

BALLINA FLOOD RELIEF SCHEME

Environmental Impact Assessment Report Chapter 18: Cultural Heritage

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18 CULTURAL HERITAGE

18.1 Introduction

The term 'Cultural Heritage' encompasses several aspects of both tangible and intangible heritage assets. Tangible assets can be land-based and static (archaeological sites and monuments, architectural heritage buildings), portable (artefacts) and/or underwater-based (shipwrecks and ruins). Intangible assets include aspects historic landscapes, and/or indigenous/traditional folklore, oral tradition, memory, craft-making, music and language. In broad terms, 'Cultural Heritage' includes the designated and non-designated heritage categories of (i) archaeology (known and unknown), (ii) architectural (built) heritage and (iii) history and folklore.

The section presents an appraisal of the Cultural Heritage resources relevant to the Ballina Flood Relief Scheme. Detailed assessment and data collation have informed baseline studies for the proposed flood relief measures. Detailed field walking (John Cronin & Associates) and underwater archaeological dive/wade/metal detection survey of the River Moy and its tributaries (Mizen Archaeology) have been undertaken in order to inform the evaluation of the significance of predicted impacts on the recorded and unrecorded Cultural Heritage resource within the study area.

18.2 Methodology

18.2.1 Legislation, Policy, and Guidance

The management and protection of cultural heritage in Ireland is achieved through a framework of national laws, policies and charters which are in accordance with the provisions of:

- The World Heritage Convention (1972) (UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage) ratified by Ireland in 1991
- Valetta Convention (1995) (formally the European Convention on the Protection of the Archaeological Heritage, 1992) ratified by Ireland in 1997
- Granada Convention (1985) (European Convention on the Protection of Architectural Heritage) ratified by Ireland in 1997
- Florence Convention (2000) (European Landscape Convention) ratified by Ireland in 2002
- UNESCO Convention on the Protection of the Underwater Cultural Heritage (2001) Ireland is a signatory and underwater Cultural Heritage is protected under the National Monuments Acts 1930-2014
- Paris Convention (2003) (UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage) ratified by Ireland in 2015
- Venice Charter (1964) International Charter for the Conservation and Restoration of Monuments and Sites and its addendum the Florence Charter (1981) concerning the preservation of Historic Gardens
- Washington Charter (1987) ICOMOS Charter for the Conservation of Historic Towns and Urban Areas
- Charter on the Built Vernacular Heritage (1999) ratified by ICOMOS to establish principles in addition to the Venice Charter for the care and protection of built vernacular heritage
- Xi'an Declaration (2005) ICOMOS Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas
- Burra Charter (2013) Australia ICOMOS Charter for Places of Cultural Significance

Relevant national legal statutes include:

- Historical and Archaeological Heritage and Miscellaneous Provisions Act (2023)
- National Monuments Act (1930-2014)
- Heritage Act (1995) (as amended)

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- National Cultural Institutions Act (1997) (as amended)
- Planning and Development Act (2000) (as amended)
- Arterial Drainage Act (1945, 1995) (as amended)

Flood Relief Schemes are delivered through planning legislation by means of the Planning and Development Act, 2000 (as amended) and with the Arterial Drainage Acts, 1945 and 1995 (as amended) being utilised to a lesser degree (Service, 2023). The administration of national policy in relation to archaeological heritage management is the responsibility of the National Monuments Service (NMS) which is currently based in the Department of Housing, Local Government and Heritage (DHLGH).

The Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 (“the Act”) was enacted on 13th October 2023, with a Commencement Order of some of its elements effective from 31st May 2024. While the Act is now law, it is important to note that most of its provisions will not enter into force until the Minister (DHLGH) has made one or more Commencement Orders per subsections (7) to (13) of section 1 of the Act).

At the time of writing, section 225 and a number of non-heritage related “miscellaneous” provisions in Part 13 of the Act have entered into force. Section 225 provides that the Minister (DHLGH) will be required to report to the Oireachtas on the operation of the Act within three years of its enactment and at five-year intervals thereafter. In addition, the first Commencement Order of the new 2023 Act came into effect on 31st May 2024. This includes for the repeal of the Architectural Heritage (National Inventory) and National Monuments (Misc. Provisions) Act 1999, new enforcement measures including fines and prison sentences, strengthening of legal protections in private/company collections, developing guidance and codes of best practice and promotion, and strengthening of the implementation of the World Heritage Convention (1972).

As no other aspects of the Act have yet entered into force, this means that section 7 of the Act (which provides for the repeal of the National Monuments Acts 1930 to 2014 and related legislation) has not entered into force. Accordingly, the National Monuments Acts 1930 to 2014 (as amended) currently remain fully in force.

There are a number of mechanisms under the National Monument Act 1930-2014, the Heritage Act 1995 (as amended) and relevant provisions of the National Cultural Institutions Act 1997 (as amended) that are applied to secure the protection of archaeological remains, which are held to include all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes.

The National Monuments Act 1930-2014 secures designation of sites of national significance as National Monuments, enters archaeological sites onto the Register of Historic Monuments (RHM) and the Sites and Monuments Record (SMR) and includes sites in the Record of Monuments and Places (RMP). All RMP sites receive statutory protection under the Act. The Act also allows for the placing of Preservation Orders and Temporary Preservation Orders on endangered sites, which secures designation protection as that for National Monuments.

Section 3 of the National Monuments (Amendment) Act 1987 as amended by the section 18 of the National Monuments (Amendment) Act 1994 makes specific provision for underwater archaeological objects, including that a person shall not dive on, damage, or generally interfere with, any wreck or archaeological object, except in accordance with a licence issued by the Minister of Department of Housing, Local Government & Heritage (DHLGH) under section 3 (5) of the Act.

Protection of the architectural heritage in Ireland is provided for through a range of legal instruments that include the Heritage Act 1995 (as amended) and the Planning and Development Act 2000 (as amended). Under the Planning and Development Act 2000 (as amended) all Planning Authorities are obliged to keep a ‘Record of Protected Structures’ (RPS) of special architectural, historical, archaeological, artistic, cultural, scientific, social, or technical interest. The relevant development plan pertaining to the study area is the Mayo County Development Plan 2022-2028, including the transfer of the town specific RPS list from the Ballina & Environs Development Plan 2009-2015 (as extended).

The National Inventory of Architectural Heritage (NIAH) was established to record architectural heritage structures within the State and to advise local authorities in relation to potential addition of structures of architectural heritage significance (RPS) within their administrative areas. The Mayo County Development Plan 2022-2028 contains a number of policies and objectives that relate to the protection and conservation of the cultural heritage resource (see **Appendix 18.1**).

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In December 2015 Ireland ratified the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage. Ireland's obligations under the 2003 Convention include establishing a National Inventory for Intangible Cultural Heritage (National Inventory of ICH) to protect, promote and celebrate Irish living cultural heritage practices, customs, crafts, and traditions.

The methodology utilised for the EIA assessment will be based on a range of planning and guidance documents including:

- Mayo County Development Plan 2022-2028
- Department of Housing, Local Government & Heritage (2023) Archaeology and Flood Relief Schemes: Guidelines
- Department of Arts, Heritage, Gaeltacht, and the Islands (1999) Framework and Principles for the Protection of the Archaeological Heritage
- Environmental Protection Agency (EPA) (2015) Draft Advice Notes for Preparing an Environmental Impact Statement (EIS)
- Environmental Protection Agency (EPA) (2022) Guidelines on the Information to be contained in an Environmental Impact Assessment Reports
- Department of Housing, Planning & Local Government (2018) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment
- European Commission (2017) Guidance on the preparation of the Environmental Impact Assessment Report
- ICOMOS (2011) Guidance on Heritage Impact Assessments for Cultural World Heritage Properties
- Department of Environment, Heritage & Local Government (2008) National Policy on Town Defences
- Historic England (2017) The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition)
- Historic Environment Scotland (2016) Managing Change in the Historic Environment: Setting
- Department for Communities NI (Historic Environment Division (HED)) (2018) Guidance on Setting and the Historic Environment
- Department of Arts, Heritage, and the Gaeltacht (2011) Architectural Heritage Protection: Guidelines for Planning Authorities
- Department of Housing, Local Government & Heritage (2021) A Living Tradition: A Strategy to Enhance the Understanding, Minding and Handing on of Our Built Vernacular Heritage
- Department of Housing, Local Government & Heritage (2022) Places for People: National Policy on Architecture
- Department of Arts, Heritage, and the Gaeltacht (2015) A National Landscape Strategy for Ireland 2015-2025
- Department of Culture, Heritage, and the Gaeltacht (2019) Built & Archaeological Heritage Climate Change Sectoral Adaptation Plan
- Department of Culture, Heritage, and the Gaeltacht (2020) Culture 2025 – A National Cultural Policy Framework to 2025
- Department of Housing, Local Government & Heritage (2022) Heritage Ireland 2030: A Framework for Heritage

18.2.2 Zone of Influence

The Zone of Influence (Zoi) applied for this Cultural Heritage assessment (hereafter termed the 'study area') is defined as a 250 m radius from the edge of the Proposed Scheme design layouts and temporary works areas (including construction compounds and access roads for construction). A description of the Proposed Scheme is provided in **Chapter 5: Project Description**. This defined study area is applicable to all desk-

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based Cultural Heritage studies while terrestrial field surveys were largely restricted to the accessible design footprint, proposed works areas and immediate adjacent areas.

An underwater archaeological dive, wade and metal detection survey was undertaken by Mizen Archaeology within the study area, at areas of proposed in-river works forming part of the scheme construction stage (see **Appendix 18.3**). This included portions of the River Moy (max survey area 230 m length x 80 m width); and sections of its tributaries (Quignamanger stream, Bunree/Behy Rd. stream, Brusna River and Tullyegan stream).

18.2.3 Sources of Information to Inform the Assessment

18.2.3.1 Desk top baseline data

A range of published desk-based data sources were consulted for purposes of identification of all recorded Cultural Heritage receptors within the study area. The desktop study also sought to identify any previously unrecorded features or areas of heritage significance. This research information has provided an insight into the historical development of the study area over time and has assisted in an evaluation of the potential presence of unrecorded Cultural Heritage sites.

The SMR and the RMP for County Mayo, both published by the Archaeological Survey of Ireland (ASI), were the principal sources consulted for identifying known (and statutorily protected) archaeological sites. These datasets were accessed via the online Department of Housing, Local Government & Heritage (National Monuments Service) (DHLGH - NMS) Historic Environment Viewer (HEV) (NMS, n.d.).

The RPS per the Mayo County Development Plan 2022-2028 was the principal source consulted to identify the known (and statutorily protected) architectural heritage resource, including Architectural Conservation Areas (ACAs). In addition, the NIAH dataset was consulted to identify any further architectural heritage structures of merit and was accessed via the HEV (NMS, n.d.).

Additional desktop baseline data sources that were consulted include:

- UNESCO designated World Heritage Sites and Tentative List: UNESCO seeks to encourage the identification, protection, and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. There are two designated World Heritage Sites in Ireland. There are also a number of other significant sites included in a Tentative List (2022) that are due to be put forward by Ireland to UNESCO for formal inclusion. None are located within the study area.
- National Monuments in State Care List: This database (2009) lists all archaeological sites designated as National Monuments, in State Ownership or Guardianship, within the country, and assigns a unique reference number to each site. The listing for County Mayo was consulted for assessment purposes. No National Monuments are located within the study area, although it is noted that an unclassified megalithic tomb at Primrose Hill at the southwestern town extent is a National Monument (Ref. No. 145), in the guardianship of the State.
- Preservation Orders (2019): This listing is based on paper and digital records held by the National Monuments Service, the National Archives and the Oireachtas Library and is considered a work in progress. Preservation Orders and/or Temporary Preservation Orders can be assigned to a site that is deemed in danger of destruction. No sites or monuments with Preservation Orders are located within the study area.
- Register of Historic Monuments (RHM): The RHM was established under section 5 of the National Monuments Act 1930 (1987 Amendment) as a means of maintaining a record of historic monuments that are afforded statutory protection. All registered monuments are included in the subsequent RMP and as such a review of the RMP has been deemed sufficient in determining identification of any such sites.
- Database of Irish Excavation Reports: This database contains summary accounts of all licensed archaeological excavations carried out in Ireland (North and South) from 1969 to present. The database entries were searched for previous investigations carried out within townlands in the study area.

