment.....	114
13.0	Conditions	114

1.0 Introduction

1.1. This report relates to an application to the Board seeking approval for the Abbey Quarter Urban Park and Street at the former Smithwick's Brewery site in Kilkenny City. The application is being made by Kilkenny County Council pursuant to Section 175 and Section 177AE of the Planning and Development Act, 2000 (as amended). Accordingly, an Environmental Impact Assessment Report (EIAR) and Natura Impact Statement have been prepared in respect of the proposed development. The application is also accompanied by the following:

- Copy of public notices,
- Statutory body notifications,
- Landscape Design Statement,
- Landscape design drawing package,
- Materials reference booklet,
- Services Design and Methodology Report,
- Engineering and services design drawing package,
- Environmental Management Plan.

1.2. Before making a decision on the proposed development, the Board shall consider the EIAR, any submissions or observations and any other information relating to (i) the likely effects on the environment of the proposed development, and (ii) the likely consequences for proper planning and sustainable development in the area in which it is proposed to situate the proposed development. It should be noted that a total of five submissions on the application were received from the Health Services Executive, An Taisce, Kilkenny Archaeological Society, Transport Infrastructure Ireland and the NCBI Services.

1.3. Under Section 175(9)(a), the Board shall make its decision on the application within a reasonable period of time and may, in respect of such application:

- (i) approve the proposed development,
- (ii) make such modifications to the proposed development as it specifies in the approval and approve the proposed development as so modified,

- (iii) approve, in part only, the proposed development (with or without specified modifications of it of the foregoing kind), or
- (iv) refuse to approve the proposed development,

and may attach to an approval under subparagraph (i), (ii) or (iii) such conditions as it considers appropriate.

- 1.3.1. Section 177AE of the Planning and Development Act, 2000 (as amended) requires that where an appropriate assessment is required in respect of development by a local authority, the authority shall prepare a NIS and the development shall not be carried out unless the Board has approved the development with or without modifications. Furthermore, Section 177V of the Planning and Development Act 2000 (as amended) requires that the appropriate assessment shall include a determination by the Board as to whether or not the proposed development would adversely affect the integrity of a European Site, and the appropriate assessment shall be carried out by the Board before consent is given for the proposed development.

2.0 Site Location and Description

- 2.1. The subject site comprises a portion of the former Smithwick's Brewery site in Kilkenny City Centre now known as the Abbey Quarter. The Abbey Quarter is located on the right bank of the River Nore and to the east of Parliament Street. The main historic feature within the Abbey Quarter site is the remains of St. Francis Abbey, a medieval structure and national monument established between 1231 and 1234. A masterplan has been compiled for the Abbey Quarter to guide the development of the precinct into a mixed-use area comprising education, innovation, culture, residential and employment.
- 2.2. The total area of the masterplan lands is 8.29 hectares and the proposed development site covers an area of c. 1.44 hectares. The main part of the subject site is situated to the south of the confluence of the Breaghagh River and River Nore. This part of the site extends as far as to the Brewery Building and around St. Francis Abbey; however, the Abbey itself is excluded from the application site. The Brewery Building is currently undergoing renovation works and it is also proposed to renovate

the Mayfair Building to the east of the site and the new city library. Works to these buildings are outside the scope of the current application.

- 2.3. The eastern site boundary extends as far as a wooden post and rail fence along the River Nore bank. This part of the riverbank is in a natural state and comprises of scrub and mature trees. Japanese Knotweed has been identified at this location. The northern boundary along the Breagh River comprises the intact and replaced section of the medieval City Walls. The intact section includes Evan's Turret which marks the termination point of the City Walls at the River Nore. The main body of the site is mostly covered in concrete slab.
- 2.4. The subject site extends to the north to include an existing bridge over the River Breagh and a section of the recently constructed Kilkenny Central Access Scheme roadway. To the south, the alignment of the proposed urban street follows a strip approximately 11m wide extending as far as Bateman Quay and including a section of this road.

3.0 Proposed Development

- 3.1. Planning permission is sought for the development of a new urban park and pedestrian and cyclist dominated urban street including ancillary site works. The proposal can be summarised as follows:
- Urban park located at the northern part of the Abbey Quarter around the upstanding remains of St. Francis Abbey and comprising the following character areas and features:
 - Abbey Plaza (c.812 sq.m.) – main arrival area from the direction of the city centre.
 - Brewhouse Plaza (c.625 sq.m.) – located to south of Abbey and populated with seating, a grove of trees and paving relating to the historic use of the site as a brewery.
 - Lawn (c.294 sq.m.) to be used for picnicking, exercising or relaxation.
 - Elevated lawn (c.248 sq.m.) representing transept and serving as a stage for events.

- Walkway along the River Bregagh with south-facing seating.
- Recreational lawn (c.383 sq.m.) with planted hedges referencing the historic use as a cemetery.
- Orchard of forgotten fruits (c.647 sq.m.).
- Ornamental crab apple orchard (c.727 sq.m.) with shaded seating.
- Space to front of Evan's Turret.
- Pathway along the River Nore connecting with the Riverside Gardens park to the north and south.
- Fitness equipment zone (c.36.4 sq.m.).
- Older children playground (c.111 sq.m.).
- Younger children playground (c.70.7 sq.m.).
- C.78 sq.m. water mirror referencing St. Francis' Well within a c.700 sq.m. plaza.
- Abbey axis connecting to the Riverside Gardens park and providing a vista to the eastern choir of St. Francis Abbey.
- Main event space / multifunctional plaza (c.658.7 sq.m.).
- 320m long and 11.1m wide urban street through the Abbey Quarter linking Bateman Quay in the south with St. Francis' Bridge to the north and comprising the following:
 - A pedestrian and cyclist dominated shared space.
 - Limited access for service, maintenance and emergency vehicles controlled by retractable bollards.
 - A one-way south to north 5.5m wide shared surface delineated by drainage channels.
 - 2.4m wide linear 'active zone - set down' on western side of shared surface comprising seats, trees, loading bays, etc.
 - Pedestrian zones on both sides of the street next to future buildings.

- Specific road markings for pedestrians and cyclist will only be present from the bridge over the Breagagh River to the junction with the Central Access Scheme and the junction with Bateman Quay to the south.

- 3.2. Other ancillary works include improvement works to the bridge over the Breagagh River; incorporation of all utility services for the development of future building plots; a lighting scheme cognisant of the need to minimise spill; and replacement of existing surface water drainage pipework and interceptors.
- 3.3. It is noted by Kilkenny County Council in its application cover letter that the proposed park and street are key components of the masterplan for the redevelopment of the Smithwick's Brewery site and are specifically provided for in the Kilkenny City & Environs Development Plan 2014-2020 under Objectives 3I and 3P. It is considered that the proposed development would provide a high-quality public amenity in the heart of the city and will provide access to the future development of new buildings within the Abbey Quarter, as provided for in the masterplan.

4.0 Planning History

Kilkenny County Council Reg. Ref: 20762

- 4.1. Kilkenny Abbey Quarter Development Partnership applied for permission on 9th November 2020 for the development of a temporary car and coach park and associated development works, for a period of 7 years, at the Abbey Quarter to the north of the Breagagh River.

An Bord Pleanála Ref: PL10B.HA0014

- 4.2. Permission granted in December 2011 for the construction of a bridge crossing over the River Nore, a new central access street and a new distributor roadway in the western environs of Kilkenny City.

Kilkenny County Council 13/990045

- 4.3. Permission granted for demolition of structures on site contiguous with the Brewhouse Building and the bottling plant to the east of the current subject site.

Kilkenny County Council Part VIII Applications

- 4.4. Part VIII application for the redevelopment of the Mayfair Building on the former Smithwick's Brewery site. The renovated building will provide a total of 1,500 sq.m. of commercial/ office space.
- 4.5. Part VIII application for the demolition of the maturation building at the former Smithwick's Brewery site. Consent is also provided for the development of a floor area of 6,200 sq.m. of commercial/ office space in the Brewhouse Building.
- 4.6. A Part VIII permission also facilitates the improvement of Horse Barrack Lane as part of the Brewhouse redevelopment.
- 4.7. A Part VIII permission was also approved for the Riverside Garden Project comprising the removal of the existing concrete slab, the raising of the existing ground levels and the construction of a 3-metre-wide shared pedestrian / cycle way along a landscaped strip of c. 15 metres in width and 600 metres in length. The approved project providing for a skate park and the section of walkway in the vicinity of St Francis Abbey and Evans Tower would be temporary pending the outcome of future archaeological investigations of this area.

5.0 Policy Context

5.1. National Planning Framework

- 5.1.1. The NPF recognises that more compact forms of growth in the development of settlements of all sizes, from the largest city to the smallest village, have the potential to bring new life and footfall, contribute to the viability of services, shops and public transport, increase housing supply and enable more people to be closer to employment and recreational opportunities, and walk or cycle more and use the car less.
- 5.1.2. Under Chapter 4, Making Stronger Urban Places, it is recognised that urban places offer a range of opportunities for community and social interaction but must become more liveable to improve quality of life. Well-designed spaces can enhance urban areas, make them attractive and distinctive and desirable for living, working and visiting.

- 5.1.3. In this regard, National Policy Objective 6 seeks to *“regenerate and rejuvenate cities, towns and villages of all types and scale as environmental assets, that can accommodate changing roles and functions, increased residential population and employment activity and enhanced levels of amenity and design quality, in order to sustainably influence and support their surrounding area.”*
- 5.1.4. With respect to achieving urban infill/ brownfield development, National Policy Objective 11 states that *“in meeting urban development requirements, there will be a presumption in favour of development that can encourage more people and generate more jobs and activity within existing cities, towns and villages, subject to development meeting appropriate planning standards and achieving targeted growth.”*

5.2. Regional Spatial and Economic Strategy for the Southern Region

- 5.2.1. Kilkenny City is designated as a Key Town in the RSES and is recognised for its internationally renowned historic mediaeval city centre with major tourist attractions and strong industrial and enterprise tradition.
- 5.2.2. Regional Policy Objective 12(e) seeks *“to support urban generation through investment in the Abbey Quarter & other initiatives to improve the Public Realm and regenerate underused land in the City and to support implementation of mitigation from Abbey Quarter Masterplan SEA and AA processes.”*

5.3. Kilkenny City Development Plan, 2014-2020

- 5.3.1. The Kilkenny City and County Development Plan 2021-2027 is currently at draft stage. Kilkenny County Council is accepting submissions on the draft plan until 12th March 2021.
- 5.3.2. The subject site is zoned “general business” where the objective is *“to provide for general development.”* Public buildings or places of assembly and open spaces are permissible uses under this zoning objective.
- 5.3.3. Development Plan Objective 3C sought *“to prepare a master plan and urban design framework for the Smithwick’s site and Bateman Quay during the lifetime of the development plan.”* Development Plan Objective 3D seeks *“to take a fresh analysis of the development strategy for the City & Environs immediately following the agreed*

masterplan for the Smithwick's lands and taking account of the current and projected economic performance of the City and County.” It is stated under Objective 4F the “the Smithwick lands the subject of the masterplan referred to in Section 3.4.3 will be the focus for major new retail expansion (convenience and comparison retailing) in the City & Environs over the plan period.”

5.3.4. The following objectives were adopted under Variation 1 to be inserted in Chapter 3 (Core Strategy):

- 3H - To provide for a linear park along the western bank of the River Nore connecting to the existing River Nore linear park north of Green's Bridge and the existing River Nore linear park south of the Masterplan area (Canal Walk) (as indicated on Fig 3.4) subject to compliance with the Habitats and Birds Directives and the provisions of the Abbey Creative Quarter Masterplan.
- 3I - To provide for an urban park in the vicinity of St. Francis Abbey (National Monument) incorporating the City Walls, Evan's Turret and St. Francis' Well taking into account the recommendations of the archaeological strategy developed in the preparation of the Abbey Creative Quarter Masterplan (as indicated on Fig 3.4) and subject to compliance with the Habitats and Birds Directives and the provisions of the Abbey Creative Quarter Masterplan.
- 3J - To prepare a Heritage Conservation Plan for St. Francis Abbey, Evan's Turret and St. Francis' Well in the context of the existing City Wall conservation plan in conjunction with the Heritage Council, the Office of Public Works, the National Monuments Service, the Department of Arts, Heritage and the Gaeltacht and other relevant stakeholders.
- 3K - To prepare urban design criteria and recommendations and archaeological recommendations for the implementation of the Abbey Creative Quarter Masterplan.
- 3L - To finalise and adopt the Abbey Creative Quarter Masterplan and to incorporate it into the Kilkenny City & Environs Development Plan 2014-2020 as a separate future Variation.
- 3M - To develop a low carbon energy strategy for the masterplan area and advance the provision of near zero energy buildings on site.

- 3N - To provide for park and walk facilities for car and bus/coach parking at a site or sites in close proximity to the Abbey Creative Quarter Masterplan area to service both the masterplan area and the city centre generally taking into account the mobility management plan for the city.
- 3O - To provide for housing within the masterplan in the area north of the Central Access Scheme as identified on fig. 3.4
- 3P - To provide for an urban street of pedestrian and cyclist priority between the Central Access Scheme and Bateman Quay crossing the River Breagh at the existing bridge crossing. To provide for traffic management measures on the street such as to inhibit the flow of through traffic and heavy goods vehicles.

5.4. Urban Design Framework / Masterplan for Abbey Creative Quarter, 2015

- 5.4.1. This document sets out an urban design layout and architectural framework for a new mixed-use quarter at the former Smithwick's Brewery and council lands to the south of Bateman Quay. Masterplan proposals for the establishment of a new creative quarter that integrates with the existing medieval fabric are assessed, including strategies for connectivity and movement, conservation and heritage, urban design and sustainability. It is recognised that the site offers a unique opportunity to create an entirely new and viable city centre quarter, based on education, innovation, culture, residential and employment.
- 5.4.2. The final masterplan includes a nine-stage approach to developing the entire site. Stage 1 highlights the remaining buildings following site clearance and Stage 2 facilitates the Noreside Linear Park from Bateman Quay to Greens Bridge and renovation of the Brewhouse Building and Mayfair Building. Community housing to the north of St. Francis' Bridge is to be completed in Stage 3, and Stage 4 will include Abbey Park, which together with the adjoining section of the Noreside Linear Park and the proposed urban street, form the site of the current proposal before the Board. The remainder of the buildings on site will be completed in later stages.
- 5.4.3. In terms of connectivity and movement, it is intended that the Masterplan area will be dominated by pedestrians and cyclists, with limited vehicle access on shared spaces. A missing link within the River Nore Linear Park will be completed for pedestrians and cyclists and vehicular access to a new street from Bateman Quay to

the Central Access Scheme will be controlled by way of retractable bollards. It is stated that the creation of the park will ensure that the river is opened up to the city, inviting people to enjoy and embrace the opportunities presented to the city by the river.

- 5.4.4. A public park/ garden park is outlined in the Masterplan, with St. Francis Abbey as its focus and representing other buried archaeological features through soft or hard landscaping as appropriate. The area will be designed as a civic space suitable for hosting outdoor events and primarily the new public spaces will relate to the provision of new appropriate settings for the numerous existing heritage structures within the site.

5.5. Abbey Quarter Urban Design Code, 2018

- 5.5.1. It is an objective of the Kilkenny City and Environs Development Plan, 2014-2020 to prepare an urban design code to complement the Abby Quarter Masterplan. The Code prepared by the Planning Department provides guidance and direction in areas such as land uses, mix of uses, built form and the nature, use and refurbishment of public open spaces.
- 5.5.2. The target land use mix for the Abbey Quarter is between 30% and 35% residential, between 15% and 20% retail and services, at least 10% creative and knowledge intensive business services (KIBS), and the remainder comprising of other uses, e.g. commercial, education, boutique hotel, social and civic uses, or, additional creative and KIBS and/ or residential use.
- 5.5.3. With respect to urban scale, the Code sets out a building height concept and street proportions in terms of width to height ratio. It is stated that provision is currently made in the Masterplan for a width of 12m (building to building) on the mixed-use street but this dimension may be reduced to reflect a more intimate scale. The importance of the interface with the buildings and space is considered to be critical to the success of streets and spaces.
- 5.5.4. Recommendations concerning urban space are most relevant for the proposed development and in this regard the Code sets out heritage considerations, proposals for new ground levels, space variety, qualities of space, materials and finishes, street

furniture and public art. The following is a summary of the key objectives for detailed space design:

- All spaces should be utilised and have a clear role and function,
- Public spaces should allow for civic and cultural events,
- Spaces should be designed to be safe with good sightlines, adequate lighting and passive surveillance,
- Spaces should be attractive to residents, workers and visitors alike,
- Spaces should be uncluttered and robust for a variety of uses and activities,
- Spaces should be designed for comfort with consideration given to micro-climate (e.g. shelter for seating), orientation and surrounding buildings,
- Space should be designed to be accessible for all,
- Spaces should have vibrant and active edges,
- Opportunities for biodiversity and sustainable urban water management should be included in space design proposals,
- Ample opportunities should be afforded to formal and informal play.

5.5.5. Streets and spaces should be categorised as places rather than links and the management of movement will prioritise pedestrians. The mixed-use street and Abbey Square will be time-controlled and local vehicular access for loading and unloading will be permitted. It is stated that longer-term parking solutions will lie outside the brewery area of the masterplan (Central Access Route to Bateman Quay).

5.5.6. The Brewery Code provides detailed guidance for the individual blocks and streets and spaces within the Brewery area including Abbey Square, the mixed-use street and the river frontages. The objectives for Abbey Square include the provision of a multi-purpose destination space, good opportunities for staying and resting, lively edges, occasional performance and entertainment space, and a complementary and restrained setting for St. Francis Abbey. The square will also provide for passive activities such as sitting, strolling, watching and socialising.

5.5.7. The section of the riverside garden within the subject site will continue the broad, well landscaped linear park to the riverfront. The embankment transition will be from garden to river with landscaped space and smaller spaces punctuating the park. It is an objective that the mixed-use street will be vibrant with a strong presence of day and evening uses. The street will be uncluttered with smooth continuous surface street furniture that will include formal and informal seating and lighting.

5.6. **Design Manual for Urban Roads and Streets, 2013**

5.7. This Manual seeks to provide guidance on how to approach the design of urban streets in a more balanced way. It sets out an integrated approach to promote better street design by slowing traffic speeds and by encouraging careful place making, quality public realm, and walking and cycling. The principles, approaches and standards set out in the Manual apply to the design of all urban roads and streets with a speed limit of 60 km/h or less.

5.8. **Natural Heritage Designations**

5.8.1. The subject site is adjacent to the River Nore SPA and the River Barrow and River Nore SAC. The nearest proposed Natural Heritage Areas are at Lough Macask pNHA (1.4km north-west), Dunmore Complex pNHA (1.35km north), Newpark Marsh pNHA (820m north-east) and Archersgrove pNHA (2.2km south-east).

6.0 **Consultations**

6.1. The following submissions were received by the Board following notification of prescribed bodies of the application, advertisement of the proposal and invitation for observations under Section 175 of the Planning and Development Act, 2000 (as amended):

An Taisce

Park landscape

- Overall landscape approach seems very hard-edged and ‘designerly’.

- Extensive areas of hard surface exhibit several designs of mathematical paving that will require high and expensive maintenance. More natural and low maintenance approach would be more appropriate.
- Landscape treatment should evolve to complement how the space will actually be used and the new buildings which will define part of the park.
- Provision of fitness equipment and playgrounds may not be appropriate in a Covid-19 regime.
- Sensitive treatment of archaeology and cultural heritage and pollinator friendly planting is welcomed.
- Recognise constraints set by having most of the site situated on concrete hardstanding.
- Park would benefit from provision of drinking water sources, e.g. 'ecofils' and a public toilet, especially as square will host cultural events and markets. Toilet facility could be provided in future plans for the Tasting Room.

Urban Street

- Street will not actually exist until buildings that define it are constructed – their design will be crucial to the whole scheme.
- Welcome the ancillary works to provide infrastructural services to facilitate future developments along the street.
- It is not clear how the street will function primarily as a pedestrian and cyclist dominated space while providing access for construction of buildings (possible ongoing for 10-20 years) and operating as a one-way system south to north.
- Overall, the proposed development of a sensitive park that is respectful of the archaeology and the River SAC, and the provision of infrastructure to facilitate future development on site is welcomed.

HSE Environmental Health

- Proposed development is summarised in a concise and comprehensive manner in the 'EIAR – Volume 1 Non-Technical Summary' and each aspect of the proposed development is detailed in the EIAR and accompanying plans and drawings.

- Environmental Health Services (EHS) notes the need for the proposed development as outlined in Chapter 2.4 which is *‘to provide a new amenity area that will transform the City Centre brownfield site, which has been in private ownership and cut off from the public for many years, into a social and sustainable public amenity.’*
- From the information provided in the EIAR relating to air, emissions to surface water and emissions to ground water, it is not envisaged that later consents will be required.
- Notes installation of new mains foul drainage sewer and proposed treatment of construction wastes.
- Notes range of statutory and non-statutory agencies consulted since 2012.
- Notes that designated site representatives will be appointed during construction to deal with noise complaints.
- EHS is satisfied that EIAR outlines the requirement to undertake work to create a social and sustainable public amenity and to transform a city centre brownfield site – ‘do nothing’ was not a viable option.
- EHS welcomes the proposed redevelopment of the Abbey Quarter, which will provide an important outdoor amenity area for both residents and visitors to the city. Development has the potential for positive physical and mental health of those who will use it.
- Noise and dust generated during construction will be mitigated by measures employed in the CEMP.
- Approximately 70 construction staff will contribute to the local economy through the purchase of services and materials.
- Proposed development will provide an opportunity for Kilkenny County Council to contribute to the aims of the Healthy Ireland Framework, 2013-2025.
- EHS is satisfied that detailed mitigation measures to protect soil from the risk of contamination during construction and operational phases are acceptable to protect public health.