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- National Museum of Ireland (NMI) Topographical Files: This archive dataset located at the NMI contains locational and summary reference details to recorded artefact finds throughout the country. A review of these records was undertaken on 2nd June 2023.
- National Inventory for Intangible Cultural Heritage: As per **Section 18.2.1**, Ireland is obliged to establish a National Inventory for Intangible Cultural Heritage (National Inventory of ICH) to protect, promote and celebrate Irish living cultural heritage practices, customs, crafts, and traditions. A review of the inventory was undertaken to identify relevant entries for the study area.
- Historical Cartographic Sources: The detail on historical cartographic sources can indicate past settlement and land-use patterns and may also highlight the increased impact of modern developments and land improvement works. This information can aid in the identification of the location and extent of unrecorded, or partially levelled, features of cultural heritage interest, and including built features of a vernacular nature. The cartographic sources examined for the study area included various editions of the Ordnance Survey (OS) maps, including the first edition 6-inch and second edition 25-inch maps surveyed during the 19th and early 20th centuries and published in 1837-42 and 1888-1913 respectively.
- Aerial imagery: A review of OSI Digital Globe imagery, aerial imagery was undertaken for purposes of identifying any potential unrecorded cultural heritage sites and features as well as interpreting, where possible, recorded site extent and overall land-use within the study area. No potential sites or features were noted.
- LiDAR survey data: A review of available LiDAR survey data was undertaken per use of the Geological Survey of Ireland online resources Open Topographic Data Viewer. No potential sites or features were noted.
- Placenames Database of Ireland: This online database provides a comprehensive management system for data, archival records and place names research conducted by the State. A detailed review of all townland placenames within the study area was undertaken in an order to evaluate recorded or potential cultural heritage significance.
- Irish National Folklore Collection: Transcribed material and relevant images from the National Folklore Collection and photographic collection archive has been digitised and published. The foundational collection - The Irish Folklore Commission Collection 1935-1970 was inscribed into the UNESCO Memory of the World Register (2017) in recognition of its 'world significance' and 'outstanding universal value to culture'. The Schools Collection (1937-1939) forms part of this digitised collection (National Folklore Collection UCD Digitisation Project) and was reviewed for purposes of desktop studies.
- Wreck Inventory of Ireland Database (WIID) and online map-based Wreck Viewer: An online facility that provides access to the records of wrecks held by the National Monuments Service. The Wreck Viewer displays only known recorded locations while the database contains all known records including unlocated wrecks.
- The Record of Piers and Harbours (1800-1890): an unpublished Office of Public Works' (OPW) archive that provides information on works to piers and harbours by the then Commissioners of Works during the late-19th and early 20th centuries in Ireland.

18.2.3.2 Field survey baseline data – terrestrial

Field surveys conducted for purposes of evaluation and impact assessment of the Cultural Heritage resource involved a walkover survey of the Proposed Scheme design footprint and inspection of adjacent areas.

Cultural Heritage terrestrial field walkover survey of the Proposed Scheme was undertaken in October 2022. Primary objectives of the walkover survey were to locate any upstanding recorded cultural heritage sites (and where relevant, ground-truth recorded Irish Transverse Mercator (ITM) locations) and to verify the condition and extent (where possible) of same.

In addition, field inspection facilitated an interpretation of landscape setting relevant to recorded sites and site groupings, a consideration of local topography, existing land-use, and potential presence of unrecorded Cultural Heritage sites, as well as identification of any Areas of Archaeological Potential (AAPs). A detailed photographic record was taken and is presented in **Appendix 18.2**.

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18.2.3.3 Field survey baseline data – underwater

Mizen Archaeology carried out an underwater archaeological assessment of the riverbed concerning the River Moy and its tributaries at proposed scheme in-water works locations on 13th September 2022, 8th - 10th March 2023 and 27th – 28th April 2023. The survey methodology comprised archaeological wade and dive survey (visual and search) and hand-held metal detection. Both surveys were conducted under licence as approved by the National Monuments Service, Department of Housing, Local Government and Heritage (Licence 22D0081 Dive/Wade survey and Licence 22R030 Detection Device Consent).

Mizen Archaeology's archaeological team undertook the underwater dive survey of the River Moy from the riverbank. In order to ensure full coverage of the site weighted lines were laid on the riverbed at 3m intervals and the dive survey was conducted along 1.5m transects.

Underwater metal detection, using a Minelab Exalibur II device, formed a specific part of the survey within the outlined area of the River Moy. The survey covered the riverbed from the weir to immediately downstream of Upper Bridge, and the assessment provided a quantitative estimation of the amounts of ferrous and non-ferrous objects in the area."

All features and objects of archaeological/cultural heritage significance and potential were recorded and included a description, photographic record, and GPS position. A Trimble GPS with mm accuracy and Canon DSLR camera with underwater housing were also utilised. The survey recorded a number of aspects relating to the general setting, including river width, depth, flow direction and visibility, bottom type, and height of banks.

Wading surveys were undertaken in the other tributaries of the Moy apart from the Brusna, where in-water survey was carried out.

18.2.4 Key Parameters for Assessment

Key assessment criteria, based on EPA (2022) and ICOMOS (2011) guidelines, has been applied to determine the methodology for the assessment of significance of effects on the Cultural Heritage resource. Impact assessment is achieved by a consideration of the duration, quality, type, magnitude, and value of effect(s) on the Cultural Heritage resource.

An assessment of works associated with the Proposed Scheme, as set out in the Project Description (**Chapter 5**), including pre-construction enabling works, construction stage works, operational stage works (including on-going maintenance requirements) has been undertaken to determine any likely significant effects on the Cultural Heritage resource.

18.2.5 Assessment Criteria and Significance

18.2.5.1 Duration of Effect

The duration of effects is assessed based on the following criteria:

- Momentary (seconds to minutes)
- Brief <one day
- Temporary <one year
- Short term one-seven years
- Medium term 7-15 years
- Long term 15-60 years
- Permanent > 60 years
- Reversible: Effects that can be undone, for example through remediation or restoration

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18.2.5.2 Quality of Effect

The quality of an effect on the Cultural Heritage resource can be positive, neutral, or negative:

- Positive – a change which improves the quality of the Cultural Heritage environment (e.g., increasing amenity value of a site in terms of managed access, signage, presentation or high-quality conservation/restoration and re-use of an otherwise vulnerable derelict structure).
- Neutral – no change or effects that are imperceptible, within the normal bounds of variation for the Cultural Heritage environment.
- Negative – a change which reduces the quality of the Cultural Heritage resource (e.g., visual intrusion on the setting of a receptor, physical intrusion on features/setting of a site).

18.2.5.3 Type of Effect

The type of effect on the Cultural Heritage resource can be direct, indirect, or no predicted effect:

- Direct – where a Cultural Heritage receptor and/or its setting, is physically located within the footprint of the proposed development, which will result in its complete or partial removal.
- Indirect – where a Cultural Heritage receptor and/or its setting, is located in immediate or close proximity to the footprint of the proposed development.
- No predicted effect – where the proposed development will not adversely or positively affect a Cultural Heritage receptor.

18.2.5.4 Magnitude of Impact

Determination of the Magnitude of the Impact is based on a consideration of character, duration, probability, and consequences of the likely impact on the heritage receptor. Magnitude of Impact (degree of change) can be negative or positive and should be ranked without regard to the value of the receptor according to the following scale: High, Medium, Low and Negligible (EPA 2022, 53). This is set out in **Table 18-1** together with indicative factors for measurement based on ICOMOS (2011, 16-17) guidelines. It must be noted that this table is indicative only and is to be used together with a consideration of the location, type, siting, design, and layout of the Proposed Scheme.

Table 18-1 Magnitude of Impact – Assessment Indicators of the Cultural Heritage Asset

Indicative Factors for assessing the Magnitude of Impact on the Cultural Heritage Asset (after ICOMOS 2011, 16-17)	
High	<ul style="list-style-type: none"> • Most or all key archaeological or architectural materials affected such that the resource is totally altered. • Comprehensive changes to setting. • Changes to most or all key historic landscape elements, parcels, or components; extreme visual effects; fundamental changes to use or access resulting in total change to historic landscape character unit. • Major changes to area that affect intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Medium	<ul style="list-style-type: none"> • Changes to many key archaeological or historic building materials/elements such that the resource is clearly/significantly modified. • Considerable changes to setting that affect the character of the archaeological asset. • Changes to the setting of a historic building, such that it is significantly modified. • Change to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, considerable changes to use or access, resulting in moderate changes to historic landscape character. • Considerable changes to area that affect the intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Low	<ul style="list-style-type: none"> • Changes to key archaeological materials/historic building elements, such that the resource is slightly altered/slightly different. • Slight changes to setting of an archaeological monument.

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Indicative Factors for assessing the Magnitude of Impact on the Cultural Heritage Asset (after ICOMOS 2011, 16-17)

	<ul style="list-style-type: none"> • Change to setting of a historic building, such that it is noticeably changed. • Change to few key historic landscape elements, parcels, or components slight visual changes to few key aspects of historic landscape slight changes to use or access resulting in limited change to historic landscape character. • Changes to area that affect the intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Negligible	<ul style="list-style-type: none"> • Very minor changes to key archaeological materials or setting. • Slight changes to historic building elements or setting that hardly affect it. • Very minor changes to key historic landscape elements, parcels, or components virtually unchanged visual effects very slight changes to use or access resulting in very small change to historic landscape character. • Very minor changes to area that affect the intangible Cultural Heritage activities or associations or visual links and cultural appreciation.

18.2.5.5 Evaluation of Cultural Heritage Value/Sensitivity

The evaluation of the Value/Sensitivity of a heritage receptor is largely based on its significance criteria, and should not be considered definitive, but rather an indicator which contributes to a wider judgment based on the individual circumstances of each feature. Generally, the more criteria that is evident for a given receptor, the higher in scale its respective value shall be. Non-exhaustive criteria to be considered in addition to any legal designations include a consideration of the condition/preservation, documentary/historical significance, group value, rarity, visibility in the landscape, fragility/vulnerability, and amenity value.

It is noted that, without recourse to archaeological excavation, there are limitations in determining the value or significance of sub-surface archaeological attributes (such as artefacts, human burials, or other remains) for both extant and levelled sites. The Value/Sensitivity of all known or potential receptors can be considered using a non-exhaustive range of indicators and professional judgement per **Table 18-2**, and ranked according to the following scale: Very High, High, Medium, Low and Negligible. It is noted that **Table 18-2** is indicative only and to be used together with a consideration of the condition/preservation; documentary/historical significance, group value, rarity, visibility in the landscape, fragility/vulnerability, and amenity value of the Cultural Heritage Asset itself on a case-by-case basis.

Table 18-2 Evaluation of Value/Sensitivity – Assessment Indicators of the Cultural Heritage Asset

Indicative Factors for assessing Value/Sensitivity of Impact on the Cultural Heritage Asset (after ICOMOS 2011, 14-17)

Very High	<ul style="list-style-type: none"> • World Heritage Sites (including Tentative List properties) and associated individual attributes that Outstanding Universal Value (OUV) of the property. • Assets of acknowledged international importance, including buildings. • Assets that can contribute significantly to acknowledged international research objectives.
High	<ul style="list-style-type: none"> • Designated <i>National Monuments</i> (archaeological) (including sites with Preservation Orders). • Assets of significant quality and importance, including designated SMR/RMP sites. • Assets that can contribute significantly to acknowledged national research objectives. • Protected Structures/National NIAH Grade built structures. • Conservation Areas containing significant buildings of importance, including group value. • Archaeological Landscapes with significant inter-group value.
Medium	<ul style="list-style-type: none"> • Assets of recognised quality and importance, including designated SMR/RMP sites. • Assets that can contribute significantly to acknowledged regional research objectives. • Regional Grade NIAH built structures. • Other undesignated buildings that can be shown to have exceptional qualities in their fabric or historical associations. • Undesignated structures or features of potential importance (archaeological, potential 'new sites'). • Conservation Areas containing buildings that contribute significantly to its historic character.

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Indicative Factors for assessing Value/Sensitivity of Impact on the Cultural Heritage Asset (after ICOMOS 2011, 14-17)

	<ul style="list-style-type: none"> Historic townscape or built-up areas with important historic integrity in their buildings or built settings (e.g., including street furniture and other structures).
Low	<ul style="list-style-type: none"> Designated and undesignated assets of local importance, including built structures. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives. Local Grade NIAH built structures. Historic Townscape or built-up areas of limited historic integrity in their buildings or built settings (e.g., including street furniture and other structures).
Negligible	<ul style="list-style-type: none"> Assets with very little or no surviving archaeological interest. Buildings of no architectural or historical note buildings of an intrusive character.

18.2.5.6 Significance of Effects

The Significance of the Effect is based on an assessment largely of the Magnitude of the Impact (graded from High to Negligible) and the Value/Sensitivity (graded from Very High to Negligible) of the heritage receptor. The Significance of Effect can be described as Profound, Very Significant, Significant, Moderate, Slight, Not Significant and Imperceptible (see **Table 18-3** and **Table 18-4**).

Table 18-3 Evaluation of Significance of Effect: Impacts Assessment Indicators of the Cultural Heritage Asset

Impact assessment Indicators on the Cultural Heritage Resource (after EPA Guidelines 2022)	
Profound	An effect which obliterates sensitive characteristics. Completely and irreversibly affects the cultural heritage receptor with total loss of integrity, character, and data.
Very Significant	An effect which, by its character, magnitude, duration, or intensity significantly alters most of a sensitive aspect of the environment. Directly or indirectly affects the cultural heritage receptor for the most part, with loss of integrity, character, and data.
Significant	An effect which, by its character, magnitude, duration, or intensity alters a sensitive aspect of the environment. Directly or indirectly affects the cultural heritage receptor in part, with partial loss of integrity, character, and data.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. Directly or indirectly affects the cultural heritage receptor but not such where the integrity of the resource is compromised.
Slight	An effect which causes noticeable changes in the character of the environment but without affecting its sensitivities. Can directly or indirectly affect the cultural heritage resource.
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences. Can directly or indirectly affect the cultural heritage resource.
Imperceptible	An effect capable of measurement but without significant consequences. Can directly or indirectly affect the cultural heritage resource but is without noticeable consequences to existing environment.

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Table 18-4 Evaluation of Significance of Effects: Assessment Matrix for the Cultural Heritage Asset

Significance of Effects Matrix (after EPA Guidelines 2022)					
Magnitude of Impact	High	Not Significant/ Slight	Moderate/ Significant	Significant/ Very Significant	Very Significant/ Profound
	Medium	Not Significant	Slight	Moderate / Significant	Significant/ Very Significant
	Low	Not Significant/ Imperceptible	Slight/ Not Significant	Slight	Moderate
	Negligible	Imperceptible	Not Significant/ Imperceptible	Not Significant/ Slight	Slight
	No Change	No Change	No Change	No Change	No Change
		Negligible	Low	Medium	High / Very High
Value/Sensitivity of the Cultural Heritage Asset					

18.2.6 Data Limitations

All available datasets for desk-based baseline assessment of the Cultural Heritage (terrestrial) environment were accessible. During field survey access was restricted to the rear of the Ballina Arts Centre (Barrett Street study area) and at lands at the junction of Creggs Road and Quay Road (Quignamanger study area). No difficulties were encountered elsewhere.

Underwater archaeological dive surveys at areas of proposed in-river works along the River Moy were carried out on the riverbed from the weir to immediately downstream of Upper Bridge The channel along the eastern side of the in-river survey area was too swift-moving to permit safe diving.

18.2.7 Consultations

Meetings and follow up consultations were arranged with stakeholders at all phases of the project. Comments and queries from stakeholders informed design and are addressed throughout this report.

18.2.7.1 Public Consultation

Table 18-5: Public Consultation Feedback

Consultees	Feedback	Location where Comments were Addressed
Member of Public Public Consultation 1 (7 August 2020)	Consider re-use of the existing stone wall as cladding on any new wall.	See Section 18.5 Mitigation Measures and Ballina Flood Relief Scheme <i>Preliminary Conservation Report</i> (March 2024) prepared by Alastair Coey Architects
Member of Public (Public Consultation 2) 21 Dec 2022	Consider reuse of existing stone when rebuilding walls at Bachelors Walk.	See Section 18.5 Mitigation Measures
Member of Public (Public Consultation 2) 21 Dec 2022	Attendee is aligned with the proposal in principle. Attendee has considerations in regard to aesthetics, heritage, and recreational perspective of the following nature: <ul style="list-style-type: none"> Reuse of original stone as much as possible on Bachelors Walk. Mix new stone with old where necessary. 	See Section 18.5 Mitigation Measures

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Consultees	Feedback	Location where Comments were Addressed
	<ul style="list-style-type: none"> Recreational access to the river from Bachelors Walk to preferably be preserved for water sports. 	

18.2.7.2 Stakeholder Consultation

Table 18-6: Stakeholder Consultation Feedback

Consultees	Feedback	Location where Comments were Addressed
Development Applications Unit, DHLGH (14/12/2020) (Constraints Study)	Underwater Archaeology Refers to the need to assess all available heritage datasets (terrestrial and underwater) and outlines potential for unrecorded features/artefacts (incl. dredged material), need to consider monument setting where relevant, and any predicted change to water levels that could have indirect impact of 'drying out' of waterlogged material.	See Appendix 18.3 Underwater Archaeological Impact Assessment (UAIA) undertaken by Mizen Archaeology and referenced findings throughout Sections 18.2 – 18.9.
Mayo County Council Heritage Office Option Selection (23 Feb 2023)	Documents which may provide background information: <ul style="list-style-type: none"> Collaborative Town Centre Health Check Summary Report Ballina Draft Public Realm Strategy 	See Sections 18.3.1, 18.4 and 18.5 and 18.8. Addressed in Chapter 19: Landscape and Visual
The Heritage Council Option Selection (20 Feb 2023)	Refer to Heritage Council and partners' Ballina Collaborative Town Centre Health Check (CTCHC) Report 2020 and Town Centre First Policy (2022). Recommends that these inform the scheme, particularly in relation to the public realm adjacent to the River Moy in the historic core, and that any [hard] engineering proposals ensure the protection and enhancement of important historic vistas, which have existed for hundreds of years and combine to create the unique 'time depth' of this historic town. Recommends that a registered Conservation Architect is part of the overall project team for the proposed development. Need to consider Places for People: National Policy on Architecture, published by Department of Housing, May 2022; and embrace the recent 'cultural shift' towards quality designed, people-focused urban areas. Architectural Conservation Areas (ACAs) - Pearse Street, which includes the historic commercial core of the town centre and features several historic laneways that run down to Emmet Street and the River Moy, e.g., Moy Lane. Strongly recommends that these important historic vistas and pedestrian routes, particularly where they include views across the Moy River to Cathedral Road and Ballina Cathedral beyond, are considered in any environmental impact assessment (EIA).	See Chapter 5: Project Description and Section 18.3.1.1 Moy; Section 18.4, Section 18.5, and Section 18.8. See Ballina Flood Relief Scheme <i>Preliminary Conservation Report</i> (March 2024) prepared by Alastair Coey Architects. Alastair Coey Architects Ltd. (Grade 1 Conservation Architects) are part of the team. Addressed in Chapter 19: Landscape and Visual See Sections 18.3-18.6 and Chapter 19: Landscape and Visual

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Consultees	Feedback	Location where Comments were Addressed
	Need for a Design Palette and a Public Urban Design Panel; it is important that any proposed materials for the flood relief scheme are linked to an agreed quality design palette for the historic town centre.	Addressed in Chapter 19: Landscape and Visual
	Scheme needs to be based on sound design rigour and rationale, particularly the section of the scheme that is to be located within the historic town centre of Ballina.	Addressed in Chapter 19: Landscape and Visual

18.3 Description of the Existing Environment

Detailed below are the Cultural Heritage receptors relevant to each of the works areas for the Proposed Scheme. These baseline datasets have been retrieved from both desk and field-based studies, including licenced underwater archaeological dive/wade/metal detection surveys (see **Appendix 18.3**).

The Proposed Scheme is located largely within the urban environs of Ballina Town, Co. Mayo. The wider study area environs retain recorded evidence of settlement since prehistoric times. This is demonstrated by the presence of a megalithic tomb (RMP MA030-073----) known as ‘*The Dolmen of the Four Maols*’, a National Monument (Ref. 145) in the Guardianship of the State and located in the grounds of Moy Valley Business Park at Primrose Hill. Within the study area, a court tomb is located (RMP MA030-059---) at Ballyholan townland at the eastern portion of the study area.

The presence of the river networks and lakelands would have been particularly attractive (in water, food, transport, and socio-economic terms) to settlers since earliest times. It is clear that settlement continued from the Neolithic period into the Bronze age and beyond. The presence of a mound barrow at Quignalecka within the study area (RMP MA030-093----) is a site type generally attributed to the Bronze age. Furthermore, there is a high volume of Bronze artefacts retrieved from the study area that is indicative of a strong prehistoric settlement pattern along the River Moy.

However the majority of recorded RMP site types within the environs of Ballina date to the early-late medieval period (two ringforts: RMP MA030-058--- and RMP MA030-076---), three enclosures (RMP MA030-038----, RMP MA030-039---- and RMP MA030-075----), a late 14th century Augustinian Abbey (RMP MA030-074), a 13th century castle in the grounds of the present day Ballina House (RMP MA030-055---), suggests that the study area, and the wider area around the Moy estuary including the Kilmoremy ecclesiastical complex, was well settled during this period.

While a previous settlement already existed at Belleek, the town of Ballina was officially founded by Lord Tyrawley in 1723 who established a garrison and cotton production; and obtained permission to hold weekly markets and a fair. The town quickly developed into a thriving port and market town, ideally situated on the river Moy which formed the administrative boundary between counties Sligo and Mayo.

A detailed description (Lewis, 1837) describes the bridges, the inhabitants, industry, and trade concerning the port town of Ballina and its prosperity therein:

This town, originally called Belleek, or the “Ford of the Flags,” owes its origin to O’Hara, Lord Tyrawley, who built the first street, of which some houses are still remaining; and is indebted for the commencement of its commercial importance to the establishment of a cotton-factory here, in 1729, by that nobleman, who also obtained for the inhabitants the privilege of a weekly market and a fair.

During the disturbances of 1798 the town was attacked by the French under Gen. Humbert, who, having landed on the 22nd of August in Kilcummin bay, and made themselves masters of that town, sent forward on the day following a detachment to assault this place, which on its approach to the town, affecting to retreat from a reconnoitring party that had been sent out by the garrison, led it into an ambushade, where the Rev. G. Fortescue, nephew of Lord Clermont and rector of the parish, who had volunteered his services, was shot by a party of the French that had concealed themselves under a bridge. On the day following, the main body

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of Gen. Humbert's forces advanced to the town, of which they took possession on the evening of the 24th, when the garrison, under Col. Sir T. Chapman and Major Keir of the Carbineers, retreated to Foxford, a village about eight miles distant.

The town is beautifully situated on the river Moy, by which it is separated from the county of Sligo, and on the mail coach road from Sligo to Castlebar; it consists of several streets, and contains about 1200 houses, most of which are regular and well built.

The river Moy, over which are two stone bridges, is navigable from the sea, about six miles distant, for vessels not drawing more than 11 feet of water, to within a mile and a half of the town. A new bridge communicating with the lower part of the town, at a short distance from the present bridge, is now being erected, at an estimated expense of £1200, to be defrayed by subscription, towards which the Earl of Arran, proprietor of a large portion of the town, has contributed £100, and in compliment to whom it will be called Arran Bridge.

Other improvements are also in progress and in contemplation; the grand juries of the counties of Mayo and Sligo have presented £3000 towards the erection of a handsome bridge on the site of the present old bridge, which is inconveniently narrow. A ship canal was formerly commenced by Government, under the superintendence of Mr. Nimmo, for bringing vessels up to the town, instead of landing their cargoes at the present quay; but after £1000 had been expended, the works were discontinued and have been since falling into decay.

There are a number of named houses within the study area, per the 2nd edition OS mapping (c. 1910), as well as other built heritage structures such as bridging points, monuments, and town houses. Belleek Manor (RPS 2/NIAH 31303017), originally Belleek Abbey (c.1830) and its demesne (Garden Survey ID 4647) and Ballina House (RPS 7/NIAH 31303024), originally Belleek Castle (c. 1894) are both located within the study area and are listed on the NIAH building survey records. A large ice-house (RPS 5/NIAH 31303029) re-built in the mid-19th century, serving the salmon fisheries on the Moy river is marked on 1st edition OS mapping (c. 1836) on the eastern bank of the river near the village of Crocketstown, in the townland of Quignalecka. A salmon weir (RPS 35/NIAH 31204103) is also recorded on the same edition mapping further upstream, within the town of Ballina itself, highlighting the importance of the Moy salmon fisheries as a local industry.

There is a total of 16 no. recorded SMR/RMP archaeological sites within the study area (**Figure 18-1**). Key sites of note include the Augustinian Abbey on Cathedral Road and the site of an early bridge and gatehouse at Lower Bridge on the River Moy.