- EHS recommends that wells supplying drinking water located within 150m of the site boundary should be sampled prior to commencement of construction to establish baseline water quality, and at least once during construction and once within 12 months of completion of construction.
- EHS recommends that additional mitigation measures are put in place to prevent the contamination of food being delivered, stored and prepared in food premises in the vicinity of the site and to minimise the spread of dust and subsequent contamination of food – may be undertaken through liaison with food business operators prior to commencement of dust generating activities.
- EHS recommends that noise mitigation measures should be included as conditions of planning permission.
- EHS recommends that pest control measures should be implemented prior to any works commencing and incorporated into CEMP.
- EHS recommends that delivery vehicles can access food premises and that food premises are informed of any planned electricity outages.
- EHS recommends that the contractor liaises with the organisers of any festivals which may be planned during construction to ensure they are facilitated.

Kilkenny Archaeological Society

- Welcomes the proposed protection, conservation and presentation of Evan's Turret and the remains of the city wall that form the southern boundary of the River Breagagh.
- Pleased to note that the urban street is being prioritised for pedestrians and cyclists and there will be strict conditions on the types of vehicle that may use the street.
- Proposed urban park has been designed with imagination and respect to its location and amenity value.
- Park should include a toilet, washing and baby changing facilities, possibly within future plans for the Tasting Room – preferable that they are in place when park opens.

- Suggests that specification of road material is sympathetic in appearance to the adjacent Riverside Gardens and riverbank ecology.
- Consideration should be given to creating rules for the use of electric bicycles and scooters on the street – they could pose a risk to family groups and small children.
- Society is most impressed with the ambition, thoroughness and professionalism of this planning application and its implementation. It will be a development of excellence and an outstanding amenity for both citizens and visitors.

National Council for the Blind of Ireland

- Developing this brownfield site into a public amenity area is welcomed but it is essential that the development occurs in a way that is fully accessible to all citizens, including people who are vision impaired.
- Provision of dedicated pedestrian pavement along the urban street is welcomed as it has the potential to provide a safe space for all pedestrians away from cyclists and service vehicles.
- If pedestrian pavement is essentially alongside the shared space, then the provision of a safe space for all pedestrians is significantly compromised – vision impaired pedestrians require clear identifiable markings that allow them to know when they are moving from one space to another, e.g. kerb edges.
- Change in level and clear boundary between vehicles and pedestrians is needed by people with impaired vision for their physical safety and for orientation.
- NCBI does not support the provision of shared spaces as it is dangerous for someone with little or no sight to share space with moving vehicles.
- This type of design deprives people with impaired vision of access to an area which is accessible to the general public and deprives them of their basic human right to independent travel, as upheld by the Convention for Rights of People with Disabilities.
- NCBI wishes the urban park to be designed in such a way to allow vision impaired people access to all parts of the park without having to use any shared space element.

- Lit limestone seating edge of the elevated lawn should contrast in colour to the material used on the ground and be clearly marked with tactile markings. Corners of elevated area should also be rounded to prevent a visually impaired person injuring themselves.
- Materials used on the ground throughout the urban park and street should contrast in colour to street furniture, poles for lighting and any other fixed structure on the ground.
- Non-reflective surfaces are important on the ground so that glare is reduced, and street furniture and seating should not have sharp edges. Trees should also be maintained so there are no overhanging branches.
- Barriers along the river walkways should not have gaps that would allow a long cane to extend under and fitness equipment should be accessible and easily identifiable to people who are visually impaired.
- There should be good consistent lighting throughout the urban park and along the urban street – lighting should not produce glare and should be even rather than lighting in spots.
- Broader Abbey Quarter should be developed in a way that is fully accessible to visually impaired people, in particular the provision of accessible pavements with tactile paving and crossings with tactile and audible signals.
- Use of eye contact, facial expressions and gestures to decide who should go first at uncontrolled crossings does not work for people with visual impairments.

Transport Infrastructure Ireland

- No specific observations to make.

7.0 Assessment

- 7.1. Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts, the planning assessment, environmental impact assessment and appropriate assessment. In each assessment, where necessary, reference is made to issues raised by all parties. There is an inevitable overlap between the assessments, for example, with

matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are not repeated but such overlaps are indicated in subsequent sections of the report.

8.0 Planning Assessment

8.1. In my opinion, the main issues to be addressed under this assessment are as follows:

- Development Principle;
- Archaeology and Built Heritage;
- Public Realm and Amenity;
- Transport and Movement;
- Environmental Impact Assessment;
- Appropriate Assessment;
- Conclusion.

8.2. Development Principle

- 8.2.1. The subject site is zoned “general business” in the Kilkenny City Development Plan, 2014-2020, where the objective is “*to provide for general development.*” Public buildings or places of assembly and open spaces are permissible uses under this zoning objective.
- 8.2.2. Variation 1 (Core Strategy) of the Development Plan contains objectives pertaining to the development of the subject site and Abbey Quarter. Objective 3H relates to the provision of a linear park along the western bank of River Nore and Objective 3I seeks the development of an urban park in the vicinity of St. Francis Abbey incorporating the City Walls, Evan’s Turret and St. Francis’ Well. The provision of a pedestrian/ cyclist priority urban street from Bateman Quay to the Central Access Scheme is sought under Objective 3P. The fulfilment of these specific objectives is the primary purpose of the proposed development.
- 8.2.3. The preparation of a heritage conservation plan for St. Francis Abbey, Evan’s Turret and St. Francis’ Well in the context of the existing City Wall conservation plan is an

objective (3J) that will be partially achieved by the proposed development. St. Francis' Well will be represented at surface level within the scheme in the form of a new water feature and new ground planting to the front of Evan's Turret will protect the structure from public access whilst allowing for it to be viewed. St. Francis Abbey is outside the site boundary and measures are set out for its protection during construction works. The proposed development will have the overall effect of providing improved access and a better appreciation of the historical heritage on site.

- 8.2.4. In accordance with Development Plan Objectives 3C and 3L, an Urban Design/ Masterplan for the Abbey Creative Quarter was prepared in 2015. This was supplemented by an Urban Design Code in 2018. The Masterplan includes an urban design layout and architectural framework for a new mixed-use quarter that integrates with the existing medieval fabric of the city. The public park/ garden park outlined in the Masterplan has St. Francis Abbey as its focus, with other buried archaeology represented through soft and hard landscaping.
- 8.2.5. The urban park proposed in the planning application will be centred around St. Francis Abbey and the outline of the abbey nave, cloister garth and associated ranges will set out in pavement, with the transept expressed as the raised lawn. The proposed development also complies with the Masterplan aim of providing a civic space for hosting outdoor events and appropriate settings for existing heritage structures within the site.
- 8.2.6. The Urban Design Code provides guidance and direction in areas such as land uses, mix of uses, built form and the nature, use and refurbishment of public open spaces. It is stated that urban spaces should be well utilised, having a clear role and function, being attractive to residents, workers and visitors alike, and allowing for civic and cultural events. Spaces should be accessible to all and have ample opportunities for formal and informal play.
- 8.2.7. I am satisfied that the proposed design pays due regard to these factors. The urban street is designed with end users in mind and the urban park includes areas for formal play, exercise, and outdoor functions, as well as informal sitting, strolling, watching and socialising opportunities. Key objectives for successful public urban spaces such as passive surveillance, clarity, robustness, comfort, vibrancy, active edges and biodiversity are assessed in further detail below.

- 8.2.8. At a more strategic level, the National Planning Framework recognises that urban places offer a range of opportunities for community and social interaction but must become more liveable to improve quality of life. The proposal can be viewed as a well-designed space that will enhance Kilkenny, and make the city more attractive for living, working and visiting. The proposal can also contribute to the overarching aims of the NPF to promote compact growth, sustainable mobility and enhanced amenity and heritage. Furthermore, Regional Policy Objective 12(e) of the Regional Spatial and Economic Strategy for the Southern Region seeks *“to support urban generation through investment in the Abbey Quarter & other initiatives to improve the Public Realm and regenerate underused land in the City and to support implementation of mitigation from Abbey Quarter Masterplan SEA and AA processes.”*
- 8.2.9. The observations on the planning application were broadly supportive of the proposed development. An Taisce welcomed the sensitive treatment of archaeology and cultural heritage and pollinator friendly planting, whilst recognising the constraints set by having most of the site situated on concrete hardstanding. The Environmental Health Service welcomes the provision of an important outdoor amenity area for both residents and visitors to the city with the potential for positive physical and mental health of those who will use it. The Kilkenny Archaeological Society consider that the proposal urban park has been designed with imagination and respect to its location and amenity value and the National Council for the Blind Ireland welcome the development of this brownfield site into a public amenity if it occurs in a manner that is fully accessible to all. Any concerns outlined within conservations are addressed in the relevant sections below.
- 8.2.10. Overall, the proposed development accords with the general aims and objectives of the Development Plan, Masterplan, Urban Design Code, and Regional and National policy with respect to the provision of an appropriate urban street and park arrangement to service the Abbey Quarter development. The proposal results in the main publicly accessible outdoor spaces for the Abbey Quarter being put in place in advance of development rather than an approach where public space is formed after building construction. The prioritisation of the Abbey Quarter for pedestrians and cyclists is therefore established at an early stage. The proposed development is therefore acceptable in principle subject to an assessment of the proposal under other relevant Development Plan criteria and ministerial guidelines.

8.3. Archaeology and Built Heritage

- 8.3.1. The subject site is located within a zone of archaeological potential and St. Francis Abbey and the City Wall including Evan's Turret are National Monuments. St. Francis' Well, the subsurface remains of St. Francis Abbey and the Abbey graveyard are listed on the Sites and Monuments Record, and The Tasting House to the south of St. Francis Abbey is listed within the National Inventory of Architectural Heritage. The part of the site to the south of the River Breaghagh is within the City Centre Architectural Conservation Area (ACA) and the portion to the north of the Breaghagh is in St. Canice's ACA.
- 8.3.2. The impact of the proposed development on archaeology and architectural heritage is assessed in detail under Section 8.9: Cultural Heritage and the Landscape of the Environmental Impact Assessment below. The visual impact of the proposed development is also assessed under this section.
- 8.3.3. In terms of impact on built heritage, it is concluded in the EIA that the proposed development will allow for a previously closed off site to become publicly accessible, and the heritage features on site can therefore be viewed and appreciated by the public. The setting of St. Francis Abbey, Evan's Turret and the City Wall will change from their current location partly concealed within an industrial yard to being the main focal points of an urban park. The proposed development will include measures to enhance and protect the setting of heritage structures. New surface materials will complement the existing stone remains and ground cover planting will enhance and protect the setting of the turret and walls.
- 8.3.4. The main arrival area from the west at Abbey Plaza will be framed by the choir and bell tower and the choir window to the east will form a vista along a paved axis extending to the riverside. The riverside walkway will also be one of the main accesses to the site from the north and south. The Abbey will become the dominant feature within the park, on the approaches and within views outside the site.
- 8.3.5. The site of the proposed development contains important archaeology underneath the concrete slab that covers most of the site. The concrete slab around the Abbey is to be removed and paved with granite on southern, eastern and western sides and the northern side will be surfaced with compacted gravel. The area of concrete to be removed is above recorded levels of archaeology. However, it will be a requirement

that these works be monitored by an archaeologist. Similarly, the cutting of the concrete slab to allow for renovation of services lines, installation of percolation holes and placement of trees will be monitored, and if archaeology is discovered, methodology to mitigate the impact will be agreed with the National Monuments Service. Vibration monitoring will also be carried out to assess any impact on upstanding structures and a conservation plan will be undertaken by the OPW for St. Francis Abbey, which is excluded from the proposed development.

- 8.3.6. The subsurface remains of St. Francis' Well, Horse Barracks and St. Francis Abbey will be represented on the ground by a water feature, cobble stone and paving design. St. Francis Abbey nave, cloister garth and associated ranges will be outlined in pavement and the transept will be expressed as a raised lawn. Planting and paving will also be used to represent the site's brewing heritage.
- 8.3.7. I would be satisfied that the proposed surface treatments will help to provide a better understanding of the archaeological character of the area. It is common practice to use paving to outline archaeological excavations, thereby securing more knowledge about the past. The underlying archaeology will therefore be preserved in situ and public will be better informed of the heritage value of the site.
- 8.3.8. Overall, I consider that the archaeology and built heritage of the site have been appropriately considered. The concrete slab over the site acts as a barrier to underlying archaeology. On the one hand, the slab essentially conceals any appreciation of the significant underlying archaeology on a permanent basis. However, given the extent of the slab covering the site, and the works that would be involved in removing it, I agree that the most appropriate course of action is to leave underlying archaeology undisturbed and represented on the surface through pavement treatments.
- 8.3.9. The built heritage features on site are of high significance and will have the effect in themselves of drawing people to the park. As assessed further below, the success of a park of this nature is primarily determined by the people who use it. I am satisfied that the proposed urban park has been designed in a manner that emphasises the importance the built heritage of the site by properly identifying, preserving and protecting these structures for visitors to the site. This is recognised

by observers on the application who have highlighted the sensitive treatment of archaeology and cultural heritage.

8.4. Public Realm and Amenity

- 8.4.1. As noted above, a successful public realm is usually determined by the quantity of people using the space. People friendly streets and parks have an ability to attract and retain activity. It is therefore essential that these spaces are designed so that at least a small amount of people are utilising them most of the time on a year-round basis. This will help to provide public realm that is safe, pleasant and inviting, and enlivened by people walking, talking, exercising and resting.
- 8.4.2. Public spaces should also be capable of accommodating civic activities such as markets, festivals and events, which will help to further animate the urban landscape. An appropriate mix of soft and hard landscaping should be provided; hard landscaping can be easier to maintain but can emerge as sterile, cold and uninviting. An ecologically rich public realm that is landscaped with trees and planting will provide habitat and food for animal and bird species, allow for intimacy and shelter, improve visual amenity and assist with drainage.
- 8.4.3. Key aspects for good public spaces include limitation of traffic, good resting opportunities, passive surveillance, active edges, variety of use, landscaping, good access and pedestrian desire lines, comfort from the elements, views of people and space, and adequate facilities such as toilets, bins, bollards, cycle parking, etc. Proper consideration of these factors can help to provide places that are attractive for people to linger.
- 8.4.4. The proposed urban street and park incorporates many of the above aspects and others, such as active edges, which relate to the surrounding buildings are unknown at this time. A number of other aspects within the proposed development, such as the provision of seating/ standing places, access, microclimate and facilities can, in my opinion, be improved upon. Those aspects relating to access are addressed in Section 7.5 below.

The Urban Park

- 8.4.5. From the outset, and on balance, I consider that the proposed urban park as it stands should provide an attractive and pleasant environment that will generate the

necessary levels of activity for a successful people friendly urban place. In terms of variety of the potential usage, and as noted above, the architectural heritage of the site alone will have the ability to draw people as one-off visitors. The proposed park will also benefit from a variety of other users including walkers/ cyclists passing through, families with children attracted to the playgrounds, adults using exercise equipment, teenagers hanging around and using the skatepark, people exploring nature, locals attending events, and future residents, workers and users of ground floor premises within buildings. The most significant grouping, however, will be those who come to the park to rest, meet or socialise. The presence of people has the multiplier effect of attracting more people simply because there is a crowd or due to the perceived safety of natural surveillance.

8.4.6. Variety in terms of space and visual appearance is also an important determinant for successful public places. Small intimate spaces with plenty of detail are preferable to wide open passive green spaces, which tend to be bland, impersonal and formal. Visual surroundings that are varied also add interest and help to retain people on a regular basis. The proposed development succeeds in this regard by breaking the overall park down into a number of different character areas around the Abbey and along the riverbanks which will have their own atmosphere. A plaza will form one of the main entrances to the site to the west of Abbey bell tower, and to the south of the Abbey, the Brewhouse Plaza will have references to the site's brewing heritage, such as hop hornbeam trees and hop pattern paving. The main event space will be situated to the north of the Abbey with an elevated lawn to its west that can be used as a stage. Lawns and orchards towards the north of the park will reference the graveyard and history of the friary, and along the River Nore there will be a wilder and more natural atmosphere interspersed with play areas and paths.

8.4.7. In general, the proposed urban park will be multifunctional in term of use with the ability of attracting different types of people at different times of the day. Character areas relate well to each other and there are no left-over spaces. There will also be a good variation of materials and colour and users will have an overall aesthetically pleasing experience. I do not agree with the observer on the application that the proposed park will be 'hard edged' with paved surfaces that will require high level of maintenance. I consider that there is a good mix of soft and hard landscaping and

that maintenance will mostly relate the soft landscaping aspects, which would be expected of a public park.

- 8.4.8. There are other interrelated aspects that can have influence how people use urban parks and plazas. Good seating and resting places that are sheltered from the elements and with good views over the park/ plaza can help to improve passive surveillance and in turn increase lingering times. The “Field Guide to Life in Urban Plazas” (SMA Group, 2019), is a study carried out in New York of how people behave in public spaces. It was discovered that people tended first to occupy edges of a plaza or places with the best view. If seating is available, people often extended their stay by 10 to 15 minutes. Favoured locations for seating tended to have strong backing such as walls or planting that were sheltered and with clear views out into the plaza or towards a constant flow of pedestrians. Short breaks were taken if there were walls or planters to lean on and groups of people tended to congregate around objects such as a low planter, bollard or even a bin. Moveable furniture attracted groups of people who typically rearranged seating to best fit their needs. People also made furniture out of bollards and other objects, or dragged moveable chairs close to these fixed elements. Finally, and perhaps most importantly in the context of the proposed development, people lingered in sunny areas and moved around to stay in the sun.
- 8.4.9. I would have some concern that the proposed seating throughout the proposed urban plaza is not situated to maximise comfort and lingering times. Seating that is orientated towards the sun is somewhat limited. The row of seating along the Breaghagh River faces south but is quite distant from the central plaza area. The raised lawn is likely to be the most attractive place for people to congregate but may suffer from some overshadowing. Seating within the ornamental crab apple orchard will capture some evening sunshine but may be overshadowed by the trees. However, the trees will provide shelter from wind and rain and that may encourage people to stay longer in poorer weather. Moveable seating proposed for the Brewhouse Plaza may also be overshadowed and it is possible that people will move this seating elsewhere.
- 8.4.10. In my opinion, the most favourable location for seating is along the northern edge of the main event space. This location faces south and overlooks the central area of the plaza. It is also along a pedestrian route and there is a potential backdrop of

trees to provide shelter. It may be possible to slope the grassed area featuring the planted hedges and the orchard of forgotten fruits upwards towards a seated edge along this pedestrian path. I propose that this modification can be made by way of condition.

- 8.4.11. The Board may wish to consider seeking further information from the applicant to assess the microclimate of the proposed development and to place seating and resting areas accordingly. An assessment of microclimate was scoped out of the EIAR due to the nature of the development involving ground works or low-level structures only; however, the urban park will be overshadowed in places by existing and proposed buildings and there may be potential for wind tunnelling effects along the urban street. According to Figure 9.5 of the EIAR, the prevailing wind is from the south-east, which roughly follows the alignment of the proposed urban street. It is essential in the interests of comfort that access to sunlight and shelter from wind is maximised in the placement of seating or resting spots.
- 8.4.12. Observers on the application note the absence of toilet facilities within the proposed development and the possibility of providing a drinking water source. I would be satisfied that adequate toilet facilities will be provided within buildings surrounding the proposed urban park rather than the provision of a standalone facility. I agree that consideration should be given to providing a drinking source and other street furniture such as bins and bollards, and in my opinion, this can be addressed by way of condition. Careful thought should be given to the proposed placement of these structures as they can also become focal points for people to stand and linger.

The Urban Street

- 8.4.13. In my opinion, the main positive aspect relating to the proposed urban street is the absence of onsite car parking and the limitation of vehicular access. The issue of transport, movement and access is addressed in more detail below.
- 8.4.14. An observer welcomes the ancillary works to provide infrastructural services to facilitate future developments along the proposed urban street. However, it is also submitted that the street will not actually exist until buildings that define it are constructed and their design will be crucial to the whole scheme.
- 8.4.15. I agree with the observer that it is difficult to assess the quality of a street in the absence of buildings and in particular ground floor uses. It is proposed that future

buildings will be developed as perimeter blocks. This model of development can provide densities and the necessary critical mass of people in an area to support regular activity in the public realm. Perimeter blocks will also overlook the street from upper floors and will create activity by way of street access at ground level. A coherent streetscape is experienced at eye level and there is a risk when creating new neighbourhoods that non-prescriptive ground uses, floor areas and shopfronts can create large ground floor units with uniform facades and few doors. However, this element of the planning application seeks to put in place the template for the street and the buildings and their ground floor usage and appearance will be assessed at the time these applications are made.