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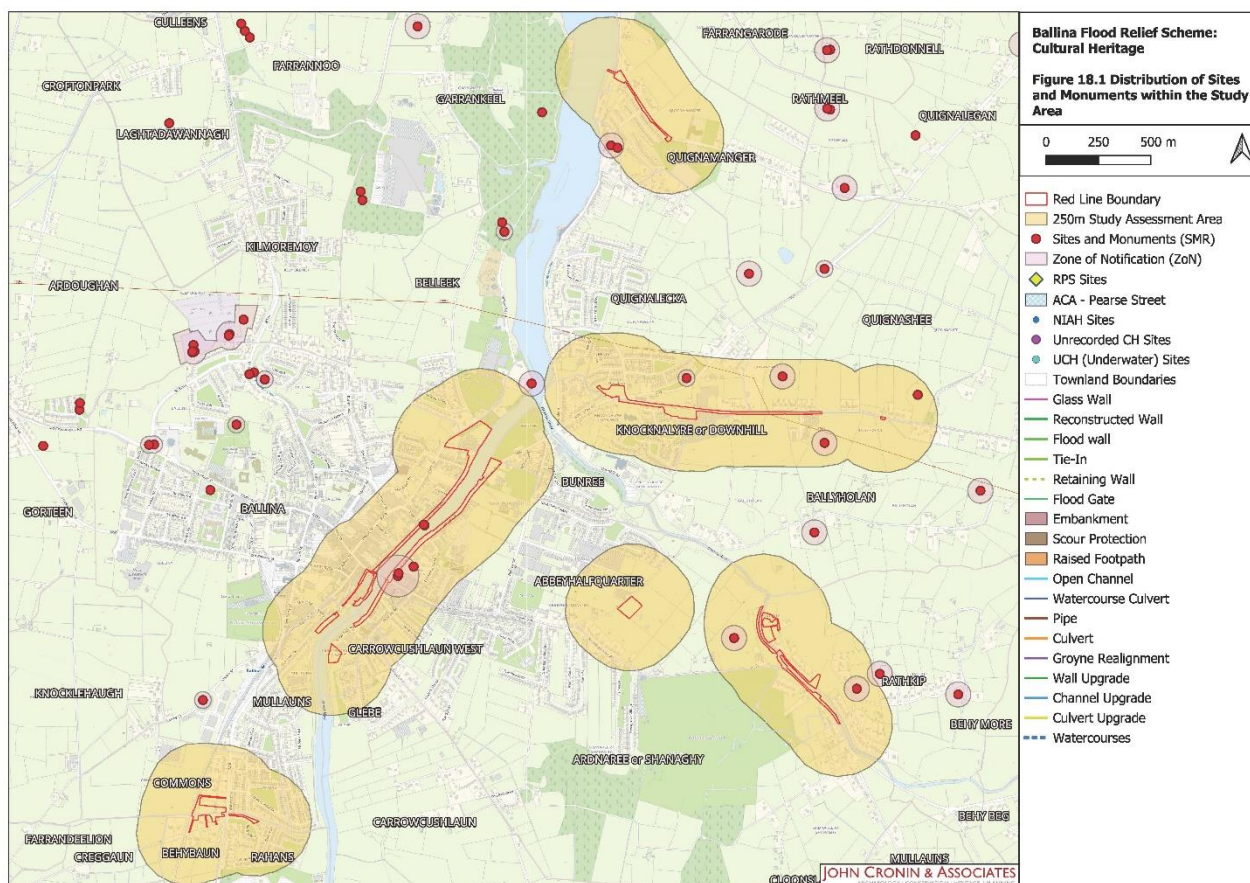


Figure 18-1: Distribution of Site and Monuments (SMRs) within the Study Area

In the wider setting, the River Moy and its tributaries retains archaeological evidence from the Mesolithic to modern times. The riverine sediments provide anaerobic conditions ideal for the preservation of buried (and unrecorded) artefacts, wrecks such as logboats or sites such as fishtraps and weirs.

There are a total of 43 No. structures listed on the RPS within the study area, while there are 94 No. recorded NIAH structures located within the study area (43 No. of which are also listed on the RPS) (Figure 18-2). All of the structures are categorised as being of Regional value rating per NIAH survey records save for Saint Muredach’s Catholic Cathedral which is considered of National value. Other key architectural structures of note within the study area are the Lower and Upper Bridges, the Salmon Weir, the quay walls along Emmett Street, Dillon Terrace, and the Humbert Memorial.

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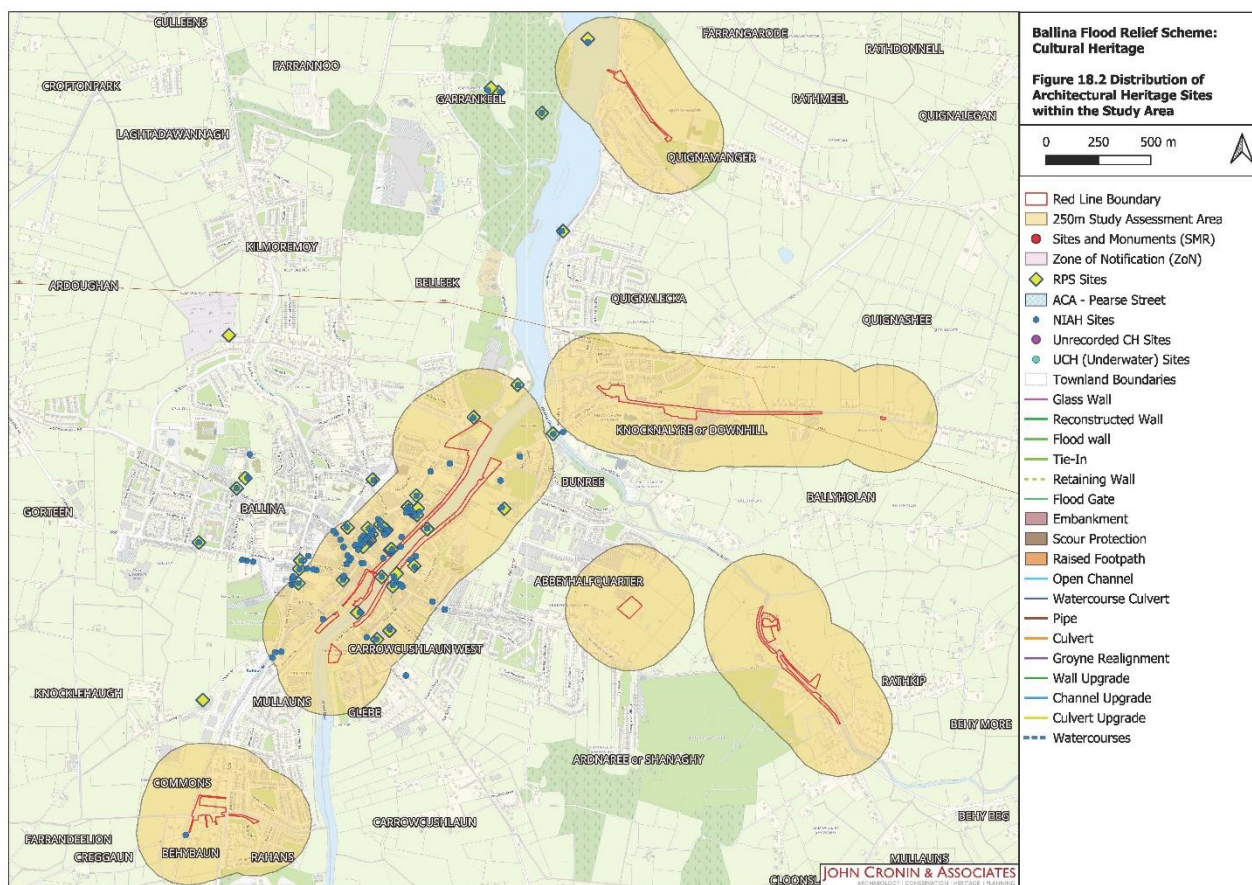


Figure 18-2: Distribution of Architectural Heritage Sites within the Study Area

18.3.1 Baseline Environment

18.3.1.1 River Moy

18.3.1.1.1 Desk-Based Assessment

At the River Moy Proposed Scheme area there are three SMR/RMP site groupings (totalling five SMR/RMP sites) (Figure 18-3). These comprise the ruins of a 13th century castle that was in continued use throughout the late medieval period on the grounds of Ballina House (MA030-055----) (incorporated into a 19th century stable block); the former fourteenth century Augustinian friary (MA030-074001-), graveyard (MA030-074003-) and building (MA030-074003-), and the Lower Bridge which replaces an earlier bridge structure (MA030-056001-) that also had a gatehouse (MA030-056002-) (Table 18-7). It is also noted that a massacre of circa 1,100 Scottish gallowglasses occurred under the orders of Sir Richard Bingham along the west banks of the Moy on 23rd September 1586. They had been waiting at Ardnaree to join forces with the O'Dowd's of Tireragh on the promise of pay and land for their services when they suffered a surprise attack, trapped by the calvary on one side and the river on the other (O'Neill, 2004).

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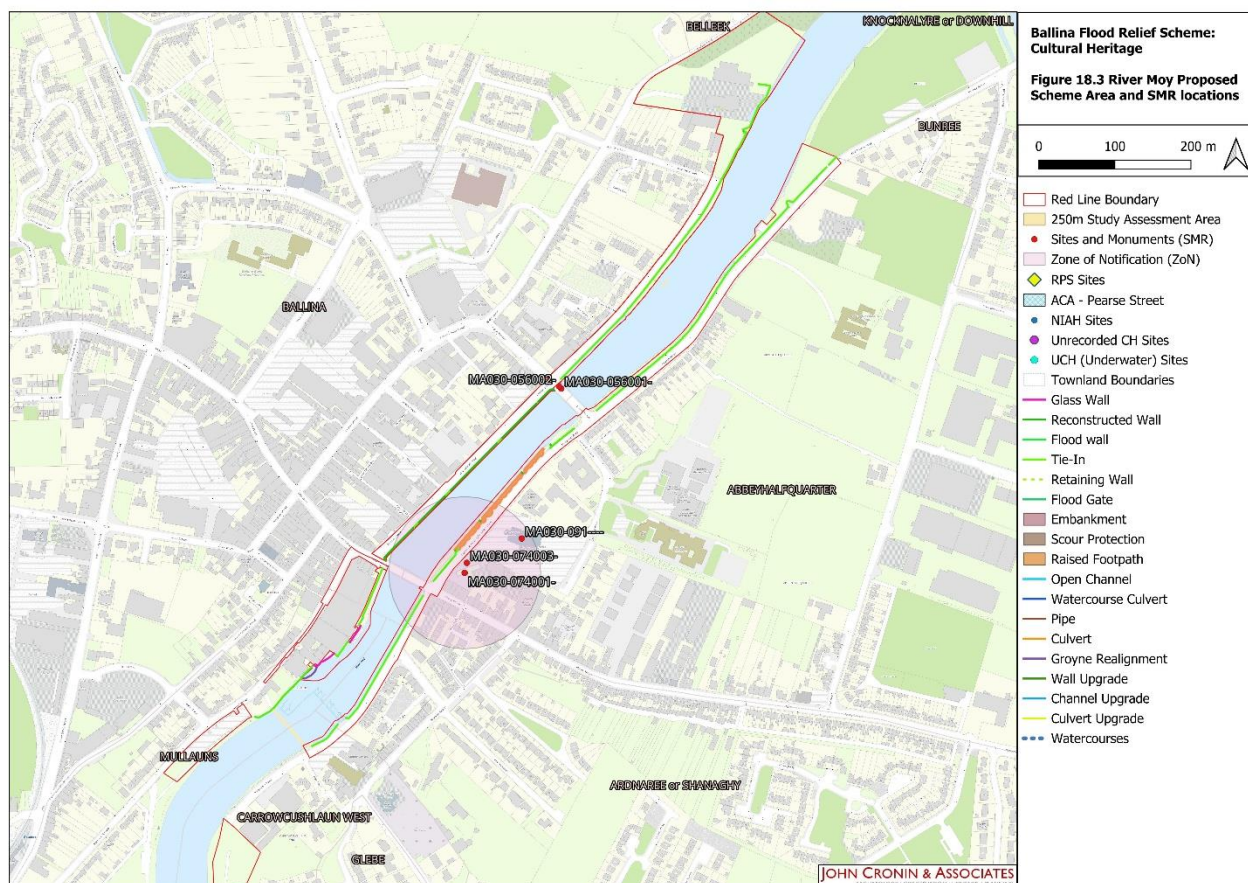


Figure 18-3: River Moy Proposed Scheme Area and SMR Locations

Each of these SMR/RMP sites retain multiple designations (listed on RPS and NIAH) and are Cultural Heritage receptors of high value. It is noted that one SMR record (MA030-091---) is now classified as redundant and will not be further assessed for this study.

Table 18-7: Recorded Archaeological Sites within River Moy Study Area

SMR No.	Townland	Type	ITM Easting	ITM Northing	RPS	NIAH
MA030-055---	Ballina (Tirawley By.)	Castle - unclassified	525330	819691	7	31303024
MA030-056001-	Abbeyhalfquarter, Ballina (Tirawley By.)	Bridge	524819	819016	11	31204105
MA030-056002-	Abbeyhalfquarter, Ballina (Tirawley By.)	Gatehouse	524816	819019	11	31204105
MA030-074001-	Abbeyhalfquarter	Religious house - Augustinian friars	524692	818774	30	31204112
MA030-074002-	Abbeyhalfquarter	Building	524692	818774	30	31204112
MA030-074003-	Abbeyhalfquarter	Graveyard	524695	818787	30	31204112
MA030-091----	Abbeyhalfquarter	Redundant record	524767	818819	-	-

There are 93 No. recorded architectural heritage sites within the River Moy study area (**Table 18-8**). Several of these sites are located within the Architectural Conservation Area (ACA) area of Ballina town comprising Pearse Street (including Tone Street, Tonal Street, O'Rahilly Street, Casement Street and James Connolly Street) and will not be affected by the Proposed Scheme (**Figure 18-4**). These streets, with structures of

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Victorian and Georgian facades, along with the Military Barracks (RPS 26), form the historic centre of the 19th century market town of Ballina.