- 8.4.16. In the interim, the main function of the proposed urban street will be to provide access to the urban park. The street will evolve over time as the buildings either side develop. It is correctly pointed out by an observer that it is unclear how the street will function primarily as a pedestrian and cyclist dominated space while providing access for construction of buildings and operating as a one-way system south to north. I consider that this should be addressed by way of condition.
- 8.4.17. The surface of the street has been designed to include a 5.5m shared surface in the centre delineated by drains on both sides. To the western side of the shared surface, a 2.4m wide “active zone - set down” is proposed that will include street tree planting, street furniture, lighting columns, signage and loading bays. The purpose of this dedicated strip is to free up the remainder of the street for unobstructed circulation. Dedicated pedestrian zones are also proposed next to the future buildings aligning the street on both sides.
- 8.4.18. I would be satisfied that the street has been designed in a manner that avoids clutter and allows sufficient outdoor space for future ground floor users to utilise. There is potential for loading bays to be used by businesses for seating in afternoons and evenings outside of delivery times. The proposed surface materials will express how the street is used and convey a visual continuity. There will be sufficient scope for the street to be enlivened by those using the ground floor business as well those passing along it. I would also be satisfied that the proposed width to height ratio of the street and future buildings aligning it will give rise to a proper sense of enclosure and reasonable sunlight and daylight access.

8.4.19. Overall, I consider that the proposed park and street will set a good template for urban place-making in a developing area within Kilkenny City Centre. It is recognised in the Development Plan with respect to public realm that *“the architectural character of a city is determined not only by the importance of individual buildings and groups of buildings but also by the quality of the spaces formed by the buildings – i.e. the footpaths, streets, squares, parks, views and vistas are all of importance, and are an integral part of the urban structure.”* The proposed street will not be fully formed until the buildings aligning take shape. However, there is sufficient scope for the urban park to become a destination in its own right, in the absence of the critical mass that will be achieved as the Abbey Quarter evolves. People will be attracted to the park for multiple reasons and, subject to condition, there are sufficient features that will encourage people linger. The urban street will act as the main access spine to the urban park and it is important that movement along this street for pedestrians and cyclists is prioritised throughout the construction period of the urban quarter.

8.5. Transport and Movement

8.5.1. Transport and movement into and around the site are important considerations that will contribute to the success or otherwise of the Abbey Quarter. This is addressed under vehicular, pedestrian and cyclist access hereunder.

Vehicular Access

8.5.2. As noted above, the proposed development will benefit from limited vehicular access and the overall Abbey Quarter development will have an absence of car parking. The proposed urban street will be one way south to north and retractable bollards at the Bateman Quay entrance will control access. It is estimated that service, delivery and maintenance vehicular access will generate in the region of 10-20 trips per day.

8.5.3. I would have some concern that the width of the shared surface may suggest to vehicle drivers that the urban street operates as a two-way system. However, daily trips will be low, and it is likely that drivers will be regular users who will become aware of the one-way system. The Board may wish to consider the attachment of a condition that requires one-way signage/ markings to be erected along the street.

However, I would be of the view that the introduction of these measures could diminish the function of the street as a priority area for pedestrians and cyclists.

Pedestrian access

- 8.5.4. The site will be afforded good pedestrian access via the new urban street, the riverside walkway and the provision of three access points from Parliament Street at the main entrance, the Smithwick's Visitor Centre and a link in between connecting to a new "slip" through the Brewery Building. The site, and Kilkenny City Centre in general, benefits from what Gordon Cullen described in *The Concise Townscape* (1961) as a "sequence of revelations" where the slightest deviation in alignment has a disproportionately powerful effect in the third dimension. As pedestrians progress through a place, they get a glimpse of what is ahead, and this draws them on further. Glimpse views of the Abbey Bell Tower and along access "slips" off Parliament Street will create this access effect for pedestrians.
- 8.5.5. Pedestrian movement within the site will occur along formal pathways and informally or diagonally throughout the site. The site will be mostly level and it should be easy for pedestrians to establish their own desire lines and traverse the park in all directions. I propose the sloping up of the lawn area to provide seating to the north of the main plaza and this should enable universal access.
- 8.5.6. It is stated in Section 11.3 of the Development Plan that all future developments used by the public (including public spaces, car parking, footpaths) shall be accessible to and usable by all regardless of age, size, disability or ability. The requirements of people with disabilities, the elderly, parents and carers and others who may be temporarily impaired must be incorporated into the design.
- 8.5.7. A submission on the application from the National Council for the Blind Ireland (NCBI) states that the proposed development should be accessible to all, including those who are vision impaired. The provision of a dedicated pedestrian pavement along the urban street is welcomed as a safe place for all pedestrians away from cyclists and service vehicles. However, it is submitted that vision impaired pedestrians require clear identifiable markings to allow them to know when they are moving from one space to another. The proposed shared surfacing is not therefore supported by the NCBI. It is submitted that a change in level and clear boundary between vehicles and pedestrians is needed.

- 8.5.8. I acknowledge that the shared surfacing can present difficulties for certain vulnerable users; however, the provision of kerbs could cause problems for wheelchair and mobility scooter users. Measures set out in the Design Manual for Urban Roads and Streets to assist in navigation and movement through shared spaces for visually impaired users include the provision of sections of tactile paving that direct movement along the street or across spaces; the creation of distinct zones that delineate pedestrian only space from shared space; and flush kerbs, drainage lines and/or sections of tactile paving to assist guide dogs and indicate movement from a pedestrian only space to a shared carriageway. I recommend the attachment of a condition to any grant of permission requiring the applicant to provide an Access Statement prior to commencement of development that incorporates the measures set out in DMURS. This should also include an audit of materials to be used on site to assess their appropriateness for those with visual impairments.

Provisions for Cyclists and Pedestrian / Cyclist Interaction

- 8.5.9. The shared surface along the urban street extends from Bateman Quay in the south to the Kilkenny Central Access Scheme (KCAS) to the north of the Abbey Quarter. The junctions to the north and south are included within the application boundary. It is proposed to provide a break within the hatching in the centre of the KCAS to facilitate right turning vehicles exiting the site. No works are proposed on Bateman Quay.
- 8.5.10. In my opinion, the shared surfacing should provide two-way access within the scheme for cyclists. Therefore, provision should be made for two-cycle access at Bateman Quay and the KCAS. In my opinion, the proposed junction onto the KCAS is substandard in terms of provisions for cyclists. It is assumed that cyclists can turn left into the Abbey Quarter from the KCAS notwithstanding the cycle markings facing the opposite direction on application drawings. There will be difficulty, however, for cyclists, particularly those with children, making right turn manoeuvres into and out of the site at this junction. In particular, right turning cyclists into the site will be required to cross the widest part of the road at this location over two lanes of traffic and through the break in the hatching. I acknowledge that the speed limit along this section of road is 30 kph and traffic moves quite slowly due to the raised pedestrian crossings further to the east and west. However, DMURS seeks to give higher priority to pedestrians and cyclists above private motor vehicles when redesigning

roads and I consider that this junction should be configured to reflect same. I also note that it is proposed to provide housing to the north of the KCAS which would create a pedestrian desire line at this location.

- 8.5.11. I would therefore recommend that a condition is attached to any grant of permission requiring the applicant to provide proposals for safe pedestrian and cycle access and crossing points at this location. This could be in the form of a raised junction table extending out over the KCAS or kerb build outs and removal of the central hatching. In my opinion, pedestrians and cyclists should not be expected to emerge abruptly from a safe environment into moving traffic without proper junction treatments. Better integration with existing footpaths and cycle lanes on KCAS is required. Similarly, there will be a pedestrian desire line into the site at Bateman Quay from the direction of the car park. Proposals should also be provided prior to commencement of construction to accommodate crossing pedestrians at this location.
- 8.5.12. It is submitted by an observer that consideration should be given to creating rules for the use of electric bicycles and scooters on the urban street. Where an electric or battery scooter can be powered alone without pedalling or scooting, it is considered to be a mechanically powered vehicle, which is subject to the regulatory controls that apply to other vehicles. Most electric bikes and scooters, however, are not considered to be MPVs and it may therefore be difficult to impose rules on e-bikes/ scooters alone. I am conscious that these vehicles can accelerate quite quickly and can be threatening to pedestrians in a shared surface environment. The Board may wish to consider attaching a condition to any grant of permission requiring the provision of a segregated two-way cycleway through the site. The Board attached conditions to the Parnell Square Cultural Quarter decision (ABP-302881-18) requiring the northern end of the square to be treated as a shared surface with a segregated two-way cycleway. Notwithstanding this, I would be of the opinion that the main purpose of a shared surface is to slow all vehicles down. Equally, I consider that this should apply to cyclists. I would be concerned that dedicated cycle lanes through a site such as this would encourage cyclists to travel at greater speeds.

- 8.5.13. Finally, I note that the proposed development will be reasonably well provided for in terms of cycle parking. However, there is an absence of cycle parking in proximity to the proposed playgrounds. I consider this should be addressed by way of condition.

9.0 Environmental Impact Assessment

9.1. Introduction

- 9.1.1. The proposed development comprising an urban park and street with an area of c. 1.4 hectares is sub-threshold under Class 10 of Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended), i.e. *“urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.”*
- 9.1.2. Notwithstanding this, the Planning Authority has submitted an EIAR following a screening assessment in accordance with Schedule 7 and 7A of the Planning and Development Regulations, 2001 (as amended). It was considered by the Council that the proposed development would have the potential for significant effects on the environment having regard to the location of the site in an urban area and on a historic site within an area of significant archaeological heritage, and in view of the proximity of the site to adjacent watercourses, including the River Nore, which is designated as a SPA and SAC.
- 9.1.3. A formal Scoping Request on the information to be contained in the EIAR under Section 173(3)(a) of the Planning and Development Act, 2000 (as amended) was issued by the Board to Kilkenny County Council on 28th April 2020. The EIAR was submitted on to the Board on 30th July 2020. Directive 2014/52/EU amending the 2011 EIA Directive was transposed into Irish legislation on 1st September 2018 under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018. The EIAR is therefore assessed under the provisions of the new Directive.
- 9.1.4. An examination has been carried out of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application for approval. A summary of the results of the submissions by the Planning Authority, prescribed bodies and other observers and the applicant's response to same are set

out at Section 6 of this report. The main issues raised specific to EIA can be summarised as follows:

- Impacts on biodiversity including ornithology and aquatic species;
- Impacts on soils and water bodies;
- Impacts on population and human health;
- Impact on land and climate;
- Impacts on material assets (roads); and
- Cultural heritage and landscape impacts.

9.1.5. These issues are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation including conditions.

9.1.6. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant, adequately identifies and describes the direct and indirect effects of the proposed development on the environment and complies with article 94 of the Planning and Development Regulations 2000, as amended.

9.2. EIAR Content and Structure

9.2.1. The EIAR is presented in three volumes comprising the non-technical summary (Volume 1), the main report (Volume 2), and appendices (Volume 3). In general, I consider that the content and scope of the EIAR is acceptable and in compliance with the EIAR Directive and the Planning and Development Regulations, 2001 (as amended).

9.2.2. The non-technical summary gives a concise synopsis of the EIAR and is written in language that can be easily understood. I am satisfied that the EIAR adequately describes the proposed development to include information on the site, design and size of the site and proposed development. The applicant has also carried out an assessment of reasonable alternatives relevant to the proposed development and its specific characteristics. A baseline scenario with and without the proposed development is assessed and a description of the factors likely to be significantly

affected by the proposed development are set out, together with any direct, indirect, secondary, cumulative, transboundary, and short-long term effects of the proposed development. A description of forecasting methods including any difficulties encountered and the main uncertainties, as well as measures envisaged to avoid, prevent, reduce or off-set significant adverse effects and any monitoring arrangements are included for both construction and operational phases. The vulnerability to risk of accidents and unplanned events is also described, along with any measures to prevent or mitigate the significant adverse effects on the environment. Details of scoping consultations are included and there is an adequate list of experts who contributed to the EIAR.

- 9.2.3. Overall, I am satisfied that the information provided is reasonable, up to date and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment.

9.3. Reasonable Alternatives

- 9.3.1. The EIAR must include a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, as well as an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.
- 9.3.2. Chapter 4 of the EIAR sets out the alternatives considered for the proposed development that resulted in the selection of the site, its layout and the processes involved. This includes an assessment of alternatives in terms of uses, design and layout, interaction with St. Francis Abbey, the river crossing, services alignment, lighting design, ecological enhancement and the “do nothing” alternative.
- 9.3.3. Four alternatives were considered for land use of the site to include redevelopment of the brewery site and reuse of existing buildings (Mayfair, Brewhouse and Maturation building) with linear park; redevelopment of the brewery site without retaining the existing buildings with linear park; intensive redevelopment of the brewery site incorporating mixed uses; and low intensity intervention with majority of the site devoted to public park.

- 9.3.4. The potential significant effects of these alternatives were assessed as part of the Strategic Environmental Assessment, which concluded that the development of the entire site as a public park would reduce the efficiency of land utilisation. It was decided following public consultation to combine alternative no's. 3 and 4 to provide for a mixed-use development and public park with access, services and public amenity space provided as part of a single project.
- 9.3.5. The Landscape Design Statement presented the design evolution incorporating the general principle of an urban park centred around the rich heritage of the site with links to the city centre, riverside and heritage sites. Any works to the abbey itself will be proposed and undertaken by the OPW as part of an approved conservation plan. It was decided to utilise the existing bridge over the Breagagh River to eliminate the requirement for in-river works associated with a new pedestrian bridge. Service trenches were realigned to ensure avoidance of areas with underlying archaeology, with depth of excavation revised in some places to avoid impacts. The ecology team assessed an initial lighting scheme and this was redesigned to minimise light spill to riparian and aquatic habitat. In terms of ecological enhancement, and following consultations with NPWS, it was decided to extend the site boundary closer to the bank of the River Nore to restore an area of riparian habitat beside Evan's Turret.
- 9.3.6. Finally, the "do nothing" alternative was discounted on the basis that the site would not realise the significant benefits of urban renewal, provision of amenity spaces, and potential ecological enhancement protection/ enhancement of archaeological and archaeological features on site. Access and services to any future development of the masterplan plots would have to be completed separately on a piecemeal basis when the alternative proposal for the urban street and park provides for a co-ordinated approach.
- 9.3.7. In general, all reasonable alternatives that are relevant to the project and its specific characteristics are clearly presented in the EIAR. The main reasons for the chosen option and the development of the design process are set out, together with the background for the chosen layout. I would be satisfied that this section of the EIAR is sufficient to comply with the provisions of Paragraph 1(d) of Schedule 6 of the Planning and Development Regulations, 2001 (as amended) and Article 5(1) and Annex IV of Directive 2014/52/EU.

9.4. Likely Significant Effects on the Environment

- 9.4.1. This section of the EIA **identifies, describes and assesses** the potential direct and indirect effects of the project under each of the individual factors of the environment (population and human health; biodiversity; land, soil, water, air and climate; material assets, cultural heritage and the landscape; and the interactions between these factors). Baseline characteristics, cumulative information and an evaluation of impacts on each sensitive aspect are set out, together with mitigation measures and residual impacts.

9.5. Population and Human Health

- 9.5.1. Chapter 5 of the EIAR describes the general characteristics of human activity and health status in the study area. The potential impacts on human health, economic activity and employment are assessed for the construction and operational phases of the proposed development. A desk-based study was carried out with respect to the receiving population and key principles and objectives from national and local policy with the potential to impact on population and human health are set out. The physical health, health inequalities, mental health and well-being, economic activity and employment and existing public amenity availability for the study area are also assessed.
- 9.5.2. The population of Kilkenny City in the 2016 Census was recorded at 26,512, representing an increase of 8.5% since 2011. The population of the county is predicted in the Regional Spatial and Economic Strategy to grow to 110,000 by 2026 and a significant portion of this will occur in Kilkenny City. The average age in Kilkenny is slightly higher than the national average and 5-year standardised death rates for common causes of death were lower in Co. Kilkenny. Kilkenny was ranked as the eighth most affluent county in the State; however, the South Eastern Regional Area has the highest unemployment rate. Approximately 613,000 visitors were attracted to Co. Kilkenny in 2017, with Kilkenny Castle and the Medieval Mile the key attractions. The Nore Linear Park and the Medieval Mile project are being implemented to address the findings of an amenity study.

Characteristics of the Proposed Development

- 9.5.3. The proposed development is located on a brownfield site at the former Smithwick's Brewery in Kilkenny City Centre. A number of brewery buildings have been demolished and the site now consists mainly of concrete slab. There is no public access to the site at present. Parliament Street and High Street are situated to the west of the subject site and these streets are mainly commercial at ground level with some apartments above. The streets to the west of the main commercial spine also comprise of a mix of residential and commercial use. Abbey View Terrace on the eastern bank of the river opposite the site is residential in use.
- 9.5.4. It is proposed to develop a recreational park and pedestrian/ cyclist dominated street to serve the planned Abbey Quarter development. The park will be developed around the abbey and will provide a range of meeting spaces to include a plaza, area for public gatherings, an elevated grassy stage, orchards, playgrounds, seating areas, walkways and a water feature.
- 9.5.5. The urban street will continue from Bateman Quay to the south between proposed urban blocks and through the urban park, across the existing bridge over the Breaghagh River and up to the western side of St. Francis' Bridge on the Kilkenny Central Access Scheme route. The street will primarily facilitate pedestrian and cyclist movement and restricted one way (south to north) access will be available for service and emergency vehicles.

Predicted Impact of the Proposed Development

- 9.5.6. The predicted impacts of the proposed development during construction and operational phases are summarised as follows:

Economic Activity and Employment

- C. 70 persons working on construction of the proposed development over a 14 month period. Existing businesses in the area will have increased potential for local enterprise to provide materials and services to the development and associated staff. There will be a short term slight positive impact on local job creation and the local economy.

- Access to historic features on site will add significant context to the Medieval Mile and new outdoor public space providing for outdoor events will enhance city's reputation.
- Proposal will address the apparent imbalance associated with tourism and economic activity centred around Kilkenny Castle – expected increased tourist activity will provide further jobs in the hospitality sector.

Human Health and Wellbeing

- Construction phase impacts addressed in other sections of EIA (Land & Soil, Water, Air Quality & Climate, Acoustics and Material Assets).
- Pedestrian/ cycleway and Nore Linear Park will improve accessibility and increased activity and provision of fitness area will be a tool to improve physical activity. Amenity value of new open space will allow people to improve their health and wellbeing. Operational phase will have a long-term significantly positive impact.

Mitigation Measures

- 9.5.7. Potential impacts on population and human health are mitigated by the measures outlined below under Land & Soil, Water, Air Quality & Climate, Acoustics and Material Assets.

Residual Impacts

- 9.5.8. Residual impacts on the local economy and employment and human health and wellbeing will be moderate, positive and long term.

Conclusions on Population and Human Health

- 9.5.9. Overall, it is considered that there will be no significant cumulative adverse impacts on population and human health during the construction or operational phases of the proposed development. I am satisfied that the construction stage impacts would be avoided, managed or mitigated by measures addressed in other sections of the EIA. There will be positive effects on the local economy from increased employment and the health and wellbeing of visitors to the site will be enhanced by a development of this nature.

9.6. Biodiversity

- 9.6.1. Chapter 6 of the EIAR sets out the methodology for evaluating effects on biodiversity, including identification of biodiversity receptors that could potentially be affected by the proposed development. Baseline data was collected through a desk study and field surveys were carried out to determine legally protected species or habitat and sites which are of importance for biodiversity conservation. The field surveys were completed in October 2019 and March, April, May, June and July 2020.
- 9.6.2. The receiving environment included 2 no. European Sites (River Nore SPA and the River Barrow and River Nore SAC), and 4 no. pNHAs within 5km of the site including the Archergrove pNHA located 2.4km downstream along the banks of the River Nore. Habitats within the site and immediate surroundings were classified using Fossitt's Guide to Habitat (2000). Legally protected or otherwise notable species that occur within a 2km grid square of the site have been extracted from National Biodiversity Data Centre mapping.
- 9.6.3. The assessment identifies trees, aquatic species, bats, birds and Otter as significant receptors that were brought forward for further consideration and mitigation. Aquatic surveys identified habitat and species in proximity to the site including river vegetation, a white clawed crayfish infected with crayfish plague, two Salmon parr in the Breaghagh and juvenile lamprey in the Nore downstream of the site. Surveys also recorded the scrub/ treeline along the River Nore and River Breaghagh crossing under the existing bridge as having the potential to support commuting and foraging bats and St. Francis Abbey has features that are potentially suitable for roosting. The scrub / treeline along the Nore also has potential to provide nesting and foraging habitat for common birds. Kingfisher were also observed within the River Breaghagh. There is suitable habitat for Otter within the Breaghagh and Nore alongside the site and evidence of Otter was identified. American mink was also observed foraging along the River Breaghagh.

Characteristics of the Proposed Development

- 9.6.4. The majority of the site comprises artificial surfaces (BL3) and the eastern boundary along the river consists of scrub/ treeline (WS1 / WL2). Invasive species were recorded within the scrub/ treeline to include Himalayan Balsam (TN2) and Japanese

knotweed (TN1). The site is located adjacent to the Breaghagh River and River Nore; however, no instream works within either river is proposed. The existing scrub / treeline along the River Nore will be largely undisturbed by the proposed development.

- 9.6.5. The proposed development will include plazas, playgrounds and 3 no. lawn areas (c. 294 sq.m., 248 sq.m. and 383 sq.m.), a c. 73m walkway along the Breaghagh River, an orchard of forgotten fruits (c. 647 sq.m.), an ornamental crab apple orchard with lower level medicinal and symbolic plants (c. 727 sq.m.); a c. 78 sq.m. water mirror acting as a reference to the historic St. Francis' Well; and a c. 105m long path along the River Nore to connect to the Riverside Gardens (Nore Linear Park) to the north and south. Tree planting will occur along the proposed urban street.
- 9.6.6. A range of environmental measures will be incorporated into the project to enhance the ecological value of the site. This includes the screening of the River Nore and enhancement of areas of retained and created habitats; implementation of a Biodiversity Management Plan as part of the management of the park; tree management in accordance with relevant legislation; implementation of an invasive species management plan; standard construction hours between 07:00 and 19:00 Monday to Friday and 09:00 and 16:00 on Saturday; implementation of water, dust and noise control measures; and design of lighting to minimise light spillage.
- 9.6.7. The construction programme will take account of the planting season. The first six months will include site clearance works, excavation works and installation of drainage and services, and the next six to eight months will include soft and hard landscaping.

Potential Impact of the Proposed Development

- 9.6.8. The potential impacts on identified sensitive aspects are summarised as follows:

European Sites

- Findings of effects of the proposed development, alone or in combination with other projects, on European Sites are fully considered and evaluated in the Appropriate Assessment in Section 9 below.

NHA/ pNHA

- Given the intervening lands and the distances separating the subject site, the 4 no. pNHAs within 4km can be discounted from being adversely impacted to a significant degree by the proposed development.

Scrub / Treeline (WL1 / WL2)

- Considered to be of ecological value and provides suitable habitat for a variety of commuting and foraging species, as well as nesting habitat for a variety of bird species. Area also provides valuable screening to the River Nore.

Aquatic Species

- Aquatic surveys on River Nore and River Breaghagh identified suitable habitat for lamprey, Atlantic salmon and white-clawed crayfish (infected with crayfish plague). Surveys also identified the presence of *Callitriche-Batrachion* vegetation within the River Nore downstream of the site. There is potential for adverse impacts on these highly sensitive species.

Bats

- Features of St. Francis Abbey are suitable for roosting bats; however, no roosts were identified, and it should be noted that the abbey is outside of the site boundary and a separate conservation plan will be prepared for this feature.
- Three maple trees located adjacent to Tasting Room have no features suitable for roosting bats.
- River Breaghagh and River Nore are important for foraging and commuting bats – these locations are not within the proposed development area.
- Potential impact could occur on bats from light spillage from the proposed development.

Birds

- Majority of all hedgerow and trees which offer foraging and nesting potential will be retained and protected.
- Five maple trees to be removed have low conservation value and do not support any notable species.

- Birds may be subject to some temporary disturbance during construction; however, it is not considered to be significant.
- Kingfisher noted foraging along the Breaghagh River but no suitable nesting habitat noted adjacent the site. Existing vegetation along the Nore and stone wall along the Breaghagh will screen the proposed development from impacts on Kingfisher.

Otter

- Main development area not considered to be of value to Otter; however, River Breaghagh and River Nore are known to be used by Otter and evidence was identified along the River Nore.
- Potential for temporary disturbance to Otter during construction that would be short-term and localised in nature.
- Potential for disturbance due to light spillage onto adjacent riverbanks during the operational phase.
- Otter using the habitat within the vicinity of the site will be habituated to levels of disturbance.

Mitigation Measures

- 9.6.9. The following biodiversity mitigation measures will be incorporated and adhered to during the construction and operational phases of the proposed development:

Construction phase

- Measures to ensure that the works do not result in contravention of wildlife legislation.
- Training and awareness by workers of mitigation measures detailed in the EIAR, including toolbox talk of notable species and erection of notices.
- Appointment of Ecological Clerk of Works (ECoW) for duration of the project.
- Preparation of CEMP and submitted by main contractor to Planning Authority in advance of commencement of works.
- Reference to and following of relevant guidance during the construction phase to prevent water pollution and impacts on flora and fauna.

Protection of trees

- Majority of scrub/ treelines on site will be retained and protected during the lifetime of the proposed development.
- Five maple trees will be removed due to their poor condition. All vegetation clearance will be scheduled to take place outside nesting bird season.
- Construction Exclusion Zone around trees where works within the outer canopy limit of trees will be minimised. Measures will include protection fencing, due care of root protection areas (RPAs) when concrete slab is being lifted, lining of new concrete slabs near trees with geotextile, routing of underground services away from RPAs, suitable ground protection on RPAs, and overseeing of works by site arborist.

Protection of Aquatic Species

- Measures will be implemented during the construction phase to ensure the protection of water quality (see Section 8.7 below).

Protection of Nesting Birds

- Management of vegetation including trees will be restricted to outside the bird breeding season and will be monitored by ECoW.
- Any works to be undertaken in the main breeding season would be undertaken in consultation with the NPWS.

Protection of Otter

- Pre-construction survey will be carried out for Otter within or close to works areas.
- Defence planting and fencing will be installed along the boundary of the park.
- Appropriate measures will be included to protect mammals during excavation works.
- No construction works will take place outside daylight hours during site clearance without prior consultation with ECoW. ECoW shall be advised of any unidentified burrows.

Measures for Invasive Species

- Updated survey for invasive species will be undertaken and an updated site-specific invasive species management plan will be prepared.
- Invasive species management plan will be developed prior to commencement of works detailing how invasive species will be eradicated/ managed and providing details regarding the management of soils during works.
- Control measures will be put in place to ensure that invasive species are not introduced or spread from the site.
- On-going ecological monitoring and training of site operatives in the identification and risks associated with invasive species such as Japanese knotweed will form part of the on-going site operations.

Bats and other nocturnal species

- Lighting scheme has been designed in order to avoid light spillage onto rivers and riverbanks.
- Essential lighting will not be excessive, LEDs will be used with brightness set as low as possible, lighting will be aimed where it is needed and directed away from landscaped areas and waterbodies and the height of lighting columns will be reduced as much as possible. ECoW will check lighting patterns along site boundaries.

Landscape Design Package

- Includes planting schedule for landscaping and ecological enhancement works, including pollinator friendly plants.
- Measures will be implemented to protect retained trees and the scrub / treeline along the River Nore throughout the life cycle of the project along with proposed additional planting.

Measures for bats

- Opportunities to enhance the site for bat species include the planting of trees and implementation of bat boxes.

Measures for birds

- Erection of a variety of bird nesting boxes on suitable trees

Residual Impacts

- 9.6.10. Residual impacts will be moderate positive in the medium to long term.

Conclusions on Biodiversity

- 9.6.11. The Biodiversity chapter of the EIAR identifies trees, aquatic species, bats, birds and Otter as significant receptors that were brought forward for further consideration and mitigation. The subject site is adjacent to the River Nore SPA and River Barrow and River Nore SAC and an Appropriate Assessment of the impact of the proposal, in combination with other plans and projects, is carried out in Section 9 of this report. Fieldwork surveys and studies were carried out in October 2019 and March, April, May, June and July 2020. An aquatic survey was also conducted in August 2019.
- 9.6.12. Most of the site itself comprises artificial surfaces and is therefore of low ecological interest. The eastern boundary along the River Nore consists of dense scrub/treeline that has potential to provide nesting and foraging habitat. However, this area will be largely undisturbed by the proposed development and the riparian zone will be protected by use of defensive planting and fencing. Ecological enhancement measures will also be carried out next to this corridor and throughout the site. The use of pollinator friendly plants, bird boxes and bat boxes will give rise of positive residual impacts on ecology.
- 9.6.13. There is potential during the construction phase for adverse impacts on highly sensitive aquatic species in the River Nore and River Breagagh. There is also potential for Otter and bird species to experience disturbance during construction works. A range of mitigation measures will be put in place for the construction phase to prevent water pollution and impacts on flora and fauna. Management of vegetation including trees will be restricted to outside the bird breeding season and will be monitored by Ecological Clerk of Works. An invasive species management plan will also be put in place, along with measures to prevent the spread of crayfish plague. No construction works will take place outside daylight hours and the lighting scheme for the proposed development will be designed to avoid light spillage onto rivers and riverbanks. It should be noted that the main potential for disturbance would be short term and any species within the vicinity of the site will be habituated to levels of disturbance given the location of the site within Kilkenny City Centre

- 9.6.14. Overall, I consider that the EIAR has adequately assessed the impact of the proposed development on biodiversity. I am satisfied that with proper implementation of mitigation measures and best practice measures, together with implementation of environmental commitments under the Construction Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on water quality, habitats and species are likely to arise.

9.7. Land, Soil, Water, Air and Climate

- 9.7.1. This assessment deals separately with the above environmental factors as they appear in the EIAR. Chapter 7 of the EIAR addresses Land and Soils and Chapter 8 deals with Water. Air & Climate and Acoustics & Vibration are covered under Chapters 9 and 11 respectively.
- 9.7.2. The subject site comprises mostly of a flat concrete hardstanding underlain by limestone. Beneath the eastern portion of the site, there are alluvial soils associated with the River Nore and there are indications of fill material under the remainder of the site.
- 9.7.3. The regionally important Nore Gravels Group aquifer underlies the site, and the bedrock aquifer is classified as a regionally important karstified aquifer. Groundwater vulnerability at this location is classified as high. Surface water run-off from the site is currently collected and passed through oil / water interceptors before discharging to the River Nore and River Breagagh via existing outfalls. The site is protected against a 1 in 100 year flood by the Kilkenny City Flood Relief Scheme.
- 9.7.4. Annual monitoring reports from the EPA air quality monitoring station at Seville Lodge (2km south-west of the site), indicates that there is good air quality in the area, with pollutant concentrations below air quality standards defined in EU and National legislation.
- 9.7.5. Baseline noise values were recorded as being noticeably quieter than would be expected in an urban location due to reduced traffic and business activity during the Covid-19 pandemic. A 10dB level was added to measured values to off-set this. No piling will be required and any concrete slab removal will be done by cutting and lifting.

- 9.7.6. Kilkenny County Council adopted a Climate Adaptation Plan in September 2019 to address forthcoming challenges associated with climate change and to establish baseline climate change conditions for Kilkenny. The Plan included objectives on flood risk management (mitigation, amenity enhancement, biodiversity opportunity, recreational enhancement, etc.), resource management and transport.

Characteristics of the Proposed Development

- 9.7.7. The proposed development will take place on brownfield land on a disused brewery site adjoining the main commercial spine of Kilkenny City Centre. The use of the site will change from disused industrial to amenity/ green links/ biodiversity.
- 9.7.8. The proposed urban park and street will be constructed mainly on the existing concrete slab that covers the site. An area of 370 sq.m. of concrete hardstanding will be removed to allow for landscaping works and surface water drainage. The remainder of the site will be reinstated with hardstanding.
- 9.7.9. The proposed surface water drainage scheme will consist of three drainage networks using existing discharge points to the Breaghagh River and River Nore. Surface water discharge from the site will reduce from current levels due to inclusion of grass/ planting, a drainage board within areas of lawn and infiltration holes in soft landscaped areas. Oil / water interceptors on site will also be upgraded.
- 9.7.10. Low volumes of traffic are expected during the construction and operational phases of the proposed development. Associated air pollution will be negligible. Construction works and the potential for dust emissions will continue for a 12-14 month period.
- 9.7.11. In terms of climate, the proposed development will encourage a modal shift to active transport and enhancement of amenity and biodiversity.

Potential Impact of the Proposed Development on **Land and Soils**

- 9.7.12. The potential impacts on land and soils are summarised as follows:
- Construction will require removal of c. 3,057 sq.m. of the existing 13,658 sq.m.m concrete hardstanding to facilitate utility installation, construction works and landscaping works. 370 sq.m. will be permanently removed and the remainder will be reinstated.

- Excavation and management of potentially contaminated fill materials has the potential to impact on human health and the environment.
- Potential for slight impact on land and soils during construction from accidental spillages from machinery and potentially onto surface water and groundwater.
- Some scrub clearance and planting will be undertaken at riverbank on confluence and may have potential for erosion of riverbank soils.
- No unacceptable risk to the health of future users of the site due to the presence of the barrier consisting of hardstanding and geotextile membrane, or layer of clean inert imported fill material to achieve proposed finished round levels.
- No unacceptable risk to sensitive receiving waters.
- Impact of change in land use from predominately disused industrial to public open space will be significantly positive.

Mitigation Measures for Land and Soils

9.7.13. Mitigation measures for the protection of land and soils are described below. Sections 8.7.15 to 8.7.17 below relating to the protection of surface water and groundwater is also related to land and soils.

- “Control of Water Pollution from Construction, Guidance for Consultants and Contractors” (CIRIA, 2001) will be included in the CEMP and strictly followed.
- Appropriate management of stockpiles to prevent siltation of nearby surface waters.
- Specific controls measures specified in CEMP for handling and temporary storage of potentially contaminating materials.
- Implementation of materials management plan by contractor to minimise overall impact of excavated materials, stockpiles, subsoil disturbance and exportation of materials for disposal.
- Potential for soil erosion on riverbank prevented through undertaking of works when seasonal water levels are low, scrub clearing and replanting by hand and no vehicles allowed beyond concrete hardstanding.

- Implementation of measures to minimise impact on land and soils from potential spillages.
- Employment of measures when concrete is poured – production, transport and placement of all cementitious materials strictly planned and supervised.
- All maintenance equipment used on soft landscaping during the operational phase will be regularly serviced and checked for leaks.

Residual Impacts for Land and Soils

- 9.7.14. No significant adverse impacts on land given that site is a predominately unused industrial site that will be brought into public use. Given the control measures that will be put in place, impact on site workers and future users of the site from exposure to contaminated material will be negligible.

Potential Impact of the Proposed Development on **Water**

- 9.7.15. The potential impacts on water are summarised as follows:
- Silt run-off and incorrect handling of deleterious materials such as lubricants, waste oils, cement, etc.
 - Potential release of sediment to drainage system from earth moving activities and associated temporary stockpiling.
 - Potential for slight impact on surface water/ groundwater during construction from accidental spillages from machinery.
 - Detailed Quantitative Risk Assessment concluded there will be no unacceptable risk to sensitive receiving waters and hydrogeological regime associated with removal of existing concrete hardstanding during construction.
 - Site will provide natural attenuation in the form of a drainage board that will support grass growth and planted areas – no requirement for hard engineering stormwater attenuation and surface water discharge from the site will be reduced.
 - There will be a slight positive long-term impact on stormwater runoff in terms of both quality and flow from the site.

- Detailed Quantitative Risk Assessment concluded there will be no unacceptable risk to sensitive receiving waters associated with increased rainfall infiltration during the operational phase.
- On-site water feature will recirculate and treat water and will only require filling during commissioning and topping up periodically.
- No wastewater will be generated by the proposed development itself. Proposal will include new mains foul drainage sewer for future nearby developments.

Mitigation measures for Water

9.7.16. There are a number of mitigation measures relevant to the protection of water that are included within the Biodiversity and Land & Soils sections. The following mitigation measures are included within the CEMP:

- Construction works <20m of the River Breagagh / River Nore will be subject to inspections by suitably qualified environmental consultant.
- Release of suspended solids to rivers will be prevented during any riverbank works through mitigation measures set out above (Land & Soils).
- Visual inspection and sampling of rivers will occur during construction works.
- Existing fuel / oil interceptors will be maintained until they are ready to be replaced and installation of new oil / silt interceptors will be conducted during dry weather.
- Any dewatering will be treated before discharge – best practice settling systems shall be employed to ensure maximum removal of suspended solids.
- Existing drains not being used as part of the proposed development will be grouted at both ends and associated gullies will be blocked.
- Impacts to groundwater during the operational phase will be negligible. New surface water drainage system will be inspected regularly and maintained as required.
- Proposed development would be considered an amenity open space and a water compatible development – risk of flooding to / from the site does not warrant further consideration beyond flood risk screening assessment.

Residual Impacts for Water

- 9.7.17. No significant impacts on the hydrogeological regime of the area and slight positive long-term impact on stormwater runoff from the site in terms of both quality and flow.

Potential Impact of the Proposed Development on Air & Climate

- 9.7.18. The potential impacts on air and climate are summarised as follows:
- No significant impacts on micro-climate such as shading, or wind tunnelling are expected.
 - Construction Dust Risk Assessment carried out
 - Site is located in urban area and residential heating and traffic are the main sources of air pollutants.
 - Construction related activities have the potential to impact on receptors through dust deposition, elevated PM₁₀ concentrations and NO_x and PM emissions due to vehicle movements.
 - Use of fossil fuel by on-site plant – there will be low numbers of on-site plant and low background concentrations of pollutants.
 - Carbon embedded in materials used for construction of the proposed development.
 - Without mitigation, there is a short-term medium risk of impact from dust soiling, human health (PM₁₀) and ecological receptors during the demolition phase and a low risk during earthworks, construction and track out.
 - Emission to air from traffic within the proposed development during the operational phase will be negligible.
 - Proposed public social space with a park will have a likely positive impact on air quality and climate due to promotion of sustainable travel and planting of trees and shrubbery reducing dust levels and absorbing carbon.

Mitigation Measures for Air and Climate

- General measures for the entire site:
 - Site management (record of complaints and exceptional circumstances that may give rise to dust/ emissions);

- Monitoring (daily visual inspections, compliance with Dust Management Plan, passive monitoring at site boundaries);
- Site preparations and maintenance (dust causing activities away from receptors, erection of hoarding, enclose activities such as concrete cutting with barriers, clean surfaces using wet methods, remove dust producing materials, cover and enclose stockpiles);
- Operating vehicle/ machinery and sustainable travel (no idling, avoid use of diesel-powered generators, 20 kph speed limit on sealed surfaces and 15 kph on unsealed surfaces);
- Operations (adequate water supply for effective dust suppression, enclosed skips/ chutes, minimise drop heights, availability of equipment to clean dry spillages);
- Waste management (no burning of waste).
- Specific construction activities:
 - Demolition (water suppression, consideration of high-volume suppression systems, passive monitoring);
 - Earthworks (revegetate to stabilise surfaces or use hessian, mulches or tackifiers, minimise exposed surfaces, implement passive monitoring);
 - Construction (avoid roughening of concrete surfaces, storage of sand and aggregates in enclosed areas, enclosure of bulk cement and other fine materials, implement passive monitoring).
 - Track out (water assisted dust sweepers and avoidance of dry sweeping, inspect on-site haul routes; install hard surface haul routes damped down; wheel washing system, vehicle coverings, internal roads free from debris, access gates at least 10m from receptors).
- Appropriate control methods in Dust Management Plan in the event of fill material containing asbestos being excavated.
- Reuse/ recycling of crushed concrete and slabs where possible.
- Sourcing of natural materials from Kilkenny where possible.

- Use of LED lighting.
- Planting of trees contributing to carbon sequestration and improved air quality.

Residual Impacts on Air & Climate

- 9.7.19. Construction stage impacts will be short term and following mitigation measures, a short-term localised minor impact is likely. Re-use of materials and waste management policies will contribute to climate action considerations.
- 9.7.20. During the operational phase, the proposed development will likely present a modal shift and the urban park will enhance amenity and biodiversity. Small urban green spaces improve air quality, urban cooling and protection from noise. Predicted impact on air quality and climate will be positive, slight and long-term.

Predicted Impact of the Proposed Development on **Acoustics & Vibration**

- 9.7.21. The predicted impacts on acoustics & vibration are summarised as follows:
- TII traffic counter to north of Kilkenny on N77 recorded a reduction of c. 39% in March 2020 compared to 2019 and 2018 equating to a 4-5 dBA reduction in traffic noise. Typical noise associated with general urban activities and road traffic likely to provide 10dB increase in measured values at the site.
 - Proposed works will be in proximity to historical monuments deemed to be key sensitive structures (St. Francis Abbey, Breaghagh bridge abutment, Evan's Turret and Kilkenny City Walls).
 - During construction, without management of noise source or work methods, a significant noise impact on noise sensitive locations is likely during peak noise events (e.g. removal of concrete, movement of trucks).
 - Vibration activities during construction would arise from excavation of trenches through concrete, breaking of concrete slab, levelling and compaction of road surface and movement of HGVs – similar in acoustic character to normal road maintenance works in terms of vibration transmission to local receptors.
 - Acoustic character of the proposed development during operation will be similar to spaces around Kilkenny Castle and vehicle restricted areas of the city. Impact will be on a very local scale and not readily discernible on noise sensitive locations.

Mitigation Measures for Acoustics and Vibration

- During works requiring plant with high sound pressure, enclosure or acoustic shielding will be needed – includes cutting and lifting of concrete slab and any crushing and screening activities.
- Placement of concrete and other site materials requiring transit will be done to ensure minimal drop height to reduce noise associated with loading.
- Contractor will provide a detailed CEMP for agreement with Kilkenny County Council to include measures on acoustic mitigation, e.g. management of deliveries, construction hours, acoustic covers, audible warning systems switched to minimum).
- Kilkenny County Council and affected residents will be kept informed of works and proposals for any works outside normal working hours.
- Assessment will be carried out to determine the likely transmission of vibration levels to historic monuments.
- All works to be carried out in such a way that ground borne vibration is kept below threshold levels to protect historical monuments. Warning notification will be sent to contractor, client and design team if vibration trigger value of 3mm/s is recorded.
- Groundworks in areas within proximity to monuments will be supervised by archaeologists.
- Vibration may be reduced by arranging the project design to minimise the number of operations likely to be particularly disturbing, co-ordination of traffic access, isolation of stationary plant using resilient mountings and slab will be cut into sections and lifted.
- During operational phase, events within the park will need to be permitted by the Local Authority and specific measures may be imposed.