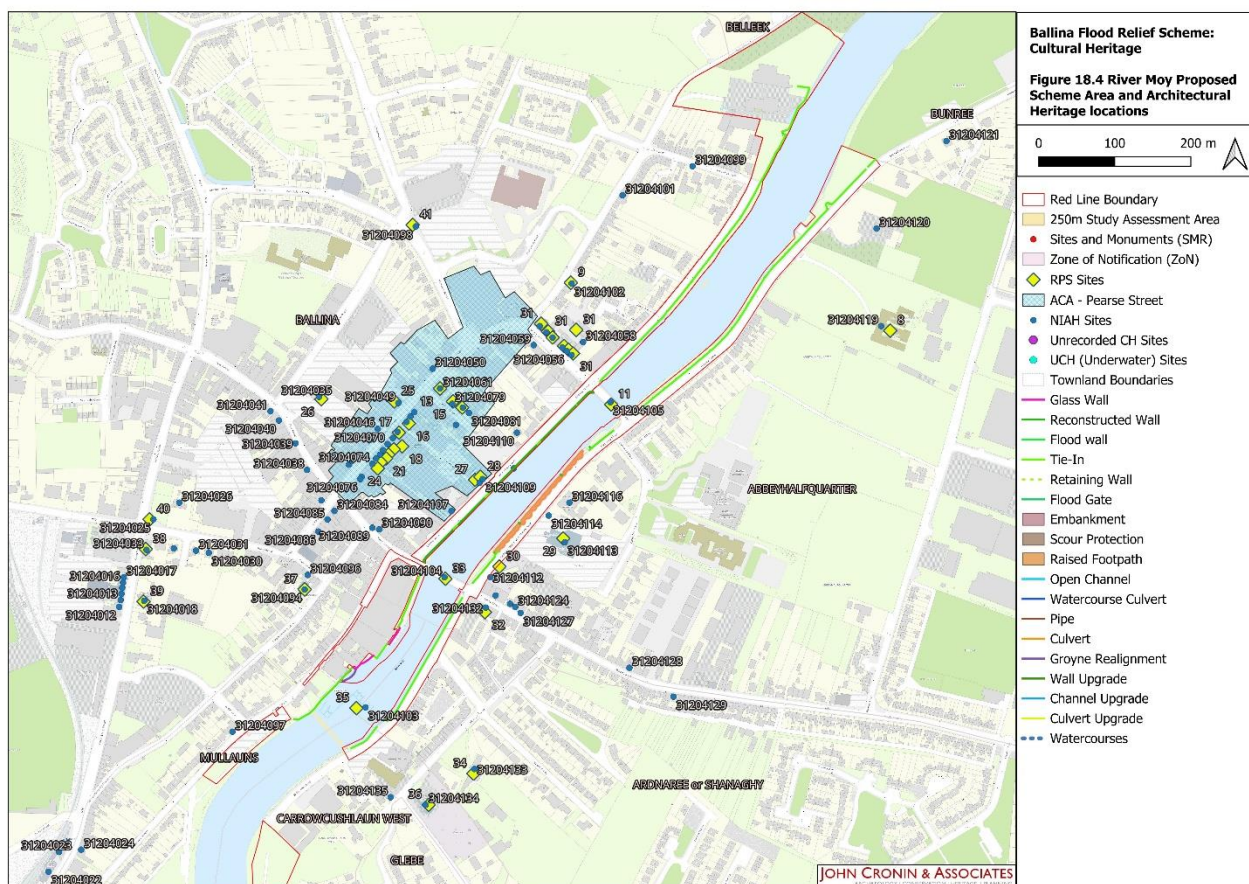


Figure 18-4: River Moy Proposed Scheme Area and Architectural Heritage Locations

Cultural Heritage receptors of high value and of direct relevance to the River Moy and its riverbanks are:

- Upper Bridge (RPS 33 / NIAH 31204104)
- Lower Bridge (RPS 11 / NIAH 31204105 / MA030-056001- & MA030-056002-)
- Salmon Weir (RPS 35 / NIAH 31204103)
- Quays along Emmett Street (NIAH 31204106) (including portion of ACA fronting Pearse Street)
- Ardnaree Augustinian Abbey (RPS 30 / NIAH 31204112 / MA030-074001- to MA030-074003-)
- St Muredach’s Cathedral (RPS 29)

Table 18-8: Recorded Architectural Heritage Sites within River Moy Study Area

RPS	NIAH	Type	Street	Townland	ITM Easting	ITM Northing
4	31303022	Gate Lodge	-	Belleek	525054	819530
7	31303024	Country House	-	Ballina [Tira. By.]	525263	819685
8	31204119	School	Howley Street originally New Line	Abbeyhalfquarter	525200	819095
9	31204102	House	Nally Street originally Castle Road	Ballina [Tira. By.]	524780	819158

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RPS	NIAH	Type	Street	Townland	ITM Easting	ITM Northing
11	31204105	Bridge	-	Abbeyhalfquarter, Ballina [Tira. By.]	524833	818998
13	31204061	Bank/Financial Institution	Pearse Street originally Knox Street	Ballina [Tira. By.]	524608	819019
14	31204080	Church/Chapel	Walsh Street originally Charles Street	Ballina [Tira. By.]	524637	818994
15	31204079	Orphanage/Children's Home	Walsh Street originally Charles Street	Ballina [Tira. By.]	524625	819002
16	31204066	Bank/Financial Institution	Pearse Street originally Knox Street	Ballina [Tira. By.]	524567	818973
17	31204068	Hotel	Pearse Street originally Knox Street	Ballina [Tira. By.]	524554	818961
18	31204069	House	Pearse Street originally Knox Street	Ballina [Tira. By.]	524558	818943
19	31204070	House	Pearse Street originally Knox Street	Ballina [Tira. By.]	524547	818939
20	31204071	House	Pearse Street originally Knox Street	Ballina [Tira. By.]	524540	818932
21	31204072	House	Pearse Street originally Knox Street	Ballina [Tira. By.]	524537	818927
22	31204073	House	Pearse Street originally Knox Street	Ballina [Tira. By.]	524530	818922
23	31204073	House	Pearse Street originally Knox Street	Ballina [Tira. By.]	524530	818922
24	31204074	Bank/Financial Institution	Pearse Street originally Knox Street	Ballina [Tira. By.]	524526	818914
25	31204049	House	Pearse Street originally Knox Street	Ballina [Tira. By.]	524548	819002
26	31204035	Outbuilding		Ballina [Tira. By.]	524452	819005
27	31204108	House	Victoria Terrace	Ballina [Tira. By.]	524654	818899
28	31204109	House	Victoria Terrace	Ballina [Tira. By.]	524661	818903
29	31204113	Cathedral	Cathedral Road	Abbeyhalfquarter	524770	818822
30	31204112	Gates/Railings/Walls	Cathedral Road	Abbeyhalfquarter	524686	818785
31	31204052	House	Dillon Terrace originally Dillon's Row	Ballina [Tira. By.]	524741	819104
31	31204053	House	Dillon Terrace originally Dillon's Row	Ballina [Tira. By.]	524750	819094
31	31204054	House	Dillon Terrace originally Dillon's Row	Ballina [Tira. By.]	524756	819086
31	31204055	House	Dillon Terrace originally Dillon's Row	Ballina [Tira. By.]	524771	819075
31	31204056	House	Dillon Terrace originally Dillon's Row	Ballina [Tira. By.]	524777	819070
31	31204057	House	Dillon Terrace originally Dillon's Row	Ballina [Tira. By.]	524783	819065
31	31204058	Store/Warehouse	Dillon Terrace originally Dillon's Row	Ballina [Tira. By.]	524787	819096
32	31204132	House	Abbey Street	Abbeyhalfquarter	524667	818725
33	31204104	Bridge	-	Abbeyhalfquarter, Ballina [Tira. By.]	524615	818769

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RPS	NIAH	Type	Street	Townland	ITM Easting	ITM Northing
34	31204133	House	Plunkett Road originally Church Street	Ardnaree Or Shanaghy	524652	818513
35	31204103	Weir	-	Ardnaree Or Shanaghy, Mullauns [Tira. By.]	524498	818599
36	31204134	Church/Chapel	Plunkett Road originally Church Street	Carrowcushlaun West	524593	818472
37	31204094	School	James Connolly Street originally Piper Hill	Ballina [Tira. By.]	524430	818755
38	31204033	School	Bury Street	Ballina [Tira. By.]	524221	818808
39	31204018	Court House	Kevin Barry Street originally Francis Street	Ballina [Tira. By.]	524218	818739
40	31204025	Monument	Bury Street	Ballina [Tira. By.]	524226	818847
41	31204098	Monument	Humbert Street originally Brook Street	Ballina [Tira. By.]	524572	819234
-	31204012	House	Kevin Barry Street	Ballina [Tira. By.]	524186	818732
-	31204013	House	Kevin Barry Street	Ballina [Tira. By.]	524188	818741
-	31204014	House	Kevin Barry Street	Ballina [Tira. By.]	524189	818749
-	31204015	House	Kevin Barry Street	Ballina [Tira. By.]	524190	818757
-	31204016	House	Kevin Barry Street	Ballina [Tira. By.]	524191	818764
-	31204017	House	Kevin Barry Street	Ballina [Tira. By.]	524192	818771
-	31204022	Railway Station	Station Road	Ballina [Tira. By.]	524093	818384
-	31204023	Post Box	Station Road	Ballina [Tira. By.]	524107	818410
-	31204024	House	Station Road	Ballina [Tira. By.]	524136	818413
-	31204026	House	Bury Street	Ballina [Tira. By.]	524265	818869
-	31204030	House	Bury Street	Ballina [Tira. By.]	524304	818803
-	31204031	House	Bury Street	Ballina [Tira. By.]	524287	818806
-	31204032	House	Bury Street	Ballina [Tira. By.]	524258	818809
-	31204035	Outbuilding		Ballina [Tira. By.]	524449	819008
-	31204038	Shop/Retail Outlet	Tone Street	Ballina [Tira. By.]	524433	818912
-	31204039	Post Box	Tone Street	Ballina [Tira. By.]	524418	818947
-	31204040	House	Tone Street	Ballina [Tira. By.]	524396	818977
-	31204041	House	Tone Street	Ballina [Tira. By.]	524385	818989
-	31204042	House	Pearse Street	Ballina [Tira. By.]	524488	818919
-	31204043	House	Pearse Street	Ballina [Tira. By.]	524492	818924
-	31204045	House	Pearse Street	Ballina [Tira. By.]	524515	818951
-	31204046	House	Pearse Street	Ballina [Tira. By.]	524526	818966
-	31204050	House	Pearse Street	Ballina [Tira. By.]	524598	819045
-	31204059	House	Pearse Street	Ballina [Tira. By.]	524731	819076
-	31204064	House	Pearse Street	Ballina [Tira. By.]	524574	818988
-	31204065	House	Pearse Street	Ballina [Tira. By.]	524569	818982
-	31204075	House	Pearse Street	Ballina [Tira. By.]	524505	818903
-	31204076	House	Pearse Street	Ballina [Tira. By.]	524503	818900
-	31204081	Manse	Walsh Street	Ballina [Tira. By.]	524646	818987
-	31204083	Garda Station/ Constabulary Barracks	Walsh Street	Ballina [Tira. By.]	524629	818971
-	31204084	House	O'Rahilly Street	Ballina [Tira. By.]	524469	818858

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RPS	NIAH	Type	Street	Townland	ITM Easting	ITM Northing
-	31204085	House	O'Rahilly Street	Ballina [Tira. By.]	524460	818847
-	31204086	House	O'Rahilly Street	Ballina [Tira. By.]	524448	818831
-	31204088	House	O'Rahilly Street	Ballina [Tira. By.]	524452	818872
-	31204089	Post Box	Tolan Street	Ballina [Tira. By.]	524519	818836
-	31204090	House	Tolan Street	Ballina [Tira. By.]	524528	818834
-	31204096	House	Casement Street	Ballina [Tira. By.]	524434	818774
-	31204097	Water Pump	Barret Street	Ballina [Tira. By.]	524335	818568
-	31204099	Post Box	Arbuckle Row	Ballina [Tira. By.]	524940	819311
-	31204101	House	Nally Street	Ballina [Tira. By.]	524848	819273
-	31204106	Quay/Wharf	Emmet Street	Ballina [Tira. By.]	524705	818914
-	31204107	Shop/Retail Outlet	Emmet Street	Ballina [Tira. By.]	524623	818858
-	31204110	Miller's House	Emmet Street	Ballina [Tira. By.]	524709	818961
-	31204114	Cross	Cathedral Road	Abbeyhalfquarter	524751	818852
-	31204116	School	Cathedral Road	Abbeyhalfquarter	524778	818869
-	31204120	House	Howley Street	Abbeyhalfquarter	525182	819229
-	31204121	House	Howley Street	Bunree	525274	819344
-	31204122	House	Abbey Street	Abbeyhalfquarter	524681	818747
-	31204123	House	Abbey Street	Abbeyhalfquarter	524700	818736
-	31204124	House	Abbey Street	Abbeyhalfquarter	524707	818732
-	31204127	Post Box	Abbey Street	Abbeyhalfquarter	524714	818724
-	31204128	House	Abbey Street	Abbeyhalfquarter	524857	818652
-	31204135	House	Plunkett Road	Carrowcushlaun West	524543	818482

A review of the Topographical finds database in the NMI indicates that a large number of artefacts have been recovered from the Moy study area (**Table 18-9**). Many of these are bronze tools (axeheads and swords) and are strong evidence of the prehistoric settlement of the area and the importance of the River Moy as a fording place, means of transportation and a food source. It is noted that some of these finds have been recovered from the river itself and/or the riverbanks.