Residual Impact for Acoustics and Vibration

- 9.7.22. Following implementation of mitigation, a short-term localised minor impact is likely. The operational phase will provide an acoustic environment that is conducive to recreation and relaxation, giving rise to a long-term significant positive impact.

Conclusions on Land, Soil, Water, Air and Climate

- 9.7.23. The main potential effects to land will be the change of use from disused industrial land to public open space, which will give rise to a significant positive impact. The use of a brownfield site also reduces the need for further land-use change at greenfield locations. It would appear that all lands are necessary for the construction and operational phases of the proposed development. The park is of reasonable size and dimensions for the area that it will serve, and the street appears to be proportionate in term of width to height ratio.
- 9.7.24. There is potential for impacts from soils on human health and the environment arising from excavation of potentially contaminated fill materials. However, most of the concrete slab on site will be kept in situ, thereby creating a barrier to any such impacts. Where slab removal is required, a geotextile membrane or layer of clean inert imported fill material will achieve proposed finished round levels.
- 9.7.25. Silt run-off and incorrect handling of deleterious materials such as lubricants, waste oils, cement, etc. has the potential to adversely impact on the hydrological regime in the vicinity of the site. Measures will be put in place such that works are undertaken in accordance with best practice in relation to the handling and storage of fuels, oils, chemicals and stockpiles. The CEMP will also provide a framework for water quality protection during construction. During the operational phase, the proposed development will give rise to decreased quantity and improved quality of run-off from the site due to increased planting and installation of new oil / silt interceptors.
- 9.7.26. In terms of air quality, the construction phase has the potential to create undue dust and noise disturbance in the absence of mitigation. There is also potential for construction vibration impacting on historical structures on site. Dust emissions will be minimised through implementation of a Dust Management Plan, and noise reduction measures will ensure that impacts on the nearest noise sensitive locations will be short-term and minor. Works will be carried out such that ground borne vibration will be kept below threshold levels and groundworks in proximity to monuments will be supervised by archaeologists.
- 9.7.27. The proposed development will have a positive impact on climate through restriction of motorised traffic and promotion of sustainable transport modes. The proposed

urban park will also enhance biodiversity and improve air quality. Tree planting will also contribute to carbon sequestration.

- 9.7.28. Overall, I consider that the impacts on land, soil, water, air and climate would be avoided, managed and/ or mitigated by the mitigation measures proposed as part of the proposed development. There will also be significant and long-term improvements brought about by the proposed land use change, drainage upgrade and biodiversity and amenity enhancements.

9.8. Material Assets

- 9.8.1. Material assets are addressed under Chapter 13 of the EIAR under “Waste and Use of Natural Resources” and “Traffic and Transport”. For the construction phase, the assessment for natural resources and waste addresses any changes in the demand for materials, baseline waste arisings and available landfill capacity. A limited assessment for changes in baseline arisings has been carried out for the operational phase.
- 9.8.2. In terms of traffic and transport, the EIAR assesses the impact of traffic generated by the proposed development and the integration of pedestrians and cyclists into existing transport infrastructure. Vehicular junctions at both ends of the urban street were assessed in terms of geometric design, junction capacity, queue lengths and geometric layout. Integration with existing public transport and the required number of car parking and bicycle parking spaces were also assessed.

Characteristics of the Proposed Development

- 9.8.3. Some natural construction products will be used to provide key materials for the construction phase that will include Kilkenny Limestone (c. 15 m³), granite (c. 4,055 m²), concrete surfacing (c. 6,165 m²), aggregates (c. 5,127 m³) and topsoils (c. 1,552 m³). The generation of construction waste will include c. 763 m³ of concrete and c. 4,300 m³ of soils.
- 9.8.4. The proposed development will only generate negligible new trips on the existing transport network by car, commercial vehicle, or public transport. During the construction phase, vehicles will enter off St. Francis’ Bridge, and in the operational phase, service, delivery and maintenance vehicles will access from Bateman Quay and exit onto St. Francis’ Bridge via a one-way arrangement.

- 9.8.5. Priority on the proposed urban street will be afforded to pedestrians and cyclists. A typical urban street cross section comprises a 5.5m wide shared surface, a 1.95m wide pedestrian zone on the eastern side and a 1.15m wide pedestrian zone / 2.4m wide active zone (set down, seats, trees) on the western side of the street.
- 9.8.6. A total of 78 no. cycle parking spaces will be discreetly and conveniently located throughout the scheme and additional cycle parking will be provided at the Brewhouse and Riverside Gardens developments.

Predicted Impact of the Proposed Development

- 9.8.7. The predicted impacts on **material assets (waste and natural resources)** are summarised as follows:
- The quantum of granite and topsoil to be used in the proposed development is considered negligible in terms of building materials used nationally.
 - Proposed use of Kilkenny Limestone is <0.1% of annual production.
 - Proposed concrete surfacing is <0.3% of national annual concrete paving production rate.
 - Proposed use of aggregates is <0.3% of national annual aggregate production rate.
 - Estimated quantity of waste is c. 0.4% of predicted national waste capacity for 2020.
 - Waste will be recycled or reused wherever possible or disposed off site in accordance with the Waste Management Act (as amended).
 - Small quantity of canteen and delivery waste will be generated during construction.
 - Small quantity of domestic waste will be collected in public bins during the operational phase.

Mitigation Measures for Material Assets (Waste and Use of Natural Resources)

- Materials will only be ordered as needed and excess materials will be returned to supplier.

- Waste generated during construction will be managed in accordance with relevant waste management regulations.
- Existing concrete slab will be reused as aggregates where possible.
- Waste will be properly supervised during construction into designated waste storage and segregation areas.
- Any hazardous waste and liquid waste will be handled and disposed of in accordance with relevant legislation.
- Site Specific Construction Waste Management Plan will be developed.
- Waste collection / removal contractors for the proposed development will operate in accordance with relevant legislation.

Residual Impact for Material Assets (Waste and Use of Natural Resources)

9.8.8. There will be no significant adverse impacts on key construction materials following mitigation, and waste disposal off site during construction will have a short term and slightly adverse impact.

9.8.9. The potential impacts on **Material Assets (Traffic and Transport)** are summarised as follows:

- Construction traffic will consist of HGVs, heavy plant, cars and LGVs – majority of traffic movements on-site will consist of light commercial vans and cars during peak construction periods.
- Maximum of 12 to 15 HGV deliveries per day during peak construction period – not likely to impact on existing traffic flows. Intermittent peaks associated with excavation for services and pouring of concrete. Temporary car parking required during construction is estimated to be 20-30 cars.
- Proposed development will not necessitate changes to the adjacent road layout or public transport services for Kilkenny City.
- Service, delivery and maintenance vehicle access estimated to be in the region of 10-20 trips per day.
- Proposed development offers numerous routes for pedestrians and cyclists and links are integrated with city centre and Medieval Mile.

- Urban street will be controlled by way of retractable bollards – service, delivery and maintenance vehicles for the urban park, the Smithwick’s Visitor Centre and future buildings will be permitted to use the urban street.
- Existing bus stops for town services are located in Market Square and Parliament Street in close proximity to the proposed development.
- No car parking is provided within the scheme as proposed development will not generate traffic that will require car parking facilities.
- On-street set down will be provided and each future development will be required to allow for special access requirements within the detailed design of the building for set down and servicing.
- Emergency service vehicles will be able to access the site via co-ordinated access through the retractable bollards.

Mitigation Measures for Traffic and Transport

- Construction Traffic Management Plan will be prepared by the contractor in advance of the commencement of works that will include access and parking arrangements, speed limits, wheel wash arrangements, signage, etc.
- HGVs accessing from north of site will minimise traffic disruption in Parliament Street and Irishtown.
- Reuse of concrete will reduce the number of HGV movements related to the proposed works.
- Construction staff parking, HGV parking and equipment will be within the former brewery site only.
- Contractor will be required to fill empty trucks which have delivered aggregates and soils with materials to be removed from the site in order to avoid empty loads.
- Only authorised vehicles will be able to access the urban street at authorised times. Permitting system will be controlled by Kilkenny County Council – access limited to service, maintenance, delivery and emergency vehicles serving this and adjoining developments only. Access limited to early mornings and late evenings only.

Residual Impacts for Traffic and Transport

- 9.8.10. Vehicles movements will have a negligible impact on the adjacent existing road network. The development encourages a shared space urban design in line with the Design Manual for Urban Roads and Streets, which will have a significantly positive impact on traffic and transport in the city centre in the medium to long term.

Conclusions on Material Assets

- 9.8.11. There will be no significant adverse impacts on the availability of key construction materials for the proposed development and waste disposal off site during construction will have a short term and slightly adverse impact. The proposed development will have a positive impact on transport by prioritising active transport modes and providing a safe and comfortable environment for walkers and cycling. There are some outstanding issues with the junctions of the proposed access and egress to / from the site. This can be addressed by way of condition. The Board should also refer to Section 8.5 under the Planning Assessment above when assessing the impact of the proposed development on Material Assets (Transport).

9.9. Cultural Heritage and the Landscape

- 9.9.1. Chapters 11 and 12 of the EIAR describe the general characteristics with respect to landscape & visual and cultural heritage in the study area. The Landscape and Visual Impact Assessment considers the landscape character impact and the visual impact of the proposed development. A total of seven viewpoints were selected around the site and four were chosen within the site. Photomontages are compared to the baseline with adjacent schemes under construction forming part of the receiving environment. Future buildings within the remainder of the Abbey Quarter are represented by semi-translucent blocks in photomontages. Photomontages after 25 years are also included.
- 9.9.2. The Cultural Heritage chapter includes an archaeological study of subsurface remains and a built heritage assessment of structures that are still standing. St. Francis Abbey, the City Wall, St. Canice's Cathedral and Kilkenny Castle are all significant architectural and archaeological heritage sites. The proposed development is located within the City of Kilkenny's zone of archaeological potential and St. Francis Abbey and the City Wall including Evan's Turret are National

Monuments with very high significance. St. Francis' Well, the subsurface remains of St. Francis Abbey and the Abbey graveyard are listed on the Sites and Monuments Record. The Tasting House to the south of St. Francis Abbey is mistakenly described in the National Inventory of Architectural Heritage as a 19th Century structure when it was actually built c.1980. The subject site also lies within two Architectural Conservation Areas.

Characteristics of the Proposed Development

- 9.9.3. It is intended that the proposed development will provide an appropriate expression of the archaeological elements and past activities carried out at the site. The proposal will also facilitate visual connection between the historical structures within the site and key vantage points outside it, and there will be public access to a site that was previously in industrial use and closed off. Newly accessible historical buildings on site and the banks of the River Nore and River Breagagh will be enhanced by the new park setting. The existing treeline / scrub along the river will be retained and new soft and hard landscaping is proposed in the form of plazas, shared surfaces, lawns, orchards and riverside walkways.
- 9.9.4. St. Francis Abbey will be excluded from the proposed development and a conservation plan for this structure will be approved by the OPW. The Abbey Plaza will be the main arrival area to the remains of St. Francis Abbey choir and bell tower from the city, and a visual axis to the eastern choir window will provide connection to the Riverside Garden park. The layout of the original Abbey will be represented on the ground by the elevated lawn and paving. A space will be left open in front of Evan's Turret for viewing and perennial planting will provide a background to the turret. References to the former brewery use on site will also form part of the proposed development.

Predicted Impact on Landscape and Visual

- 9.9.5. The potential impacts on **Landscape and Visual** are summarised as follows:
- Potential impacts during construction are related to temporary works, site activity and vehicular movement. Temporary vertical elements include hoardings, gates, site accommodation, plant and machinery, etc.

- Sensitivities in respect of construction impacts are likely with respect to adjacent properties to the west and these are somewhat buffered by the Brewhouse scheme.
- Occupants of the Brewhouse scheme will in due course become sensitive to construction activities on site.
- Proposed development provides full access to the park via the street and pedestrian / cycle links within the core of the site. Public gatherings can also be facilitated.
- Access to and association with the river is more comprehensively provided and the public can get much closer to St. Francis Abbey, Evan's Turret, and the City Walls.
- Proposal will transform a poor-quality environment into a high quality, attractive and richly varied series of recreational spaces.
- Setting of National Monuments will be greatly enhanced within the design, and prospects from key locations are created.
- Views into the site are limited by the riverbank, brewhouse and other adjacent buildings. Positive views will be created from the top of the round tower at St. Canice's Cathedral.
- There will be an increased level of lighting from a dark space to a public park, with the required level of lighting to ensure public safety.

Mitigation Measures for Landscape and Visual

- Site hoarding along strategic portions of the site boundary will substantially address some of the potential negative effects from construction operations.
- There will be no tall cranes and scaffolding and site facilities and equipment will be lower scaled.
- Site management procedures will be put in place to control lighting, storage of materials, placement of compounds, vehicular movement and dust and dirt control measures, etc.

- During the operational phase, the proposed development will establish an integrated relationship with the broader landscape layout, visual assimilation with the city fabric, rationalisation of services to prevent visual clutter, and simplification of routes and ground pattern.
- Proposed external surfaces will be finished to complement the historical features in the area.
- Significant open space is designed to meet the modern needs of the local community.
- Creation of animated relationship between buildings and adjacent proposed external public spaces will be a vital and new addition to the fabric of the city.

Residual Impacts

- 9.9.6. The perceived impact of the proposed development on the character of the area and the effects on social and cultural amenity are considered as residual impacts in the EIAR. This section also assesses the impact of the proposal on views.
- 9.9.7. It is noted in the EIAR that the development will be judged on its final appearance and the impact of time, public use and the elements upon it. The project is well researched and is designed in a manner that is respectful to its context. A significant positive and long-term impact on landscape character and social and cultural amenity is therefore envisaged.
- 9.9.8. The visual impact of the proposed development is assessed by comparing the 'before' and 'after' photomontages. Of the seven verified photomontages prepared from locations around the site, three views were assessed as slight and neutral and two were assessed as moderate and positive. The views from the western edge of St. Francis' Bridge looking south-westwards, and from the top of the tower at St. Canice's Cathedral looking eastwards, will be significant and positive.
- 9.9.9. Four approximate photomontages which cannot be verified as exact due to existing site conditions were also prepared within the site. The impact of the proposed development was assessed as being significant and positive in all views that were prepared.

Potential Impact on Cultural Heritage

9.9.10. The potential impacts on **Cultural Heritage** are summarised as follows:

Archaeological sites within the proposed development

- C. 0.3m concrete slab will be removed from part of the site of the friary - slight negative impact as concrete to be removed is above recorded levels of archaeology.
- St. Francis' Well is encased in a deep, water-filled underground concrete chamber. Project designed to preserve the remains of St. Francis' Well in situ – negligible impact as works will be carried out on top of the existing concrete surface.
- Renovation of existing service line in proximity to subsurface remains of St. Francis' Graveyard will involve cutting of concrete surface, removal of fill material and replacement of service line – slight negative impact as works will be carried out within alignment of existing services.
- Percolation holes cut through concrete in Abbey grassed area and elevated lawn – will not impact deeper than the base of the modern concrete covering the site.
- Trees will be placed in a 2m wide hole cut into the concrete – designed to avoid archaeology wherever possible.
- Development of Abbey Plaza and elevated lawn will take place above the level of the existing concrete surface, thus preserving the archaeology beneath. Subsurface remains of Horse Barracks will also be preserved beneath existing concrete slab.
- Construction of street will impact on subsurface remains of two millraces – both millraces have already been significantly disturbed when each was encased in a concrete culvert. Proposed development is over a small part of their overall length.
- Proposed service trench within the street will impact on subsurface archaeological deposits north of Breaghagh River – impact very small relative to the overall size of these deposits.

- Potential for archaeological material including organic timbers in proposed service trench within street at the area of gardens and boundary walls between St. Francis Abbey and the River Nore. Impact assessed as low.
- Proposed service trench may impact on subsurface remains of 18th century St. Francis' Brewery – will only impact on a small part and in an area where significant disturbance has already occurred.
- Proposed services will impact on the remains of the mid 19th century market building – only a small area of the subsurface remains resulting in partial removal. Assessed as low with slight significance of effects.

Architectural heritage within the proposed development

- Direct impacts on structures within the site during construction from vibration, impact of vehicles or machinery and undermining of foundations.
- Concrete slab that runs along the southern side of the City Wall will be retained and layer of soils will be laid over slab prior to planting of ground cover. There will be no excavation in the vicinity of the walls and drain through wall to Breagagh will be retained.
- Ground in vicinity of Evan's Turret will be planted with ground cover and ground level will not be altered. There will be no excavation in the vicinity.
- Tasting House will be retained and land in the vicinity will be maintained at its existing level. Concrete slab in the vicinity will be paved with granite.
- St. Francis Abbey will be protected from damage and encroachment by construction hoarding. Concrete slab in the vicinity is to be removed and paved with granite on southern, eastern and western sides and northern side will be surfaced with compacted gravel. Setting of Abbey will be temporarily affected during construction.
- No impact on bridge abutment or Cotterill's' Bridge as River Breagagh is separated from the main part of the site.
- No impact on any architectural heritage in close proximity to the proposed development including St. Francis Abbey Brewery and Gateway, the Mayfair Building or St. Canice's Cathedral and round tower.

- During operational phase, the proposed development has been designed to preserve archaeology in situ without impacting on it. Proposed development will emphasise by design the significance of subsurface archaeology by outlining St. Francis Abbey nave, cloister garth and associated ranges in pavement and the transept will be expressed as the raised lawn. Horse Barracks will be outlined in pavement laid over existing concrete and St. Francis' Well will be marked by a shallow pool above the existing concrete.
- Operational phase will have a moderate positive impact on the upstanding remains of the Horse Barracks forming part of the City Wall through conservation and ongoing maintenance and by making them accessible to the public.
- Belt of planting will protect City Walls from close approach whilst ensuring that it is visible and improving its setting.
- Belt of ground planting at Evan's Turret will protect it from close approach whilst ensuring that it is visible and improving its setting. There will also be greater public accessibility.
- Setting of Tasting House will also be improved within the operational phase.
- Setting of St. Francis Abbey will be greatly improved, and public accessibility will be a major benefit with wider advantages for the city and public appreciation for its medieval built fabric.
- The view from the round tower at St. Canice's Cathedral will be improved through the introduction of the urban park in place of industrial lands.

Mitigation Measures

- Archaeological monitoring of all groundworks – if archaeology is discovered, groundworks will stop and methodology to mitigate the impact will be submitted to the National Monuments Service for approval. Archaeological remains will be avoided and preserved in situ where possible or preserved by record where it is not possible.
- In places where concrete is removed, archaeological monitoring will ensure that the impact is not deeper than removing the concrete surface and that contractors will not damage underlying subsurface remains.

- During excavation of service lines, care will be taken to record subsurface remains of the mid 19th Century market building and results will be presented in a monitoring report.
- During excavation of services lines in proximity to St. Francis Abbey and graveyard, care will be taken to archaeologically monitor the excavation, avoid impacting any underlying or surrounding archaeological remains and recover any archaeological material.
- Mitigations for Horse Barracks will include vibration monitors and protective fencing during the construction stage.
- City Walls, Evan's Turret and St. Francis Abbey – mitigation to include vibration monitoring and protective fencing during construction stage.
- St. Francis Abbey is under the control of OPW and is excluded from proposed development – conservation plan for the Abbey will inform the future management and conservation of the monument and its relationship with the proposed development.

Residual Impacts

- 9.9.11. No residual impact is predicted for nine sites and moderate positive residual impact is predicted for Horse Barracks during the operational phase.

Conclusions on Landscape & Visual and Cultural Heritage

- 9.9.12. The Board should also refer to Section 8.3 under the Planning Assessment above when assessing the impact of the proposed development on Landscape and Cultural Heritage.
- 9.9.13. The landscape and visual impacts of the proposed development and the impact on cultural heritage will be largely positive and long term, most notably through transformation of the site from disused industrial lands to publicly accessible open space that emphasises the historical structures on site and reflects the archaeological heritage.
- 9.9.14. The visual impact of the proposed development and of future developments is adequately represented within photomontages which illustrate the aesthetic improvements brought about by the proposal from within the site and from nearby

vantage points. Landscaping is proposed to complement the existing scrub / treeline along the river and the presence of orchards and hedging and other planting will represent the friary and brewery heritage of the site.

9.9.15. The site contains National Monuments of very high significance and the proposed development is sensitive to the presence of these structures. Most notably, the setting of St. Francis Abbey will be improved and public accessibility to the site will give rise to further appreciation for Kilkenny City's medieval built fabric. Underlying archaeology will be represented within paving, cobble stones, the raised lawn and water feature, adequate archaeological mitigation and monitoring procedures are proposed, and consultation with the necessary bodies will take place during construction works.

9.9.16. I am satisfied that with proper implementation of mitigation measures and best practice measures, together with implementation of environmental commitments under the Construction Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on cultural heritage and the landscape are likely to arise.

9.10. Vulnerability of the Project to Major Accident and/ or Natural Disaster

9.10.1. Article 3 (1) of Directive 2014/52/EU and Schedule 6 of the Planning and Development Regulations, 2001 (as amended) require a description of the expected significant adverse effects of the project on the environment deriving from the vulnerability of the project to risks of major accidents and/ or disasters which are relevant to the project concerned. This includes both the potential to cause accidents/ disasters and the vulnerability of the project to potential accidents/ disasters.

9.10.2. The EIAR does not contain a specific section identifying any major accidents or natural disasters that have the potential to affect the proposed urban street and park. However, various risks are considered throughout the EIAR in the context of various factors of the environment. Having regard to its nature, scale and location, I am satisfied that the proposed development does not pose a major hazardous accident risk and is not vulnerable to any potential accidents or disasters. The site is outside the 700m consultation distance for the Grassland Fertiliser (Seveso II) site.

- 9.10.3. Flooding is a natural disaster that could potentially affect the proposed development site. However, the Kilkenny City Flood Relief Scheme comprises flood defence walls, embankments and channel conveyance improvements that provide protection to the Abbey Quarter against a 100 year flood. OPW mapping confirms that the site is within a flood risk area but is also a “defended area”. Notwithstanding this, the proposed development is a less vulnerable land use and water compatible development.
- 9.10.4. The previous industrial use of the site could result in the exposure of contaminated soils during excavation. The concrete slab will remain in place over most of the site, thereby providing a barrier to the soils below. Invasive species are present on site and there is potential for spread of these species within and outside of the site. Crayfish plaque was also identified within the River Nore adjoining the site. Ongoing ecological monitoring and training of site operatives will form part of the site operations.
- 9.10.5. I am satisfied that given the nature of the proposed development, and the mitigation measures proposed, together with the low probability of a major accident/ natural disaster, it is not likely that significant effects on the environment would arise in this regard.

9.11. Cumulative Impacts & Environmental Interactions

- 9.11.1. Table 15.1 of the EIAR sets out the various interactions between the environmental factors insofar as the effect of one environmental factor causes an indirect effect on another environmental factor. Throughout the EIAR, the cumulative assessment of the proposed urban street and park is carried out along with the other elements of Abbey Quarter Masterplan and other relevant projects and activities.
- 9.11.2. There are potential cross factor effects to population and human health arising from all other environmental factors. Increased ambient dust and noise during construction can negatively impact on human health and impacts on water quality can also have cross factor effects on human health. Positive impacts on population and human health can accrue from landscape and aesthetic improvements, access to archaeology and historical buildings and a safe and comfortable transport

environment for pedestrians and cyclists. This can also result in increased tourism revenue.

- 9.11.3. Cross factor effects to biodiversity can be caused by effects to soils, water and air through excavation, contamination and increased dust, noise and vibration. The other main cross factor effects relate to climate/ biodiversity (pollinator plants and carbon sequestration from trees); material assets (climate and transport); cultural heritage (landscape and visual setting); and landscape/ biodiversity (new planting and trees).
- 9.11.4. Many of the interactions will take place during the construction phase of the proposed development and will therefore be short term. More positive impacts are likely to occur in the longer term. Mitigation measures are set out in each of the relevant chapters and can also be applicable to other environmental factors.
- 9.11.5. The cumulative effects of the proposed urban street and park is assessed together with the other elements of the Abbey Quarter development under each environmental factor. The other elements of the Abbey Quarter project will be developed to provide residential/ commercial units and leisure spaces. This includes the Brewhouse Building being developed primarily as office space, the Mayfair Building which will house the City Library and the River Garden Project, which will connect with both ends of the urban park along the River Nore. These projects are ongoing or nearing completion.
- 9.11.6. Overall, the Abbey Quarter will comprise residential (30-35%), retail and services (15-20%), creative and knowledge intensive business services (>10%), and the remainder comprising other uses, e.g. commercial, education, boutique hotel, social and civic uses, or additional creative uses and/ or residential. The masterplan provides an indicative block layout to guide the future development of the Abbey Quarter. An Urban Design Code allows for building density and quantum to be determined at planning application stage.
- 9.11.7. The EIAR includes an evaluation of the cumulative effects of proposed urban street and park for the sensitive aspects under each environmental factor. In terms of population and human beings, it is noted that the demolition and completion of the Maturation Building in combination with the proposed development may contribute to a minor increase in employment. The proposed development, in combination with

the overall masterplan, will open the north-eastern quarter of the City to the public and tourists alike, and the attraction of new businesses and residents would benefit the City as a whole.

- 9.11.8. As part of the Masterplan, all plans and projects will be subject to Appropriate Assessment. Appropriate Assessments were carried out for ongoing projects within the Abbey Quarter and it was found that there will be no direct or indirect adverse effects on European Sites. An Ecological Impact Assessment carried out for the Riverside Garden Project concluded that this development would not result in any direct, indirect or cumulative impacts with appropriate mitigation measures in place. As these ongoing projects will not result in any adverse effects to local biodiversity and taking into account the small scale and localised nature of the proposed development, it is considered that significant cumulative impacts are highly unlikely.
- 9.11.9. No cumulative impacts are foreseen in terms of land and soils; however, the development of future Masterplan structures has the potential to have cumulative impacts on surface water and groundwater. The cumulative impact of any future Masterplan structures on the local environment and available infrastructure will be considered when assessing these structures.
- 9.11.10. There may be cumulative impacts on air quality if demolition works within the Abbey Quarter occur at the same time as the proposed development. However, plans will be co-ordinated so that potential dust generating activities are not completed concurrently. The sustainability strategy outlined in the Masterplan is in line with national, regional and county policy and cumulatively the Abbey Quarter development will limit vehicular access and associated air pollution, promote energy efficient buildings and refurbishment of existing buildings, and facilitate renewable heat and electricity generation. This will have a cumulatively positive impact on climate.
- 9.11.11. Photomontages prepared for the proposed development illustrate future buildings as outlined in the Masterplan, as well as the approved schemes for the Mayfair Building, Brewhouse Building and Riverside Garden Project. The potential impacts on cultural heritage within other parts of the masterplan lands are not known at present.
- 9.11.12. Potential cumulative impact in terms of natural resources and waste infrastructure will be considered when future planning applications in the Abbey Quarter are being

assessed. The development of the remainder of the Masterplan lands on an incremental basis is unlikely to cause significant traffic and transport issues. Deliveries and vehicle users associated with the Mayfair and Brewhouse buildings will not be granted access to the proposed urban street. A positive cumulative impact for pedestrians will occur through improved access to the adjoining skate park and riverside gardens.

9.11.13. In general, I would be satisfied with the methodology provided within the EIAR for cumulative assessment. The subject development is assessed with all the other elements of the Abbey Quarter Masterplan lands and any relevant other activities. Overall, this provides for a robust and complete assessment of the proposal by itself and any cumulative interactions with other aspects of the Masterplan development.

9.12. Monitoring

9.12.1. The following are included in the EIAR as monitoring for the proposed urban street and park:

- An Ecological Clerk of Works will undertake site inspections as required during works and details of the monitoring schedule will be set out in the CEMP.
- Any excavation material requiring off-site disposal will undergo sampling and testing in accordance with relevant waste legislation.
- Visual inspections and daily sampling of rivers.
- Passive monitoring for air quality.
- Construction noise and vibration monitoring.
- Reference material sampling provided on site for the duration of construction and defects period.
- Soft landscaping to be maintained and managed especially over the initial period.
- Periodic monitoring by archaeologists and architectural heritage specialists.
- Waste records will be kept during construction and operational phases.

9.13. Reasoned Conclusion

9.13.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the applicant, and the submissions from Planning Authority, observers and prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Positive short-term impacts on **population and human health** in terms of the local economy from increased spending and jobs during the construction period.
- Positive long-term impacts on population and human health through the creation of an aesthetically pleasing outdoor public area that will improve the visual setting of the area, encourage physical activity, and enhance the health and wellbeing of visitors to the site.
- Construction phase impacts on Population and Human Health will be mitigated by a range of measures and through implementation of the CEMP.
- Potential adverse impacts on **Biodiversity** during the construction phase on highly sensitive aquatic species in the River Nore and River Breagagh. A range of mitigation measures will be put in place for the construction phase to prevent water pollution and impacts on flora and fauna.
- Potential long-term positive impacts on **Land** through change of use from disused industrial land to public open space.
- Potential adverse impacts on **Water** from silt run-off and incorrect handling of deleterious materials such as lubricants, waste oils, cement, etc. Measures will be put in place such that works are undertaken in accordance with best practice in relation to the handling and storage of fuels, oils, chemicals and stockpiles and the CEMP will also provide a framework for water quality protection during construction.
- Potential for long-term positive impacts on Water through decreased quantity and improved quality of run-off from the site due to increased planting/ landscaping and installation of new oil / silt interceptors.

- Potential for long term positive impacts on **Climate** through restriction of motorised traffic and promotion of sustainable transport modes, enhancement of biodiversity and improved air quality, and tree planting contributing to carbon sequestration.
- Potential for long term positive impacts on **Material Assets (Transport)** by prioritising active transport modes and providing a safe and comfortable environment for walkers and cycling.
- Potential for long-term positive impacts on **Cultural Heritage** through improvements to the setting and accessibility of National Monuments of very high significance and representation of archaeological heritage on site through features contained in the proposed urban park.
- Potential for adverse impacts on underlying archaeology during excavation works. Mitigation during the construction stage will include archaeological monitoring of ground works and consultation with National Monuments Service if archaeology is discovered.
- Potential for adverse impacts on architectural heritage structures within the site during construction from vibration, impact of vehicles or machinery and undermining of foundations. Mitigation measures will include vibration monitoring and protective fencing.
- Potential for long-term positive impacts on **Landscape** through transformation of the site from disused industrial lands to publicly accessible and aesthetically pleasing landscaped open space that complements the riparian setting.

9.13.2. Having regard to the above, I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on the environment. The Board is satisfied that the reasoned conclusion is up to date at the time of making the decision.

10.0 **Appropriate Assessment**

10.1. The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive

- Geographical Scope and Main Characteristics
- Screening the need for Appropriate Assessment
- The Natura Impact Statement and associated documents
- Appropriate Assessment of implications of the proposed development on each European Site

10.2. Compliance with Articles 6(3) of the EU Habitats Directive: The Habitats

Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that 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. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

10.3. The proposed development comprises the construction of an urban park and urban street as part of the Abbey Quarter development at the former Smithwick's Brewery site along the River Nore in Kilkenny City. The proposal is not directly connected with or necessary to the management of any European site and is therefore subject to the provisions of Article 6(3).

10.4. Geographical Scope and Main Characteristics

- 10.4.1. The proposed urban street and park will serve the Abbey Quarter, a mixed-use development on the site of the former Smithwick's Brewery in Kilkenny city centre. The Abbey Quarter is situated on the western banks on the River Nore upstream of Kilkenny Castle and either side of the Breagh River. The topography of the site slopes gently from west to east towards the River Nore.
- 10.4.2. To the south of the Breagh River, the Abbey Quarter site comprises the remaining buildings of the brewery complex and extensive concrete marshalling yards surrounding St. Francis Abbey. Further to the south, a surface level car park on Bateman Quay is included within the quarter. The part of the Abbey Quarter to the

north of the Breaghagh River is bisected by the Kilkenny Central Access Route. This area was used for parking and truck washing when the brewery was in operation.

- 10.4.3. The area of the Abbey Quarter is 8.29 hectares and the proposed development site covers an area of 1.44 hectares. The site includes the alignment of the urban street from Bateman Quay over a distance of approximately 320m to the Central Access Scheme, as well as the area of the proposed urban park to the south of the Breaghagh River and west of the Nore. The subject site also includes a strip on land along the northern bank of the Breaghagh and the proposed junction of the site access / Central Access Scheme. St. Francis Abbey does not form part of the subject site.
- 10.4.4. The riverbank along the River Nore within the subject site comprises a narrow strip of trees and scrub on a bank that slopes down quite steeply over a short distance. The riverbank along the Nore extends from Evan's Turret along the subject site boundary for a distance of approximately 130m. The Breaghagh River enters the Nore to the south of St. Francis' Bridge and to the east of Evan's Turret. The turret forms part of the old city walls, the remains of which define the southern bank of the Breaghagh through the subject site. A modern wall is constructed along the north bank of the Breaghagh.
- 10.4.5. The proposed development will include the urban park adjoining the Breaghagh and Nore and an urban street utilising the existing bridge over the Breaghagh River. The urban park will consist of grassed areas, trees, paved surfaces, water features and meeting points. A proposed pathway along the River Nore will continue south and will form part of the Riverside Garden Project. Riverside natural planting that will tie in with existing planting is proposed along the Nore riverbank and symbolic flower planting is proposed along the Breaghagh wall.
- 10.4.6. The urban street will be pedestrian and cyclist dominated with vehicular access controlled by traffic barriers. The urban street will incorporate foul and surface water drainage, electricity, broadband, gas and public lighting services. New settlement tanks and oil interceptors will help to improve water quality discharge and landscaped areas will also reduce the volume of water discharged from the site. Works will take approximately 14 months to complete.

10.5. Screening the need for Appropriate Assessment

- 10.5.1. The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site. This is considered stage 1 of the appropriate assessment process, i.e., *screening*. The screening stage is intended to be a preliminary examination. If the possibility of significant effects cannot be excluded on the basis of objective information, without extensive investigation or the application of mitigation, a plan or project should be considered to have a likely significant effect and Appropriate Assessment carried out.
- 10.5.2. Having regard to the information and submissions available, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the European Sites set out in Table 1 below are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects. A 15km study area from the proposed development is applied for this purpose, wherein a total of two European Sites are included (1 SAC & 1 SPA).
- 10.5.3. European sites considered for Stage 1 screening:

European site (SAC/SPA)	Site code	Distance to subject site	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
River Nore SPA	004233	Adjoining	Potential connections	Y
River Barrow and River Nore SAC	002162	c. 5m	Potential connections	Y

Table 1 – Summary Table of European Sites considered in Screening for Appropriate Assessment

- 10.5.4. Based on my examination of the NIS, together with other supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separation distances and functional relationships between the proposed works and the European sites, their conservation objectives, and taken in conjunction with my assessment of the subject site and the surrounding area, I

conclude that a Stage 2 Appropriate Assessment is required for the following European Sites in view of the conservation objectives of those sites:

- River Nore SPA
- River Barrow and River Nore SAC

10.5.5. Table 2 below provides a screening summary matrix where there is a possibility of significant effects, or where the possibility of significant effects cannot be excluded without further detailed assessment.

Site name	Is there a possibility of significant effects in view of the conservation objectives of the site?		
Qualifying Interest feature	General impact categories presented		
	Habitat loss/ modification	Water quality and water dependent habitats (pollution)	Disturbance/ displacement barrier effects
River Nore SPA Special Conservation Interest: Kingfisher (A229)	No	Yes Impacts associated with pollution during construction works resulting in deterioration in water quality. Pollution of the watercourses could adversely impact on fish species that are the Kingfisher's source of food.	Yes Potential for noise disturbance impacts.
River Barrow and River Nore SAC Special Conservation Interests: Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170] Salicornia and other annuals colonising mud and sand [1310]	No	Yes Potential impacts on water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachium vegetation downstream of the subject site. Effects associated with pollution during construction. Possible threats to species from decreases in water quality including Sea Lamprey, Brook Lamprey, River Lamprey, Atlantic Salmon and White-Clawed Crayfish.	Yes Potential for disturbance to Otter.

<p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260]</p> <p>European dry heaths [4030]</p> <p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</p> <p>Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p><i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016]</p> <p><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</p> <p><i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p> <p><i>Petromyzon marinus</i> (Sea Lamprey) [1095]</p> <p><i>Lampetra planeri</i> (Brook Lamprey) [1096]</p>			
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Lampetra fluviatilis (River Lamprey) [1099]			
Alosa fallax fallax (Twaiite Shad) [1103]			
Salmo salar (Salmon) [1106]			
Lutra lutra (Otter) [1355]			
Trichomanes speciosum (Killarney Fern) [1421]			
Margaritifera durrovensis (Nore Pearl Mussel) [1990]			

Table 2 Screening summary matrix: European Sites for which there is a possibility of significant effects (or where the possibility of significant effects cannot be excluded without further detailed assessment)

10.5.6. I am satisfied that no additional sites other than those assessed in the NIS (River Nore SPA and River Barrow and River Nore SAC) need to be brought forward for Appropriate Assessment. I confirm that no mitigation has been taken into account at the screening stage.

10.6. **The Natura Impact Statement and Associated Documents**

10.6.1. The application was accompanied by a Natura Impact Statement for the proposed urban park and street comprising a Stage 1 Screening: Identification of Potential Adverse (*likely significant*) Effects and a Stage 2: Assessment of Potential Adverse Effects dated July 2020. A Baseline Aquatic Ecology Study is appended to the NIS. Other documents that accompany the planning application include an Environmental Impact Assessment Report, Landscape Design Statement and drawings, Materials Reference Booklet, Services Design and Methodology Report and Engineering and Services Design Drawing Package.

10.6.2. In general, I am satisfied that the NIS for the proposed urban park and street adequately describes the proposed development, the project site and the surrounding area. The Stage 1 Screening concluded that a Stage 2 Appropriate Assessment (NIS) was required. The NIS outlined the methodology used for assessing potential impacts on the habitats and species within the European Sites that have the potential to be affected by the proposed development. It predicted the potential impacts for the site and its conservation objectives, suggested mitigation measures, assessed in-combination effects with other plans and projects and identified any residual effects on the European sites and their conservation objectives.

10.6.3. The NIS was informed by the following studies, surveys and consultations:

- Desk based studies including the following:
 - Consultation with NPWS website with regards to conservation objectives for European Sites relevant to the assessment,
 - Consultation with National Biodiversity website with regards to species distributions,

- Consultation with EPA Envision website to obtain details on watercourses in the vicinity of the site, and
- Consultation with EPA Catchments website to obtain details on watercourses in the vicinity of the site.
- Field based studies undertaken on 16th October 2019 and 29th June 2020 to assess the extent and quality of habitat present and to identify potential ecological receptors associated with European Sites.
- Additional specialist surveys on protected/ notable species as follows:
 - Aquatic surveys
 - Otter survey
 - Kingfisher survey
 - Invasive species assessment
 - Other species assessment
- A habitat map of the area following the Fossitt (2000) classification scheme.

10.6.4. The NIS concluded that the proposed development will not result in any adverse effects on the basis that the specific mitigation measures will be implemented, and therefore the proposed development, in-combination with other projects, will not adversely affect the integrity and conservation status of any of the qualifying interests of the River Barrow and River Nore SAC and the River Nore SPA or any other Natura 2000 site.

10.6.5. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided, and they are summarised in the NIS. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development (see further analysis below).

10.7. **Appropriate Assessment of implications of the proposed development on each European Site**

10.7.1. The following is an assessment of the implications of the project on the relevant conservation objectives of the European site using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are identified and mitigation measures designed to avoid or reduce any adverse effects are examined and assessed.

10.7.2. I have relied on the following guidance:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service.
- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC

10.7.3. Relevant European sites: The following sites are subject to appropriate assessment.

- River Nore SPA (Site code: 004233)
- River Barrow and River Nore SAC (Site code: 002162)

10.7.4. A description of these sites and their Conservation Objectives and Qualifying Interests, including any relevant attributes and targets for these sites, are set out in the NIS and outlined in Tables 3 below. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for these sites available through the NPWS website (www.npws.ie).

10.7.5. **Aspects of the proposed development:** The main aspects of the proposed development that could adversely affect the conservation objectives of the European sites include:

- Loss of, or disturbance to habitats or species,
- Potential Impairment of water quality,

- Potential noise disturbance, and
- Potential light disturbance.

10.7.6. **Tables 3 and 4** summarise the appropriate assessment and site integrity test. The conservation objectives, targets and attributes as relevant to the identified potential significant effects are examined and assessed in relation to the aspects of the project (alone and in combination with other plans and projects). Mitigation measures are examined, and clear, precise and definitive conclusions reached in terms of adverse effects on the integrity of European sites.