Table 18-9 Recorded Artefacts from Moy Study Area (NMI Topographical Files)

Townland	NMI Ref.	Artefact Type	Notes
Ardnaree or Shanaghy	1940:16	Stone tool	From Palmyra
Ballina	2013:424	Iron knife	Cloona Bog
	2013:111	Bronze sword	Convent Hill
	2004:36	Spindle whorl	-
	1992:69	Bronze axehead	From bog
	1968:345	Bronze axehead	-
	1968:320	Bronze axehead	-
	1964:20	Copper alloy bell	Workhouse
	1959:185	Bronze rapier	-
	1936:1880	Decorated bone hairpin	-
	1936:1879	Iron axehead	-
1936:1878	Flint arrowhead	-	
1936:1877	Bronze axehead	-	

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Townland	NMI Ref.	Artefact Type	Notes
	1936:1876	Bronze axehead	-
	1936:1875	Bronze axehead	-
	1935:412	hammerstone	-
	1935:411	Bronze axehead	-
	1935:410	Bronze axehead	-
	1935:409	Stone axehead	-
	RIA1899:50	Iron bayonet	Found near Ballina but townland unknown
	1887:4	Bronze rapier	River Moy
	1886:88	Bronze dirk	Found near Ballina but townland unknown
	1886:87	Bronze sword	-
	1000:1767	Gold ring	Found near Ballina but townland unknown
	R4029	Gold torc	Found near Ballina but townland unknown
	E92:585	Gold sleeve fastener	-
	E186:44	Bronze sword	-
	E186:43	Bronze sword	Found near Ballina but townland unknown
Carrowcushlaun West	2000:67	Bronze looped and socketed axehead	Bank of River Moy. A fragment of the wooden haft is still in place.
	1931:335	Bronze axehead	-
Glebe	1965:59	Bronze axehead	River Moy
	1965:58	Bronze axehead	River Moy
Mullauns	1965:28	Bronze socketed and kite-shaped spearhead	From River Moy

It is noted that the underwater archaeological riverine site surveys (**Appendix 18.3**) retrieved the majority of material from the Moy River at the Ridgepool area. Finds included post-medieval pottery sherds (including ironware, stoneware, and transfer-printed ware), sherds of glass bottles, a modern composite hinge, an animal long-bone, and a shaped wooden stick (a type frequently used by local fishermen).

A review of previous archaeological excavations from the Excavations Database of Ireland indicates that a number of investigations have taken place within the historic town environs of Ballina (**Table 18-10**). Of note is a preserved stone wall and flagged culvert at Abbey Street and a burnt spread at McDermott Street.

Table 18-10 Record of Archaeological Excavations within Moy Study Area

Townland	Licence Ref.	Notes
Abbeyleftquarter	09E0112	Monitoring adjacent to abbey MA030-074001- - MA030-074004-. No archaeological significance.
Ardnaree or Shanaghy	-	-
Ballina	03E0258	Broadband fibre cabling Ballina and environs. No archaeological significance.
	04E0952	Ballina Relief Rd. Fulacht fiadh
	07E0796	Gas pipeline within town. Stone wall and culvert, Abbey St (preserved in situ)
	09E0565	Mercy Park Playground. No archaeological significance.

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Townland	Licence Ref.	Notes
	15E0376	St Muredach's Cathedral (monitoring of underground crypt). No archaeology found.
	16E0209	Belleek Manor demesne. No archaeological significance.
	17E0552 & Ext	McDermott Street – (new school) – burnt spread.
	18E0728	Ballina Watermains Replacement – within town and environs. No archaeology found.
	20E0006	Abbey Street. No archaeology found.
	22E0810	Killala road – housing development. No archaeological significance.
	00E0524	Ballina Main Drainage Scheme. No archaeological significance.
Belleek	99E0117	Ballina WWTP. No archaeological significance.

A review of the townland names the associated with the study area per is presented in **Table 18-11**. The townland of Carrowcushlaun West may infer reference to the location of a potential castle site with the ringfort MA039-026--- noted at this location.

Table 18-11 Placenames Review: Moy Study Area

Townland	Irish	Translation/Meaning	Indicative Cultural Heritage potential
Abbeyhalfquarter	-	-	Indicates land owned by Augustinian Friary MA030-074001-
Ardnaree or Shanaghy	<i>Ard na Ria</i> or <i>Seanachaidh</i>	'Hill of the King' or 'Hill of the Executions' 'Old field'	O'Donovan: <i>Ard na Riagh = Hill of Executions. According to local tradition this refers to the four Maols who are believed to have murdered Ceallach, a 7th-century Bishop of Kilmoremoy while they were encamped at Ardnaree. The Four Maols are also associated with a recorded megalithic tomb [MA030-073----] across the river in the townland of Ballina, believed to be their final resting place.</i>
Ballina	<i>Béal an Átha</i>	'áth' ford; 'béal' opening, approach, mouth	Topographical description: 'Mouth of the Ford'
Belleek	<i>Béal Leice</i>	'béal' opening, approach, mouth; 'leac' flat stone or rock, flagstone	Topographical description
Bunree	<i>Bun Riabh</i>	'bun' (river-)mouth, bottom(-land)	Topographical description
Carrowcushlaun West	<i>Ceathrú an Chaisleáin</i>	'caisleán' castle; 'ceathrú' quarterland	This townland contains one recorded ringfort MA039-026----
Glebe	<i>An Ghléib</i>	'gléib' glebe	Indicates church lands used for upkeep of clergy
Mullauns	<i>Na Mulláin</i>	O'Donovan 1836: na mullain, 'the little summits or hill-tops'	Topographical description

The 1st edition OS mapping for the Moy study area shows the established historic layout of the town environs and its streetscapes (**Figure 18-5**). Along the River Moy, both the Upper and Lower bridges are shown, as

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well as the Salmon Weir and industrial heritage in the form of a Corn Mill with mill race and a brewery on the west banks and a flour mill on the east bank. The town layout remains largely the same in the 2nd ed OS map with the addition of the Great Western Railway (Mayo Branch) line to the western area extent noted.

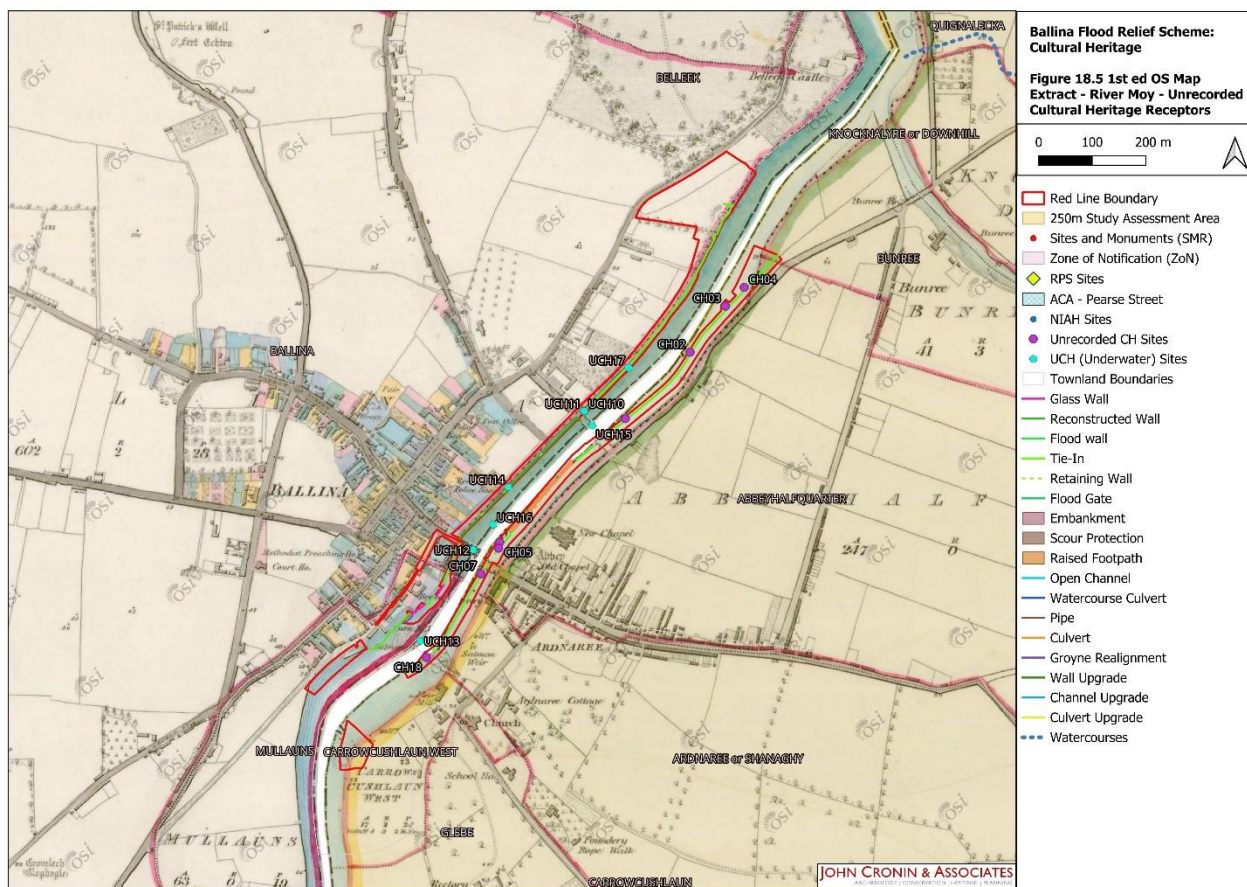


Figure 18-5: 1st Edition OS Map Extract, River Moy- Unrecorded Cultural Heritage Receptors

18.3.1.1.2 Field survey assessment

The proposed works on the River Moy include flood walls of up to 1.2 m height along the west and east banks of the river. Construction will require pavement removal and replacement to accommodate the foundation of the new walls and drainage (along same alignment as existing). Wall removal will be required along the banks of Ridgepool Road, Cathedral Road, Clare Street and Bachelors Walk. The existing quay walling along Emmett Street will be retained, but made good, by careful dismantling, match re-building and re-pointing; and existing iron railings removed and replaced with match stone masonry and/or glass walling (see Alastair Coey Architects Conservation Report prepared for the scheme).

Underwater archaeological dive and metal detection surveys focused on the riverbed beside Ridgepool Road. The channel along the eastern side of the survey area was too swift-moving to permit safe diving. The riverbed comprised small to medium cobbles with coarse sand, with occasional bedrock ridges. An array of objects identified (UCH016) included: cans, broken glass bottles, sherds of post-medieval pottery, fishing debris, animal bone and modern metal debris (see **Appendix 18.3**).

The Moy study area was divided into six separate locations in order to appraise the field survey observations:

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Area 1: Bachelors Walk

Flood defences on the west bank of the river will begin at the existing flood defence at the Ballina Arts Centre and end at the old Ballina Dairies site north of Bachelors Walk. New walls will be constructed to replace existing walls along Bachelors Walk.

The scheme area of Bachelors Walk extends downstream from the Lower Bridge along the Moy riverbank and includes a temporary site compound area to the north along Castle Road at the former Dairies/Co-Op site (**Appendix 18.2: Plate 18.1 to Plate 18.6**).

There are no recorded Cultural Heritage receptors along the Moy riverbank which is fronted by modern commercial premises and mid-twentieth century dwellings (**Appendix 18.2: Plate 18.4**). Any adjacent protected structures such as the gate-lodge (RPS 4) and entrance to Ballina House and a terrace of buildings at Dillon Terrace (RPS 31) are located outside the temporary works areas and red line boundary.

The northern elevation of Lower Bridge will require tie-in to the replacement flood walling. Lower Bridge, built in 1835, is a protected structure (RPS 11) and recorded in the NIAH (Reg. No. 31204105) (**Appendix 18.2 Plate 18.3**). Furthermore, it is recorded as an archaeological site of an earlier bridge (SMR MA030-056001-) and gatehouse (SMR MA030-056002-). Given these multi-designations, the bridge retains notable cultural heritage significance. Along the River Moy, the new flood walls will tie into the existing bridges. The scheme will not result in any alterations to the Lower Bridge at this location of Bachelors Walk.

The junction of the northern parapet and wing wall of Lower Bridge to the existing flood wall along Bachelors Walk is clearly discernible where the two contrasting masonry styles meet (**Appendix 18.2 Plate 18.7**). The bridge elevations and parapet walls are of repointed, punch-finished, ashlar limestone blocks with the sweeping parapets of the curved wing walls having a cut limestone coping just above the height of the abutting (slightly later c. 1840-45) flood walling. The existing flood walls are built of uncoursed, roughly-squared, quarry-faced limestone with cement strap pointing and a coping of similar, roughly-squared limestone blocks. The coping mostly spans the full width of the wall-top and with a top, front edge that evenly follows the general line of the ground-level along the riverside footpath (**Appendix 18.2, Plate 18.2**).