10.7.7. Supplemental to the summary tables, any key issues that arose through consultation and through my examination and assessment of the NIS are expanded upon in the text below:

Table 3

River Nore SPA (Site code: 004233)

Key Issues:

- Loss of, or disturbance to habitats or species
- Potential impairment of water quality
- Potential noise disturbance, and

Conservation Objectives: [CO004233.pdf \(npws.ie\)](#)

Summary of Appropriate Assessment					
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects	Can adverse effects on site integrity be excluded?
To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: Kingfisher (A229)	The favourable conservation status of a species is achieved when: - population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its	Loss or disturbance to habitat or species: - Foraging and commuting Kingfisher were identified utilising the Breagagh River. - Construction works have the potential to result in temporary disturbance to Kingfisher, which may result in temporary	- Construction works will be undertaken in accordance with best practice and relevant guidance to prevent any deterioration of water quality and disturbance to bird species, as set out in the preliminary CEMP. These measures will be integrated in full into the final CEMP by the	- Ongoing construction of Riverside Garden Project, redevelopment of Mayfair Ballroom into the City Library and redevelopment of the former Smithwick's Brewery Brewhouse into primarily office space	Yes - Kingfisher territories can range in size from 1km of a river to 5km (RSPB, 2000) – species would only be temporarily displaced from one available territory to another. - Section of Breagagh and Nore is located within an urban environment and

	<p>natural habitats, and</p> <ul style="list-style-type: none"> - the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and - there is, and will - probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	<p>minor loss of feeding habitat.</p> <p>Potential for impairment of water quality:</p> <ul style="list-style-type: none"> - Potential for pollutants entering the entering surface or groundwater and flowing into the Breaghagh or Nore – potential to adversely affect water quality and subsequently impacting on protected habitats and species. - Potential pollutants include suspended solids, cementitious materials, silt, dust or hydrocarbon leaks or spills – adverse water quality impacts could affect Kingfisher and indirectly its food supply. <p>Potential Noise Disturbance:</p> <ul style="list-style-type: none"> - Construction noise has the potential to result in temporary adverse effects on noise levels in the vicinity of the site. 	<p>eventual contractor as a means of effective implementation of all measures.</p> <ul style="list-style-type: none"> - Best practice guidelines will be followed based on Inland Fisheries Ireland (IFI, 2006) and National Roads Authority (NRA, 2005) documents to remove the risk from potential contamination and to implement emergency procedures in the event of an accidental release or spill of potentially contaminating substances. - Preparation and implementation of an Invasive Alien Plant Species Management Plan to avoid spreading Japanese knotweed and Himalayan balsam from the site. - Discharges to the River Breaghagh/ River Nore will be blocked while new oil/ silt interceptors are being installed. - Construction works within close proximity of the Breaghagh and Nore will be subject to inspections by a suitably qualified environmental consultant. 	<ul style="list-style-type: none"> - These projects and the Abbey Creative Quarter Masterplan were all subject to appropriate assessments and all found that there would be no direct or indirect effects on European Sites. - There will not be any significant adverse effects on the European Sites in combination with other plans or projects. 	<p>has a history of human activity on site – Kingfisher would be habituated to this activity and are unlikely to be significantly disturbed.</p> <ul style="list-style-type: none"> - Due to mitigation measures, best practice measures and implementation of monitoring scheme, no adverse effects on surface or ground water quality or the designated conservation interests of the European sites will occur. - There will be an overall reduction of surface water run-off from the proposed development when compared to the existing site. - There is no unacceptable risk to sensitive receiving waters associated with the known condition of the site during the operational phase. - Kingfisher will be habituated to high levels of human activity and anthropogenic noise - Subject to compliance with noise mitigation measures, the construction phase will not result in any adverse
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			<ul style="list-style-type: none"> - Existing drains not being used will be grouted both ends and associated gullies will be blocked. - Dust management plan will be implemented. - Daily sampling of Breagagh/ Nore for pH, suspended solids and FOG (fat, oils and grease). - During operational phase, run-off from hardstanding areas will pass through silt/ oil separators before discharging to the rivers. Run-off from soft landscaped areas will drain by infiltration via cores in existing concrete hardstanding and soft landscaping will drain to the soil through the cores. A drainage board will form part of the landscape build-up over the concrete hardstanding. - Construction works will be limited to 07:00 to 19:00 hours Monday to Friday and 09:00 to 16:00 on Saturday. - Other mitigation measures for noise reduction include those relating to plant and equipment, delivery 		<p>effects on, or significant disturbance of designated species due to noise emissions.</p> <ul style="list-style-type: none"> - Noise emissions during the operational phase will be local in scale and not readily discernible.
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			vehicles, usage of mufflers and silencers on tools and shutting down of machinery when not in use.		
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Overall Conclusion: Integrity test

Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of the River Nore SPA in view of the site's conservation objectives. No reasonable scientific doubt remains as to the absence of such effects.

Table 4

River Barrow and River Nore SAC (Site code: 002162)

Key Issues:

- Loss of, or disturbance to habitats or species
- Potential impairment of water quality
- Potential noise disturbance, and
- Potential light disturbance

Conservation Objectives: [Site specific cons obj \(npws.ie\)](http://npws.ie)

		Summary of Appropriate Assessment			
Conservation Objective: To maintain the favourable conservation condition of the following:	Targets & Attributes (as relevant)	Potential adverse effects	All Mitigation Measures	In-combination effects	Can adverse effects on site integrity be excluded?

White Clawed Crayfish [1092]	No reduction from baseline distribution, juveniles and/ or females with eggs in at least 50% of positive samples, no alien crayfish and no instances of disease, sampling of water quality by EPA, no decline in habitat heterogeneity or habitat quality.	<p>Loss of, or disturbance to, habitats or species:</p> <ul style="list-style-type: none"> - Potential for construction works to temporarily disturb fish species and otter. - Otter surveys identified footprints and spraints in the vicinity of the site along the River Nore. <p>Potential for impairment of water quality:</p> <ul style="list-style-type: none"> - Potential for pollutants entering the entering surface or groundwater and flowing into the Breaghagh or Nore – potential to adversely affect water quality and subsequently impacting on protected habitats and species. - Potential pollutants include suspended solids, cementitious materials, silt, dust or hydrocarbon leaks or spills – adverse water quality impacts could affect otter and fish species and indirectly affect their food supply (specialist aquatic surveys identified evidence of a moribund 	<ul style="list-style-type: none"> - Pre-construction survey will be carried out to check for otter holts within or close to works areas. - Defence planting and fencing will be installed along the boundary of the park. - Where excavations are required on site, appropriate measures will be installed to protect mammals from ingress. - No construction works will take place outside daylight hours during site clearance and ECoW will be consulted as required. - ECoW will be contacted if unidentified burrows are identified within works areas. - Construction works will be undertaken in accordance with best practice and relevant guidance to prevent any deterioration of water quality and disturbance to aquatic species, as set out in the preliminary CEMP. These measures will be integrated in full into the final CEMP by the eventual contractor as a means of effective 	<ul style="list-style-type: none"> - Ongoing construction of Riverside Garden Project, redevelopment of Mayfair Ballroom into the City Library and redevelopment of the former Smithwick's Brewery Brewhouse into primarily office space - These projects and the Abbey Creative Quarter Masterplan were all subject to appropriate assessments and all found that there would be no direct or indirect effects on European Sites. - There will not be any significant adverse effects on the European Sites in combination with other plans or projects. 	<p>Yes</p> <ul style="list-style-type: none"> - Works are small scale and otter in the vicinity of the site will be habituated to levels of human activity and anthropogenic noise. - Not considered that pollutants will affect water quality in the rivers given the localised nature of the proposed works, utilisation of an existing bridge and the fact that there will be no in-river works. - Due to mitigation measures, best practice measures and implementation of monitoring scheme, no adverse effects on surface or ground water quality or the designated conservation interests of the European sites will occur. - There will be an overall reduction of surface water run-off from the proposed development when compared to the existing site. - There is no unacceptable risk to sensitive receiving waters associated with the known condition of
Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachion vegetation [3260]	No decline in habitat distribution; stable/ increasing habitat area; maintain appropriate hydrological regime; groundwater flow to habitat should be permanent and sufficient to maintain tufa				

	formation; maintain appropriate sub-stratum, water chemistry, water quality, typical species and floodplain connectivity.	white-clawed crayfish, two Atlantic salmon parr, juvenile lamprey and <i>Callitriche-Batrachion</i> vegetation).	implementation of all measures.		the site during the operational phase.
To restore the favourable conservation condition of the following:		Potential Noise Disturbance:	- Best practice guidelines will be followed based on Inland Fisheries Ireland (IFI, 2006) and National Roads Authority (NRA, 2005) documents to remove the risk from potential contamination and to implement emergency procedures in the event of an accidental release or spill of potentially contaminating substances.		- Otter will be habituated to high levels of human activity and anthropogenic noise
Sea Lamprey [1095]	Greater than 75% of main stem length of rivers accessible from estuary (Sea Lamprey), access to all watercourses down to 1st order streams (Brook Lamprey) and greater than 75% of main stem and major tributaries down to second order accessible from estuary (River Lamprey); at least 3 age/ size groups present; juvenile density at least 1/m2 (Sea Lamprey) and 2/m2 (Brook and River Lamprey); no decline in extent and distribution of spawning beds;	- Construction noise has the potential to result in temporary adverse effects on noise levels in the vicinity of the site.	- Preparation and implementation of an Invasive Alien Plant Species Management Plan to avoid spreading Japanese knotweed and Himalayan balsam from the site.		- Subject to compliance with noise mitigation measures, the construction phase will not result in any adverse effects on, or significant disturbance of designated species due to noise emissions.
Brook Lamprey [1096]		Potential Light Disturbance:	- Implementation of biosecurity measures to avoid spreading crayfish plague to other sites.		- Noise emissions during the operational phase will be local in scale and not readily discernible.
River Lamprey [1099]		- Potential for impacts on nocturnal and crepuscular species from light disturbance during the operational phase.	- Discharges to the River Breagh/River Nore will be blocked while new oil/silt interceptors are being installed.		- Lighting will not adversely impact on any species during the construction phase and works will be limited to daylight hours.
			- Construction works within close proximity of the Breagh & Nore will be subject to inspections by		-

	more than 50% of sample sites positive.		a suitably qualified environmental consultant.		
Atlantic Salmon [1106]	100% of river channels down to 2nd order accessible from estuary, conservation limit for each system consistently exceeded, maintain or exceed 0+ fry mean catchment-wide abundance threshold value-currently set at 17 salmon fry/5 minutes sampling, no significant decline in out-migrating smolt abundance, no decline in no. & distribution of spawning redds due to anthropogenic causes, water quality at least Q4 at all sampled sites.		<ul style="list-style-type: none"> - Existing drains not being used will be grouted both ends and associated gullies will be blocked. - Dust management plan will be implemented. - Daily sampling of Breagagh/Nore for pH, suspended solids and FOG (fat, oils and grease). - During operational phase, run-off from hardstanding areas will pass through silt/oil separators before discharging to the rivers. Run-off from soft landscaped areas will drain by infiltration via cores in existing concrete hardstanding and soft landscaping will drain to the soil through the cores. A drainage board will form part of the landscape build-up over concrete hardstanding. - Construction works limited to 07:00 to 19:00 hours Mon to Fri and 09:00 to 16:00 on Sat. - Other mitigation measures for noise reduction include those relating to plant and equipment, delivery 		
Otter [1355]	No significant decline in distribution or extent of terrestrial, marine and freshwater habitat;				

	no significant decline in couching sites and holts; available fish biomass; no significant decline in available fish biomass.		<p>vehicles, usage of mufflers and silencers on tools and shutting down of machinery when not in use.</p> <ul style="list-style-type: none"> - Lighting strategy has been designed to mitigate against potential adverse effects from security lighting and associated footpaths. - Light spillage into the Breagagh & Nore will not exceed 1 lux. - Where lighting is essential, LEDs will be set low as possible; lighting aimed where it is needed and away from landscaped area, vegetation & waterbodies; and height of lighting columns will be kept to a minimum. - ECoW will check lighting patterns and lux levels along site boundaries. - - Proposed planting will provide appropriate screening to the River Nore from proposed lighting. 		
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Overall Conclusion: Integrity test

Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of the River Barrow and River Nore SAC in view of the site's conservation objectives. No reasonable scientific doubt remains as to the absence of such effects.

Relevant European site: River Nore SPA (Site code: 004193)

- 10.7.8. According to the Site Synopsis, the River Nore SPA is a long, linear site that includes the River Nore, the Delour River, the Erkina River, a section of the River Goul and the Kings River. The river channel and marginal vegetation are included within the SPA.
- 10.7.9. It is noted that the River Nore SPA is of high ornithological importance as it supports a nationally important population of Kingfisher, which is listed on Annex I of the EU Birds Directive. The single special conservation interest of the River Nore SPA is the Kingfisher. It is noted that 22 pairs were recorded in a 2010 survey within the SPA. Other species recorded in the 2010 survey were Mute Swan (35), Mallard (267), Cormorant (14), Grey Heron (45), Moorhen (14), Snipe (17) and Sand Martin (1,029).

Baseline Ecological Conditions

- 10.7.10. The proposed development site adjoins the River Nore SPA for a distance of approximately 130m. The Breaghagh River is a tributary of the Nore and forms the northern boundary of the subject site. The SPA includes the confluence of the Breaghagh and the Nore but not the Breaghagh itself. The subject site boundary continues along the western bank of the Nore River. There is a narrow strip of trees and scrub along this bank. The Breaghagh River is defined by concrete and stone walls including a section of the medieval city wall on the southern bank.
- 10.7.11. Habitat surveys were undertaken on 16th October 2019 and 29th June 2020 and habitat was mapped in accordance with the Fossitt (2000) classification scheme. The predominant land classification is BL3 – Artificial Surfaces. The strip along the Nore River bank is classified as WS1 / WL2 – Scrub / Treeline, with identified species including willow, alder, field maple, horse chestnut, ash, elder, hawthorn, balsam poplar, dogwood, oak, ivy, ragwort, bramble, butterfly bush, colt's foot, St. John's Wort, dandelion, common field-speedwell and creeping buttercup. Invasive species in this area included Himalayan balsam and Japanese knotweed. Himalayan balsam was also detected to the north of the site on and adjacent to concrete slabs.
- 10.7.12. A Kingfisher survey was carried out on 20th March 2020 to assess the potential to provide nesting habitat for breeding. The section of the Breaghagh River was

surveyed along the northern boundary of the site. No survey of Kingfisher was carried out along the Nore. The survey recorded evidence of Kingfisher commuting and foraging along the River Breaghagh; however, there was no record of breeding or suitable nesting sites within the site boundary or surveyed area. There was a total of three Kingfisher sightings.

10.7.13. I note that the Kingfisher survey did not extend along the western bank of the River Nore. It may be the case that the applicant considered that there is a sufficient degree of separation between the eastern site boundary and the River Nore river channel and marginal vegetation to an extent that a survey of the riverbank was not necessary. In addition, it is highlighted in the NIS that habitat on-site and within the vicinity are comprised predominately of built land and artificial surfaces. I also note that the Landscape Masterplan shows “existing tree planting” and “riverside natural planting – tie in existing planting” along the Nore and to the east of the subject site. The western riverbank of the River Nore is heavily vegetated at this location and there may be limited nesting opportunities for Kingfisher. It appears, therefore, that there will be little or no disturbance of potential habitat or nesting sites on the riverbank arising from the proposed development. The riverbank is quite steep and inaccessible to an extent from the site and I note that a 1.2m high timber fence is proposed along the River Nore inside the site boundary. Works and planting proposed at this location are also intended to reinforce the wild and natural riverside.

10.7.14. Overall, I am satisfied that Kingfisher and habitat surveys are appropriate having regard to the relationship of the subject site with the River Breaghagh and River Nore. The baseline information is also suitably up to date, with the Kingfisher surveys being recorded within the breeding season.

Factors that can adversely affect the achievement of conservation objectives

10.7.15. There are factors arising from the proposed development, in-combination with other plans/ projects, that can adversely affect the achievement of the conservation objective for which the River Nore SPA is designated. The conservation objective is to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: Kingfisher.

10.7.16. The favourable conservation status of a species is achieved when its population dynamics data indicate that it is maintaining itself on a long-term basis as a viable

component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

- 10.7.17. The main potential impacts to the favourable conservation status of the Kingfisher are loss or disturbance of habitat or species, potential for impairment of water quality and potential for noise disturbance. In terms of feeding habitat, there may be temporary noise disturbance to Kingfisher during the construction phase of the proposed development. However, it is recognised that Kingfisher territories can range from 1km to 5km of a river (RSPB, 2000) and any temporary displacement would be from one available territory to another. Furthermore, the Kingfisher would be habituated to human activity at this location and habitat suitability along the River Breaghagh is considered to be sub-optimal for nesting Kingfisher due to the presence of walls aligning the river. There is also a lack of overhanging branches for foraging Kingfisher. Mitigation measures are nonetheless proposed that will further limit the impacts of disturbance on Kingfisher to a non-significant level. This includes measures to limit construction work hours and noise reduction measures from construction machinery.
- 10.7.18. There is also potential for impairment of water quality subsequently impacting on protected habitat or species. Adverse impacts on water quality may affect Kingfisher and indirectly its food supply. However, there will be an overall reduction in surface water run-off from the site due to increased planting and vegetation. Furthermore, the quality of run-off will be improved as new silt/ oil separators are being installed. The potential for contamination during the construction phase will be mitigated by a range of measures, best practises and monitoring that will remove the risk of potential contamination. This will include implementation of a CEMP, oil storage and refuelling measures, procedures for dealing with emergencies, careful planning of concrete pours, use of biodegradable chemicals where possible, inspections by suitably qualified environmental consultants, blocking of discharges whilst new interceptors are installed and blocking of disused drains.
- 10.7.19. The targets and attributes for the Special Conservation Interest species that potentially could be adversely affected by the proposed development are set out in Table 3 above. The above mitigation measures will ensure that the proposed

development will not adversely impact on water quality. I am therefore satisfied that mitigation is clearly defined and appropriate in terms of the potential adverse impact on water quality. The proposed development will not interfere with the population dynamics and natural range of the Special Conservation Interest species.

10.7.20. In terms of disturbance and displacement impacts, it is possible that Special Conservation Interest species utilise the habitat alongside the subject site and could therefore be displaced by construction disturbance. However, there is no suitable breeding habitat within the site. Moreover, Kingfisher will forage over a wide area and there will be suitable habitat within the wider territory. Thus, there will probably continue to be a sufficiently large habitat in the wider area to maintain the Special Conservation Interest species on a long-term basis.

10.7.21. In conclusion, I am satisfied that with full and proper implementation of the above mitigation measures, it can be determined, beyond all reasonable and reliable scientific doubt, that the proposed development will not result in adverse effects on the integrity of the River Nore SPA. The mitigation measures will address the source of any potential impacts and are adequate, in particular, to protect against disturbance and from sedimentation and pollutants arising from surface water run-off to the adjoining watercourses.

Relevant European site: River Barrow and River Nore SAC (Site code: 002162)

10.7.22. The site synopsis for the River Barrow and River Nore SAC states that the site is of considerable significance for the occurrence of good examples of habitat and populations of plant and animal species listed on Annexes I and II of the EU Habitats Directive. Freshwater Pearl Mussel (including Nore Freshwater Pearl Mussel), White-clawed Crayfish, Salmon, Twaite Shad, Lamprey, whorl snail and Otter have an important presence and the freshwater stretch of the River Nore main channel is a designated salmonid river. It is noted that the main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, over-grazing within the woodland areas, and invasion by non-native species.

Baseline Ecological Conditions

10.7.23. The proposed development site adjoins the River Barrow and River Nore SAC for a distance of approximately 130m. The Breagh River is a tributary of the Nore and

forms the northern boundary of the subject site. The SAC does not include the Breagagh River. The subject site boundary continuing along the western bank of the Nore River consists of a narrow strip of trees and scrub. The Breagagh River is defined by concrete and stone walls which includes the remains of the medieval city wall on the southern bank.

- 10.7.24. Habitat surveys were undertaken on 16th October 2019 and 29th June 2020 and habitat was mapped in accordance with the Fossitt (2000) classification scheme. The predominant land classification is BL3 – Artificial Surfaces. The strip along the Nore River bank is classified as WS1 / WL2 – Scrub / Treeline, with identified species including willow, alder, field maple, horse chestnut, ash, elder, hawthorn, balsam poplar, dogwood, oak, ivy, ragwort, bramble, butterfly bush, colt's foot, St. John's Wort, dandelion, common field-speedwell and creeping buttercup. Invasive species in this area included Himalayan balsam and Japanese knotweed. Himalayan balsam was also detected to the north of the site on and adjacent to concrete slabs.
- 10.7.25. A Baseline Aquatic Ecology Study dated 30th June 2020 appended to the NIS sets out details of field work carried out on 7th August 2019 and includes an assessment of the status of protected species possibly occurring in the rivers adjacent, and for 1km downstream of the subject site. Deep river sections were surveyed by boat and shallow sections by foot. The presence of Nore Freshwater Pearl Mussel was surveyed under licence from the NPWS and a hand search of White Clawed Crayfish was carried out in the Breagagh River. Habitat quality for salmon and Lamprey based on physical in-stream requirements of these species for spawning, nursery and adult habitat, was assessed. The presence of invasive alien plant species was also checked.
- 10.7.26. Floating river vegetation was discovered downstream of the weir near the castle and a single moribund crayfish infected with crayfish plague was found in the Nore. It is considered that the presence of crayfish in the vicinity of the subject site is highly unlikely but the spores of the micro-organism that cause plague could be present.
- 10.7.27. The River Nore contains suitable physical habitat for salmon spawning and nursery downstream of the weir and two salmon parr were found in the Breagagh. Riffle areas in the Nore are suitable for Lamprey spawning and the presence of juvenile

lamprey was discovered. There are no records of Twaite Shad occurring upstream of Inishtioge (over 30km downstream), and Nore Freshwater Pearl Mussel was not discovered in surveys.

- 10.7.28. An otter survey was carried out on the 20th March 2020 and otter spraints and footprints were identified. The Nore and Breagagh in the vicinity of the site were evaluated as being optimal for commuting and foraging. The Nore was evaluated as being optimal for holt/ couch construction and the Breagagh is sub-optimal. The survey identified the presence of a large mammal hole at the confluence of the Breagagh and Nore and a camera trap survey confirmed that this hole was being used by a red fox.
- 10.7.29. Overall, I consider that the level of surveying is appropriate having regard to the biodiversity of the area and adequate in terms of their content, duration and coverage. The baseline information is suitably up to date having regard to the lodgement dates of the planning application.