Underwater archaeological wading/riverbank survey (see **Appendix 18.3**) notes that the Lower Bridge abutment slopes downwards to the northwest and contains the exit to the Knockanelo culvert (UCH010). Knockanelo stream enters the Moy through two culverts, located upstream and downstream of Lower Bridge. Mizen Archaeology (see **Appendix 18.3**) describes this feature as follows: *The culvert upstream of Lower Bridge is located c. 20m from the bridge and outside of the underwater assessment area. The downstream culvert enters the Moy through a small arch in the north-western abutment of Lower Bridge (UCH010). The archway was visible to c. 1m above the waterline at the time of underwater survey and was c. 3m wide. The top of the archway was 2m below the coping of the parapet, while the springing of the arch was 0.40m above the water line. The arch was defined by 22 voussoirs of dressed stone, with a central keystone with no distinguishing features.*

The underwater archaeological surveys (**Appendix 18.3**) also record that the western riverbank along Bachelors Walk is a *gently sloping vegetated silt bank, rising up to 0.80m above the water line and being up to 2m wide. The stone quay wall over the bank is in poor condition, being highly vegetated with stones missing along its length. It comprises roughly squared stones, which have not been set to courses. The coping comprises large, squared stones averaging 0.35m wide x 0.48m long x 0.25m thick. The mortar is concrete. The quay wall slopes down from where it meets the bridge abutment to the south (3.24m high) towards the bank (2.42m high) and has a slight batter.*

A set of stone steps (UCH017) were also observed during underwater surveys at a distance of c. 120m northwest of Lower Bridge, which provides access to the bank. It was noted (**Appendix 18.3**) that *the walling around the steps (to the southwest and southeast) is of the same construction as the quay wall. The steps themselves comprise single stone slabs, which are worn and in a poor state of repair, with several having fallen from their original position. The steps, as with the wall elsewhere, are overgrown.*

Consideration of direct and indirect construction and operational phase impacts on the cultural heritage receptor of Lower Bridge (Bachelors Walk) and the archaeological SMR sites of a former bridge and gatehouse is set out in **Section 18.4** as well as likely predicted impact on the underwater archaeological resource per Mizen Archaeology findings (**Appendix 18.3**).

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Table 18-12 Moy Area 1: Bachelors Walk - Unrecorded Cultural Heritage Receptors

ID Ref.	Townland	Type	ITM Easting	ITM Northing
UCH010	Ballina	Stone culvert	524819	819029
UCH017	Ballina/ Bachelors Walk	Stone access steps to riverbank	524901	819110

Area 2: Clare Street (Howley Street)

Along the eastern bank of the River Moy, new replacement defence walling will start upstream of the Salmon Weir at the pedestrian bridge and finish at Clare Street (Tom Ruane Park).

Similar to the opposite riverbank along Bachelors Walk, the northern elevation of Lower Bridge will require tie-in to the replacement flood walling (**Appendix 18.2 Plate 18.9**). The existing flood walling comprises along Clare Street (Howley Street) is comparable to that along Bachelors walk and was also likely built soon after Lower Bridge (c. 1840-45) (**Appendix 18.2 Plate 18.8**). The existing flood walls are built of uncoursed, roughly-squared, quarry-faced limestone with cement strap pointing and a coping of similar, roughly-squared limestone blocks for a distance downstream of c. 160m. Thereafter the height wall height increases c. 0.30m and there is evidence of later roughcast rendering. The coping spans the full width of the wall-tops (**Appendix 18.2, Plate 18.10**). There are two riverbank/fishing access points along the walling leading to stone steps behind (CH01 and CH 02), as well as a pier (CH03) which is indicated on the 2nd ed OS mapping c. 1840 (**Table 18-13** and **Appendix 18.2 Plates 18.11-18.15**). At the open amenity space opposite the gated entrance to St Muredach’s College (RPS 8) is a Marian shrine (CH04) that is venerated and well maintained (**Appendix 18.2 Plate 18.16**). Public access to the Roman Catholic religious Marian shrine (CH04) will be maintained by placing the flood wall behind the structure.

No additional underwater archaeological features were noted in this area during wade, on-foot, and metal detection surveys.

Table 18-13: Moy Area 2: Clare Street (Howley Street) - Unrecorded Cultural Heritage Receptors

ID Ref.	Townland	Type	ITM Easting	ITM Northing
CH01	Abbeyhalfquarter	Stone wall access crossover and steps	524895	819015
CH02	Abbeyhalfquarter	Stone wall access crossover and steps	525016	819139
CH03	Abbeyhalfquarter	Access steps and pier (2 nd ed OS)	525082	819225
CH04	Abbeyhalfquarter	Marian Shrine (1954)	525117	819260

Area 3: Cathedral Road

Cathedral Road extends alongside St Muredach’s Cathedral (RPS 29 and RPS 30) and the early Augustinian Abbey (MA030-074001- to MA030-074003-) between Upper Bridge (RPS 33) and Lower Bridge (RPS 11). New replacement walling is required along the riverbanks which also retains an existing public amenity space, angling platforms/river access and street furniture. Mayo County Council (MCC) is in the process of developing a Public Realm scheme for the town of Ballina. The Proposed Flood Relief Scheme provides for a new public open space area on Cathedral Road which will be incorporated into the broader Ballina Public Realm in the future. Modification of the existing amenity space opposite Muredach’s Cathedral will involve the development of a raised platform to a height of approximately 0.8 m. Existing pedestrian access to the river will be maintained, including provision for accessible access.

Along Cathedral Road, the existing flood walling extends from the wing walls of both Upper Bridge and Lower Bridge (**Appendix 18.2, Plate 18.17**). At Upper Bridge, there is a dedicated stone-paved riverside platform/quay accessed via (later) stone steps (**Appendix 18.2, 18.20 and 18.23**). A cut-stone drainage insert is noted (**Appendix 18.2, 18.22**) and the riverside elevation wall is of considerable height (**Appendix 18.2, Plate 18.21**), consisting of uncoursed random rubble masonry and likely built mid-nineteenth century soon after Upper Bridge (1836) was completed. The new flood walls will tie into the existing bridges. The scheme will not result in any alterations to the Upper or Lower Bridges (including wing walls) in this regard.

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The junction of the northern parapet and wing wall of Upper Bridge to the existing flood wall along Cathedral Road is clearly discernible where the two contrasting masonry styles meet (**Appendix 18.2, Plate 18.18**). The bridge elevations and parapet walls are of repointed, punch-finished, ashlar limestone blocks with the sweeping parapets of the curved wing walls having a cut limestone coping just above the height of the abutting (later c. 1840-45) flood walling. The existing flood walls are built of uncoursed, roughly-squared, quarry-faced limestone with cement strap pointing and a coping of rounded quarry-faced limestone blocks. The rounded coping spans the full width of the wall-top and ends at the access steps at a rounded terminus reaching base level (**Appendix 18.2, Plate 18.19**). It is noted that the later cement-strap repointing to the roadside elevation is likely to have been undertaken as part of a FAS scheme per the inscription dated '1996' on the wall elevation (**Appendix 18.2, Plate 18.19**).

The junction of the southern parapet and wing wall of Lower Bridge (1835) along Cathedral Road is also discernible. Similar to Bachelors Walk, it consists of uncoursed, roughly-squared, quarry-faced limestone with cement strap pointing and a coping of similar, roughly-squared limestone blocks (**Appendix 18.2, Plate 18.24**). In this case, the coping spans the full width of the wall-top (**Appendix 18.2, Plate 18.25**).

The existing tree-lined public amenity space and riverside access comprise relatively modern invention possibly circa the past twenty years with the installation of a paving, access steps, information signage, benches, street lighting and flower planting (**Appendix 18.2, Plate 18.25 – Plate 18.30**).

St Muredach's Cathedral (RPS 29 & RPS 30) and the medieval Abbey site (SMR MA030-074001- to MA030-074003-) are sited on the opposite roadside to that of the proposed works along the riverbank (**Appendix 18.2, Plate 18.31- Plate 18.33**). Given this close proximity, the curtilage and setting of the cathedral and abbey as well as the sub-surface archaeological sensitivities are noted along Cathedral Road.

No additional underwater archaeological features were noted in this area during wade, on-foot, and metal detection surveys.

Table 18-14 Moy Area 3: Cathedral Road - Unrecorded Cultural Heritage Receptors

ID Ref.	Townland	Type	ITM Easting	ITM Northing
CH05	Abbeyleftquarter	Riverside stone paved platform adjacent Upper Bridge	524660	818784
CH06	Abbeyleftquarter	Cut dressed stone drainage feature	524658	818773

Area 4: Emmet Street

The quay along Emmet Street (NIAH 31204106) is contemporary, in date with Upper and Lower Bridges, recorded as under construction in 1834, and extant in 1838. A battered retaining wall, it consists of repointed tooled limestone ashlar, with tooled cut-limestone ashlar coping (**Appendix 18.2, Plate 18.34-18.35**). There are riverine access steps/mooring points along the quay walls and modern railings sit atop the former roadside level access points (**Appendix 18.2, Plate 18.36-18.38**). The riverside street frontage is tree-lined and retains modern street furniture (benches, lighting, informational signage) (**Appendix 18.2, Plate 18.40**). There will be no removal of the quay walls along Emmet Street. The existing modern iron railings will however be replaced with glass walls to improve on the character, amenity and setting value of the overall quayside.

It is noted that the edge of the ACA area of Ballina town comprising Pearse Street extends to the Emmet Street façade at Moy Lane and Pawn Office Lane, to include the street frontage of a pair of nineteenth century (renovated) townhouses RPS 27-28 (also birthplace of Mary Robinson, now in use as the Mary Robinson Centre) and an early twentieth century commercial premises NIAH 31204107 (**Appendix 18.2, Plate 18.39**).

No additional underwater archaeological features were noted in this area during wade, on-foot, and metal detection surveys.

Area 5: Ridgepool Road

The existing tie-in with Upper Bridge along Ridgepool Road, is of later roughcast rendered walling (heavily vegetated to river elevation) that terminates at an open riverine access section (now infilled with modern railings) (**Appendix 18.2, Plates 18.41 – 18.42**). Thereafter the walling stop-starts (with interspersed modern

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railings) to the Salmon Weir and Inland Fisheries Ireland (IFI) building in a form similar to that along Cathedral Road (**Appendix 18.2 Plate 18.43**). The upstanding street-level flood walls are built of uncoursed, roughly-squared, quarry-faced limestone rounded rubble coping finish with cement pointing (**Appendix 18.2 Plate 18-44**). Modern repairs and modifications are noted throughout, with the roadside wall abutting Upper Bridge, although externally rendered, surviving most intact. The underwater archaeological survey (**Appendix 18.3**) observed that this section of intact walling c. 30m upstream of Upper Bridge comprises *roughly squared, dressed stone and topped with a rounded concrete and stone coping (0.30m high)*. *The stone wall is 0.15m wider than the coping, stepping out from it to the west. The wall is highly vegetated and is bonded with eroded lime mortar. It rises towards the north to reach the height of the bridge abutment (3.55m above the water line). A modern pipe is visible in the wall face. A culvert (c. 1m x 1m) empties into the Moy at the base of this wall section, currently sitting atop a narrow, vegetated bank.*

Beyond the Salmon Weir (built 1838) and IFI building (**Appendix 18.2 Plate 18-45 – 18.46**), the wall comprises a stepped profile, finished in (later) cast cement block construct with a smooth rendered riverine elevation further upstream (**Appendix 18.2 Plate 18-47 – 18-49**). There are modern railed concrete access ramps and footpaths to the pedestrian bridge. There is street furniture (benches) located along the area some of which has been donated by Ballina Soroptimist Club (2003).

The riverbed at the southern-western extreme of the underwater survey area (along the line of the Salmon Weir) was noted to be uneven with frequent medium to large sub-rounded boulders. No remains of the mill race shown on the 25-inch OS map were noted at this location. Below the quay walls (modern) along the southern end of Ridgepool Road, it was noted that stone blocks, in a poor state of repair, missing stone, heavily covered by vegetation and bulging outward in places.

There is a recent memorial art installation (CH18) commemorating the Ardnaree Massacre (1586) (CH07) along the Ridgepool Road footpath, adjacent to the Salmon Weir area. A new lower 700 mm high (approximately) wall will be constructed with a new railing placed above the wall at Ridgepool Road. Along the River Moy, new flood walls will tie into the existing bridges. The scheme will not result in any alterations to the Upper Bridge, Salmon Weir, or pedestrian bridge.