Factors that can adversely affect the achievement of conservation objectives

- 10.7.30. The conservation objectives for the River Barrow and River Nore SAC includes the maintenance of the favourable conservation condition of white clawed crayfish and watercourses of plain to montane levels, with the Ranunculion fluitantis and Callitriche-Batrachion vegetation. It is also the conservation objective to restore the favourable conservation objective of Sea Lamprey, Brook Lamprey, River Lamprey Salmon and Otter.
- 10.7.31. The favourable conservation status of a habitat is achieved when its natural range, and area it covers within that range, are stable or increasing; the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and the conservation status of its typical species is favourable. The favourable conservation status of a species is achieved when its population dynamics data indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

- 10.7.32. There are factors arising from the proposed development, in-combination with other plans/ projects, that can adversely affect the achievement of the conservation objectives for which the River Barrow and River Nore SAC is designated. In the absence of mitigation measures, the proposed development alone, and in combination with other plans/ projects, has the potential to adversely affect the maintenance or restoration of the favourable conservation condition of certain habitats and species for which the River Barrow and River Nore SAC is designated through loss or disturbance of habitat/ species; potential impairment of water quality; potential noise disturbance; and potential light disturbance.
- 10.7.33. In an unmanaged situation, impacts could occur from disturbance to fish species and otter and from pollutants entering the surface or groundwater and flowing into the River Breagagh or River Nore. Pollutants from suspended solids, cementitious materials, silt, dust or hydrocarbon leaks or spills could directly affect otter or fish species or indirectly through their food supply. Disturbance to otter could occur in the construction phase from increased noise and light disturbance. The discovery of a moribund White Clawed Crayfish in the River Nore during aquatic surveys is the first confirmed case of crayfish plague in the Nore catchment. There is potential for the spread of crayfish plague if proper procedures are not put in place.
- 10.7.34. The potential for contamination during the construction phase will be mitigated by a range of measures, best practises, and monitoring. This will include implementation of a CEMP, oil storage and refuelling measures, procedures for dealing with emergencies, careful planning of concrete pours, use of biodegradable chemicals where possible, inspections by a suitably qualified environmental consultant, blocking of discharges whilst new interceptors are installed and blocking of disused drains. During the operational phase, there will be an overall reduction in surface water run-off from the site due to increased planting and vegetation. Furthermore, the quality of run-off will be improved as new silt/ oil separators are being installed.
- 10.7.35. The preparation and implementation of an invasive alien plan species management plan will be required to avoid the spreading of Japanese knotweed and Himalayan balsam from the site and biosecurity measures will be necessary to avoid the spread of crayfish plague to other sites.

- 10.7.36. Mitigation measures for protection of otter include the restriction of construction works to daylight hours, pre-construction surveys for otter holts and consultation with Ecological Clerk of Works, installation of defence planting around the boundary of the park, and protection of any excavation works from mammal ingress. Other measures that will be put in place for the protection of Otter and other species and habitat include daily sampling of the rivers for pH, suspended solids and FOG (fat, oils and grease); implementation of a dust management plan; and measure for noise and light reduction/ minimisation during the construction period.
- 10.7.37. The targets and attributes for the Special Conservation Interest species that potentially could be adversely affected by the proposed development are set out in Table 4 above. The above mitigation measures will ensure that the proposed development will not adversely impact on water quality. Watercourse vegetation will be maintained, and the measures will mitigate against any potential impact causing disturbance to fisheries species, including Lamprey and Salmon. Otter will be habituated to human activity in this area and are capable of foraging over a wide area. Thus, there will probably continue to be a sufficiently large habitat in the wider area to maintain the Special Conservation Interest species on a long-term basis. I am therefore satisfied that mitigation is clearly defined and appropriate in terms of the potential adverse impact on water quality. The proposed development will not interfere with the population dynamics and natural range of the Special Conservation Interest species.
- 10.7.38. The qualifying interests for the River Barrow and River Nore SAC include a number of other species such as estuaries, reefs, salt meadows that are located significant distances downstream from the proposed works to an extent that there will be no impact on baseline conditions. The National Biodiversity Data Centre (NBDC) holds no records for species such as the Freshwater Pearl Mussel and Desmoulin's whorl snail within 2km of the site and the nearest records for Nore Freshwater Pearl Mussel is 16.5km upstream. The NBDC holds no records for Twait Shad in the Barrow catchment, which is directly linked to the River Nore. In addition, these qualifying interest species were not recorded at or adjacent the subject site during surveys.
- 10.7.39. In conclusion, I am satisfied that with full and proper implementation of the above mitigation measures, it can be determined, beyond all reasonable and reliable

scientific doubt, that the proposed development will not result in adverse effects on the integrity of the River Barrow and River Nore SAC. The mitigation measures will address the source of any potential impacts and are adequate, in particular, to protect against disturbance and from sedimentation and pollutants arising from surface water run-off to the adjoining watercourses.

10.8. In-Combination Effects

- 10.8.1. The proposed development comprises the construction of an urban park and street to serve the mixed-use development of the Abbey Quarter at the former Smithwick's Brewery in Kilkenny City Centre. As part of the development, works are currently ongoing that include the Riverside Garden Project, the redevelopment of Mayfair Ballroom into the City Library and redevelopment of the former Smithwick's Brewery Brewhouse into primarily office space.
- 10.8.2. A Natura Impact Report prepared for the Masterplan for the Abbey Quarter, 2015 (see Section 5.4 above), demonstrated that the masterplan implementation has the potential to result in adverse impacts to the integrity of the Natura 2000 network of sites, if unmitigated. Mitigation measures include the relevant provisions of the Kilkenny City & Environs Development Plan that will safeguard European Sites from potential significant effects associated with individual elements of the masterplan. All plans and projects that will form part of the masterplan will themselves be subject to Appropriate Assessment.
- 10.8.3. The concurrent projects on the Abbey Quarter site at the riverside, Mayfair Ballroom and brewhouse were subject to Appropriate Assessment and it was concluded that there would be no direct or indirect adverse effects on European site arising from each of these projects in combination with other plans and projects.
- 10.8.4. I have analysed the provisions of the Masterplan for Abbey Creative Quarter, 2015 and the Appropriate Assessment Natura Impact Report prepared for this plan. I am satisfied that this document sets out a comprehensive framework for the development of the Abbey Quarter that includes all lower order plans and projects that merit in-combination assessment of possible adverse effects on the River Nore SPA and River Barrow and River Nore SAC.

10.8.5. The potential for adverse effects due to in-combination effects with other projects and activities was excluded based on the following:

- The proposed Abbey Quarter urban park and street itself will not lead to adverse impacts on the Special Conservation Interests of the River Nore SPA and River Barrow and River Nore SAC and therefore in-combination impacts will not arise.
- Appropriate Assessment for the Abbey Quarter Masterplan sets out the relevant provisions of the Development Plan that will safeguard European Sites from potential significant effects associated with individual elements of the masterplan.
- All plans and projects that will form part of the masterplan will themselves be subject to Appropriate Assessment.
- Appropriate Assessment carried out for the projects within the Abbey Quarter to date have concluded that there would be no direct or indirect adverse effects on European site arising from each of these projects in combination with other plans and projects.
- The proposed development is small scale and located in an urban area where regular development and human activity occurs naturally over time.

10.9. **Appropriate Assessment Conclusions**

10.9.1. Having carried out screening for appropriate assessment of the proposed Abbey Quarter urban park and street, it was concluded that it would be likely to have a significant effect on the River Nore SPA and River Barrow and River Nore SAC. Consequently, an appropriate assessment was required of the implications of the project on the qualifying features of these sites in light of their conservation objectives.

10.9.2. Following an appropriate assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the River Nore SPA and River Barrow and River Nore SAC, or any other European site, in view of the sites' Conservation Objectives. No reasonable scientific doubt remains as to the absence of such effects.

10.9.3. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project and proposed mitigation measures in relation to the Conservation Objectives of the River Nore SPA and River Barrow and River Nore SAC.
- Detailed assessment of in combination effects with other plans and projects.
- No adverse effects to Special Conservation Interest habitat or species of the River Nore SPA and the River Barrow and River Nore SAC following the application of mitigation measures.
- Implementation of a Construction Environmental Management Plan.
- The demonstration, beyond reasonable scientific doubt, that with full and proper implementation of mitigation measures, the proposed development will not result in adverse effects on the integrity of the River Nore SPA and River Barrow and River Nore SAC.

11.0 Conclusion

- 11.1. The proposed urban park and pedestrian / cyclist dominated urban street will form a key component of the new Abbey Quarter in Kilkenny City Centre. The main publicly accessible outdoor spaces for the Abbey Quarter will be advanced prior to the construction of the buildings that will form the urban street and the southern edge of the park. The prioritisation of the Abbey Quarter for pedestrians and cyclists will therefore be established at an early stage. The urban street will act as the main access spine to the urban park and it is important that movement along this street for pedestrians and cyclists is prioritised throughout the construction period of the urban quarter.
- 11.2. There has been a new appreciation of outdoor spaces arising from the pandemic and the proposed urban park has the potential to provide an attractive publicly accessible meeting place that links well with the medieval core of the city and riverbank. This city centre brownfield site has been cut off from the public for many years and the proposal will transform disused industrial lands into an amenity area containing significant architectural and archaeological heritage.

- 11.3. The proposed park has been designed to attract people for multiple reasons and, subject to condition, there are sufficient features that will encourage people to linger. There will be variety in terms of character areas, materials and colours and the mix of hard and soft landscaping will be aesthetically pleasing. Active transport modes will be prioritised, and a safe and comfortable environment will be provided for walkers and cyclists. There will also be significant and long-term positive impacts on the wider city brought about by the proposed land use change, as well as improvements to the local environment through drainage upgrades and biodiversity and amenity enhancements.
- 11.4. Under Section 175(9)(a) of the Planning and Development Act, 2000 (as amended) the Board may approve the proposed development; modify the proposed development; approve, in part only, the proposed development; or refuse to approve the proposed development. It is also open to the Board under Section 175(5) to require the applicant to submit further information in relation to the effects on the environment of the proposed development or the consequences for the proper planning and sustainable development of the area.
- 11.5. Having regard to the above, I recommend that the proposed development is approved subject to modifications as set out below.

12.0 Recommendation

- 12.1. On the basis of the above assessment, I recommend that the Board **APPROVE** the proposed development with modifications for the reasons and considerations and subject to the conditions set out below.

13.0 Reasons and Considerations

- 13.1. In coming to its decision, the Board had regard to the following:

a) EU legislation including in particular:

- The relevant provisions of **EU Directive 2014/52/EU** amending **Directive 2011/92/EU (EIA Directive)** on the assessment of the effects of certain public and private projects on the environment,

- **Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives)** which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.

b) National Legislation including in particular:

- **Section 175 of the Planning and Development Act 2000 (as amended)**
- **Section 177AE of the Planning and Development Act, 2000 (as amended)**

c) National Policy and Guidance including in particular:

- **The Design Manual for Urban Roads and Streets, 2013**, which provides guidance on how to approach the design of urban streets in a more balanced way.

d) Regional Policy including in particular:

- **The Regional Spatial and Economic Strategy for the Southern Region**, which seeks to support urban generation through investment in the Abbey Quarter and other initiatives to improve the public realm and regenerate underused land in Kilkenny City

e) Local Planning Policy including in particular:

- The provisions of the **Kilkenny City & Environs Development Plan 2014-2020**, including Objectives 3I and 3P which specifically provide for the proposed park and street
- **Urban Design Framework / Masterplan for Abbey Creative Quarter, 2015**, which contains the proposed park and street as key components
- **Abbey Quarter Urban Design Code, 2018**, which sets out criteria for the design of the public realm

f) The following matters:

- the nature, scale and design of the proposed works as set out in the application for approval and the pattern of development in the vicinity,

- the documentation and submissions of the Local Authority, including the environmental impact assessment report and associated documentation submitted with the application, and the range of mitigation and monitoring measures proposed,
- other relevant guidance documents,
- the submissions and observations made to An Bord Pleanála in connection with the application,
- the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European sites, and
- the report and recommendation of the inspector including the examination, analysis and evaluation undertaken in relation to appropriate assessment and environmental impact assessment.

13.2. Proper Planning and Sustainable Development

- 13.2.1. The proposed development is in accordance with aims and objectives of the Kilkenny City & Environs Development Plan, 2014-2020 and is therefore acceptable in principle. The proposed urban park and street will be key components of the Abbey Quarter development in the heart of Kilkenny City. The proposed park will be multifunctional and will enhance the special interest, character and setting of the National Monuments on site, archaeology underlying the site and the adjacent riparian setting. Overall, the proposed public realm works represent an acceptable contribution towards place-making that will generate a largely positive impact on the amenities of the area. Subject to condition, the Board concludes that the proposed urban park and street layout is acceptable having regard to the potential end users and is, therefore, in accordance with the proper planning and sustainable development of the area.

13.3. Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development, taking into account:

- (a) the nature, scale and extent of the proposed development,
- (b) the Environmental Impact Assessment Report and other associated documentation submitted in support of the application,
- (c) the submissions from the applicant, the observers and prescribed bodies in the course of the application, and
- (d) the Inspector's report.

The Board agreed with the summary of the results of consultations and information gathered in the course of the environmental impact assessment, and the examination of the information contained in the Environmental Impact Assessment Report and the associated documentation submitted by the applicant, and the submissions made in the course of the application as set out in the Inspector's report. The Board was satisfied that the Inspector's report sets out how these various environmental issues were addressed in the examination and recommendation which are incorporated into the Board's decision.

Reasoned Conclusion of the Significant Effects:

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the Environmental Impact Assessment Report is up to date and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are those arising from the impacts listed below.

The main significant effects, both positive and negative, are:

- Positive short-term impacts on **population and human health** in terms of the local economy from increased spending and jobs during the construction period.
- Positive long-term impacts on population and human health through the creation of an aesthetically pleasing outdoor public area that will improve the visual setting

of the area, encourage physical activity, and enhance the health and wellbeing of visitors to the site.

- Construction phase impacts on Population and Human Health will be mitigated by a range of measures and through implementation of the CEMP.
- Potential adverse impacts on **Biodiversity** during the construction phase on highly sensitive aquatic species in the River Nore and River Breagagh. A range of mitigation measures will be put in place for the construction phase to prevent water pollution and impacts on flora and fauna.
- Potential long-term positive impacts on **Land** through change of use from disused industrial land to public open space.
- Potential adverse impacts on **Water** from silt run-off and incorrect handling of deleterious materials such as lubricants, waste oils, cement, etc. Measures will be put in place such that works are undertaken in accordance with best practice in relation to the handling and storage of fuels, oils, chemicals and stockpiles and the CEMP will also provide a framework for water quality protection during construction.
- Potential for long-term positive impacts on Water through decreased quantity and improved quality of run-off from the site due to increased planting/ landscaping and installation of new oil / silt interceptors.
- Potential for long term positive impacts on **Climate** through restriction of motorised traffic and promotion of sustainable transport modes, enhancement of biodiversity and improved air quality, and tree planting contributing to carbon sequestration.
- Potential for long term positive impacts on **Material Assets (Transport)** by prioritising active transport modes and providing a safe and comfortable environment for walkers and cycling.
- Potential for long-term positive impacts on **Cultural Heritage** through improvements to the setting and accessibility of National Monuments of very high significance and representation of archaeological heritage on site through features contained in the proposed urban park.

- Potential for adverse impacts on underlying archaeology during excavation works. Mitigation during the construction stage will include archaeological monitoring of ground works and consultation with National Monuments Service if archaeology is discovered.
- Potential for adverse impacts on architectural heritage structures within the site during construction from vibration, impact of vehicles or machinery and undermining of foundations. Mitigation measures will include vibration monitoring and protective fencing.
- Potential for long-term positive impacts on **Landscape** through transformation of the site from disused industrial lands to publicly accessible and aesthetically pleasing landscaped open space that complements the riparian setting.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures referred to above, including proposed monitoring as appropriate, and subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions set out in the Inspector's report. The Board is satisfied that this reasoned conclusion is up to date at the time of making this decision.

13.4. **Appropriate Assessment**

Appropriate Assessment: Stage 1

The Board agreed with and adopted the screening assessment and conclusions carried out in the Inspector's report that the only European sites in respect of which the proposed development has the potential to have a significant effect are the River Nore SPA (Site code: 004233) and the River Barrow and River Nore SAC (Site code: 002162).

Appropriate Assessment: Stage 2

The Board considered the Natura Impact Statement and other associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file and the Inspector's assessment.

The Board completed an appropriate assessment of the implications of the proposed development on the aforementioned European sites in view of the sites' Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- (a) the likely direct and indirect impacts arising from the development and the proposed development, both individually, when taken together and in combination with other plans or projects,
- (b) the mitigation measures, which are included as part of the current proposal, and
- (c) the Conservation Objectives for the European sites.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European sites, having regard to the sites' Conservation Objectives. In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' Conservation Objectives.

14.0 Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars, including the environmental impact assessment report (EIAR), and other associated documentation, lodged with An Bord Pleanála on the 30th day of July 2020, except as may otherwise be required in order to comply with the conditions set out below. Where any mitigation measures set out in the Environmental Impact Assessment Report or any conditions of this Approval require further details to be prepared by or on behalf of the Local Authority, these details shall be placed on the file and retained as part of the public record.

Reason: In the interest of clarity and the proper planning and sustainable development of the area and to ensure the protection of the environment.

2. The mitigation measures and associated monitoring outlined in the plans and particulars relating to the development, including the environmental impact assessment report submitted with this application as set out in Section 16 of Volume 2 of the EIAR 'Schedule of Commitments', shall be carried out in full except as may otherwise be required in order to comply with other conditions.

Prior to commencement of the development, details of a time schedule for implementation of the mitigation measures and associated monitoring shall be prepared by or on behalf of the Local Authority, these details shall be placed on the file and retained as part of the public record.

Reason: In the interest of clarity and protection of the environment and in the interest of public health.

3. The mitigation measures contained in the Natura Impact Statement which was submitted with the application shall be implemented in full.

Reason: In the interest of clarity and the proper planning and sustainable development of the area and to ensure the protection of European Sites.

4. The proposed development shall be amended as follows:

- (a) The grassed area featuring the planted hedges and the orchard of forgotten fruits shall slope southwards towards a new seated edge along the pedestrian path to the north of the main plaza area.
- (b) Cycle parking shall be provided in proximity to the proposed playgrounds and fitness area.
- (c) Measures shall be put in place for the provision of other street furniture such as a drinking source, recycle bins and bollards at appropriate locations.

Revised drawings showing compliance with these requirements shall be placed on the file and retained as part of the public record.

Reason: In the interests of pedestrian and cyclist comfort and convenience.

5. Within three months of the date of this order, measures to facilitate safe pedestrian and two-way cyclist priority access to / from and past the site at

Bateman Quay and the Kilkenny Central Access Scheme, and a timeframe for implementation of these measures, shall be placed on file and retained as part of the public record.

Reason: In the interests of pedestrian and cyclist safety.

6. Within three months of the date of this order, an Access Statement for the proposed development shall be prepared, placed on file and retained as part of the public record. This shall incorporate measures to assist in navigation and movement through shared spaces for visually impaired users, such as the provision of sections of tactile paving that direct movement along the street or across spaces; the creation of distinct zones that delineate pedestrian only space from shared space; flush kerbs, drainage lines and/or sections of tactile paving to assist guide dogs and indicate movement from a pedestrian only space to a shared carriageway; and an audit of materials to be used on site to assess their appropriateness for those with visual impairments.

Reason: To provide for universal access and in the interests of pedestrian safety.

7. Prior to the commencement of development, the applicant or any agent acting on its behalf shall update the preliminary Construction and Environmental Management Plan (CEMP) including demonstration of proposals to adhere to best practice and protocols. The CEMP shall include specific proposals as to how the CEMP will be measured and monitored for effectiveness.

Reason: In the interest of protecting the environment and public health.

8. Within three months of the date of this order, a detailed Construction Management Plan for the construction stage shall be placed on the file and retained as part of the public record. The Construction Management Plan shall incorporate the following:

- (a) a detailed plan for the construction phase incorporating, inter alia, construction programme, supervisory measures, noise management

measures, water sampling, dust minimisation, pest control, construction hours and the management of construction waste,

- (b) a comprehensive programme for the implementation of all monitoring commitments made in the application and supporting documentation during the construction period,
- (c) an emergency response plan,
- (d) Proposals for construction traffic access to the site for the duration of the Abbey Quarter development and during festivals or other large events.
- (e) proposals in relation to public information and communication.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be available for public inspection by the planning authority.

Reason: In the interests of environmental protection and orderly development.

9. The developer shall facilitate the preservation, recording and protection of archaeological materials or features which exist within the site and these details shall be placed on the file and retained as part of the public record.

The developer shall also comply with the following requirements:-

- (a) satisfactory arrangements shall be put in place for the execution (or supervision) by a suitably qualified archaeologist of all archaeological excavations, investigations and site development works.
- (b) This archaeologist shall advise on such measures as may be necessary to ensure that any damage to the remaining archaeological material is avoided or minimised. In this regard, the proposed locations of service trenches or other subsurface works shall be placed on the file and retained as part of the public record.
- (c) satisfactory arrangements for post-excavation research and the recording, removal and storage, of any archaeological remains which may be considered appropriate to remove, shall be placed on the file

and retained as part of the public record. In this regard, a comprehensive report on the completed archaeological excavation shall be prepared within a period of six months or within such extended period as may be agreed with the planning authority.

Reason: In order to conserve the archaeological heritage of the site, it is considered reasonable that the developer should facilitate the preservation by record of any archaeological features or materials which may exist within it. In this regard, it is considered reasonable that the developer should be responsible for carrying out properly supervised archaeological excavations in circumstances where the permitted development works would be likely to result in the unavoidable disturbance or destruction of such features or materials.

10. A suitably qualified ecologist shall be retained by the applicant to oversee the construction of the proposed project and implementation of mitigation measures relating to ecology as set out in the EIAR and NIS. Upon completion of works, an ecological report of the site works shall be prepared by the appointed ecologist and submitted to the Local Authority to be kept on file as part of the record.

Reason: In the interest of nature conservation and protection of terrestrial and aquatic biodiversity.

Donal Donnelly

Senior Planning Inspector

1st February 2021