It should also be noted that the existing wall alignment will be changed in the proximity of the Salmon Weir (RPS 35) building located on Ridgepool Road. The Salmon Weir is contemporary in date with the Upper and Lower Bridges (c. 1838) and was restored in 2011. The proposed flood wall will be aligned along the existing footpath in front of the building and existing ramp access (as opposed to abutting it). A flood gate will be included to facilitate continued access to the weir building as well as a new access to the river Moy adjacent to the weir building. Glass walling in combination with flood walling will also be used in front of the Inland Fisheries Ireland Building and apartments opposite Ridgepool Road where modern railings are currently in place.

Table 18-15 Moy Area 5: Ridgepool Road - Unrecorded Cultural Heritage Receptors

ID Ref.	Townland	Type	ITM Easting	ITM Northing
CH07	Ardnaree or Shanaghy	Gallowglasses Massacre 1586	524625	818725
CH18	Ardnaree or Shanaghy	Memorial Monument	524523	818569

Area 6: Barret Street

The area to the rear of Barrett Street fronts onto the riverside and comprises the property of Ballina Manor Hotel, derelict warehouses, and Ballina Arts Centre. The area also provides angling access and has been modernised throughout the rear area of Ballina Manor Hotel with extensive modern railings noted (**Appendix 18.2, Plates 18-50 – 18.53**). Access to the rear of the warehouses was not possible during field survey (**Appendix 18.2, Plate 18-54-18-55**).

The proposed works on the River Moy include replacement flood walls (where required) of up to 1.2 m height along the west banks of the river (**Appendix 18.2 Plate 18-56**). Glass walling in combination with flood walling will also be used at the riverfront of the Ballina Manor Hotel, located along Barret Street (**Appendix 18.2, Plate 18.57**).

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18.3.1.2 Brusna (Glenree)

18.3.1.2.1 Desk-based assessment

There are three recorded SMR/RMP sites located at the Brusna (Glenree) Proposed Scheme study area (including temporary works area at Abbeyhalfquarter) (**Table 18-16**).

Table 18-16: Recorded archaeological sites within Brusna (Glenree) River Study Area

SMR No.	Townland	Type	ITM Easting	ITM Northing	RPS	NIAH
MA030-075----	Abbeyhalfquarter	Enclosure	526296	818478	-	-
MA030-076----	Rathkip	Ringfort - rath	526881	818236	-	-
MA030-077---	Rathkip	Ringfort - rath	526991	818307	-	-

These comprise probable early-late medieval site types of an enclosure (levelled) and two ringforts, one of which is levelled (MA030-076---) (**Figure 18-6**).

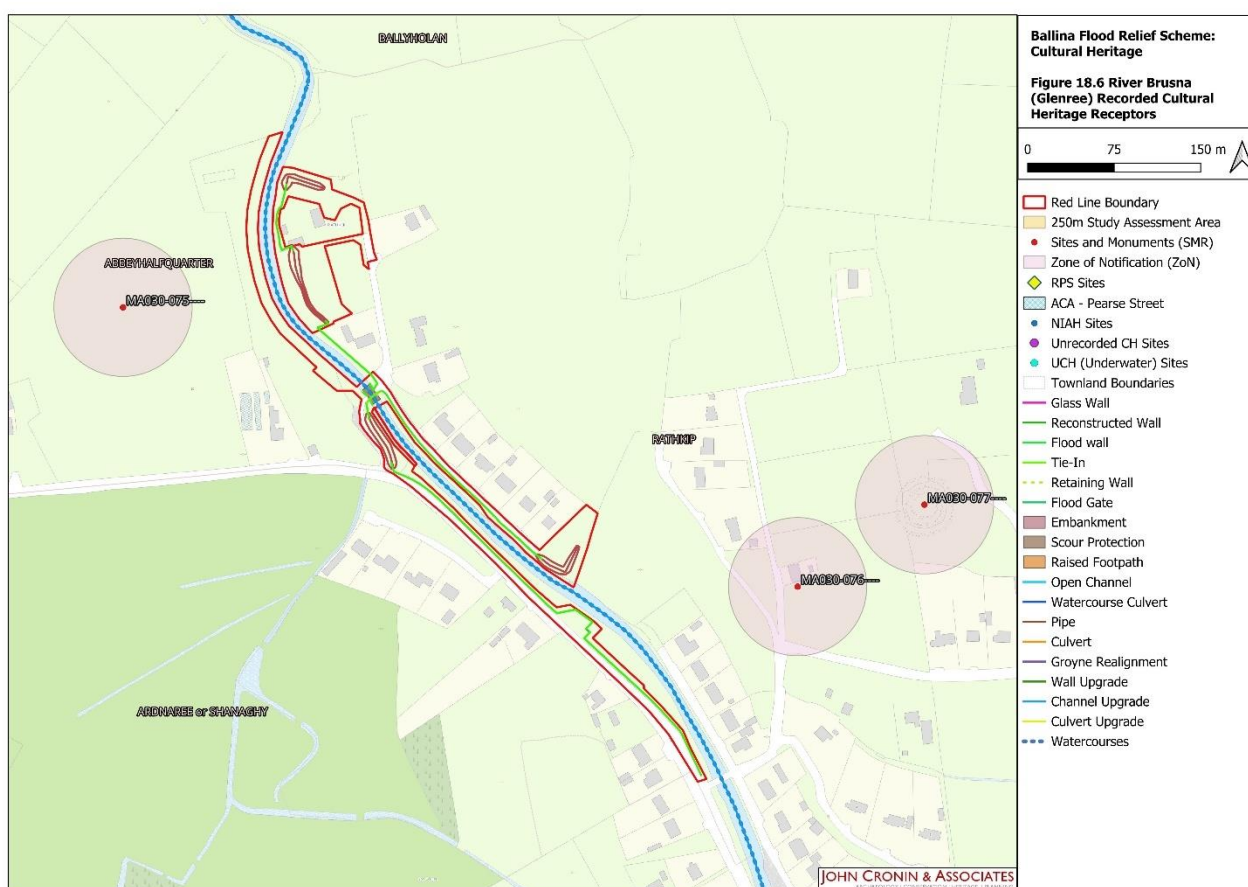


Figure 18-6: River Brusna (Glenree) Recorded Cultural Heritage Receptors

There are no recorded architectural heritage sites within the Brusna (Glenree) Proposed Scheme study area (including temporary works area at Abbeyhalfquarter).

A review of the Topographical Finds database in the National Museum of Ireland (NMI) indicates that no artefacts are recorded to have been recovered from Rathkip or Abbeyhalfquarter townlands. It is noted that the majority of material identified during the underwater archaeological surveys (**Appendix 18.3**) was

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modern debris, including aluminum cans, folding chairs, and a number plate. The Brusna River survey area produced a concentration of modern construction material, including tiles and metal nosing.

A review of previous archaeological excavations from the Excavations Database of Ireland indicates that a testing investigation (Licence Ref. 08E0305) was carried out in advance of development for a single dwelling and associated services at Rathkip. The site is close to the marked location for MA030–076, a levelled ringfort, however no archaeological features were noted.

A review of the townland names the associated with the study area per is presented in **Table 18-7**. The townland of Rathkip is likely to infer reference to one or more of the three recorded ringforts in that townland.

Table 18-17 Placenames Review: Brusna (Glenree) Study Area

Townland	Irish	Translation/Meaning	Indicative Cultural Heritage potential
Abbehalfquarter	-	-	Indicates land owned by Augustinian Friary MA030-074001-
Rathkip	<i>Ráth Gioba</i>	Rath of the stock	Ringfort site – there are three recorded in the townland MA030-076---, MA030-077--- and MA030-078---

A fording point and stepping stones (CH08) are indicated on the historic mapping (3rd edition) at the location of the existing access road bridge to Rathkip/ Shanaghy with a weir (CH09) also marked upstream (south) (**Figure 18-7**). Similarly, a fording point with stepping stones (CH10) is noted just outside the southern portion of the Proposed Scheme footprint, upstream of Rathkip Bridge (CH11) (**Figure 18-7**).

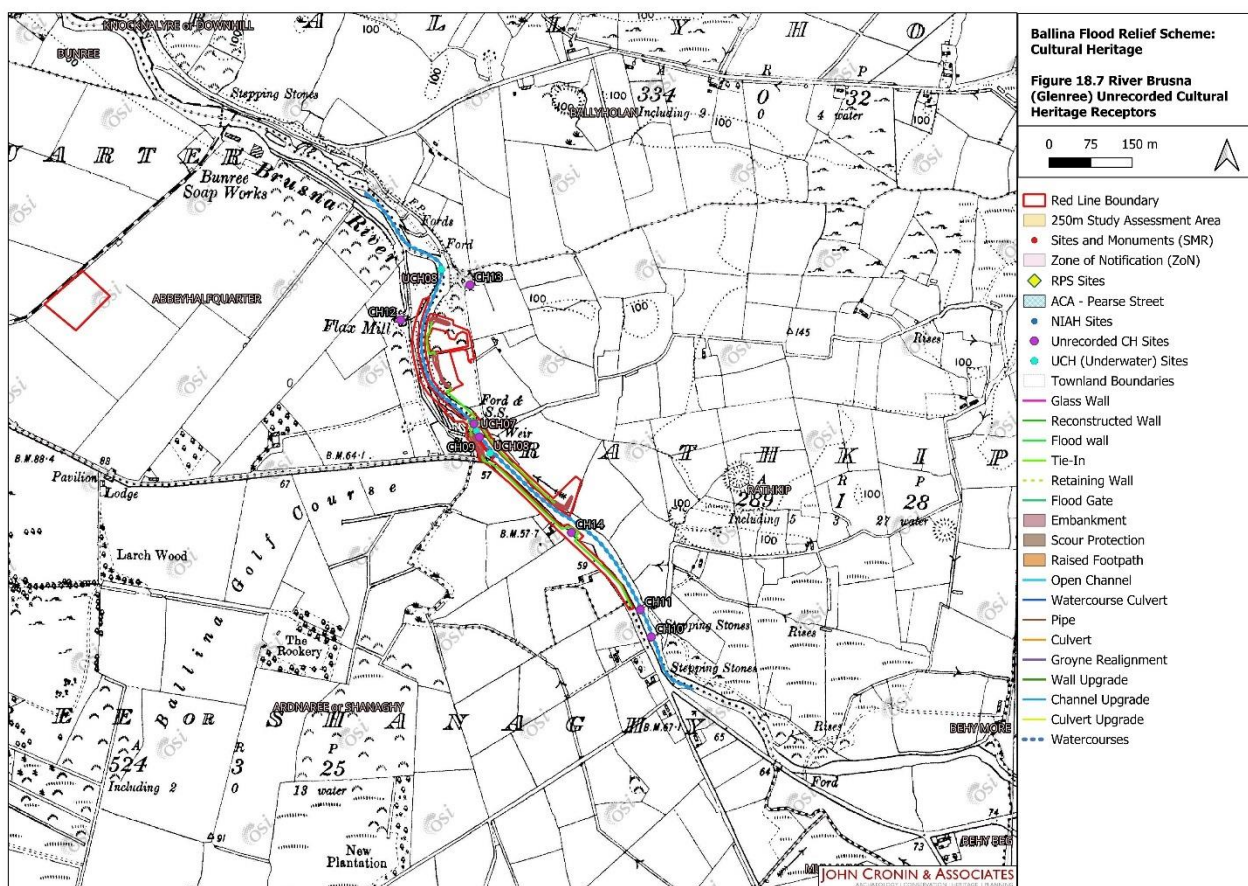


Figure 18-7: 3rd edition OS map extract, River Brusna (Glenree) - Unrecorded Cultural Heritage Receptors

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Outside the northern portion of the works area, at bend on the river, a Tuck Mill (CH12) is indicated on the 1st ed OS map which now located in an area of dense scrub. On the opposite riverbank a short distance downstream, a flax mill with sluice is noted on the 3rd ed OS (CH13) which is now ruinous (**Figure 18-7**).

The proposed temporary works area at Abbeyhalfquarter is a greenfield site with no historic built features noted per historic mapping editions.

Table 18-18 Brusna (Glenree) - Unrecorded Cultural Heritage Receptors

ID Ref.	Townland	Type	ITM Easting	ITM Northing
CH08	Rathkip	Fording point and stepping stones	526514	818402
CH09	Rathkip	Weir (River Brusna)	526524	818378
CH10	Rathkip	Fording point and stepping stones	526834	818018
CH11	Rathkip	Rathkip Bridge	526814	818067
CH12	Rathkip	Tuck Mill (1 st ed OS)	526382	818589
CH13	Abbeyhalfquarter	Flax Mill and sluice (3 rd ed OS)	526507	818652
CH14	Rathkip	Rathkip amenity area	526690	818206
UCH07	Abbeyhalfquarter/ Rathkip	Townland boundary	526455	818680
UCH08	Rathkip	Possible weir	526519	818389

18.3.1.2.2 Field survey assessment

The proposed works on the Brusna (Glenree) River include hard defences consisting of flood walls and embankments. Flood walls and embankments are required on both sides of the river upstream of the access bridge to Rathkip/ Shanaghy (**Appendix 18.2, Plate 18-58**) to include in front of the housing and alongside the grass road verge of the R294 (**Appendix 18.2, Plate 18-59, and Plate 18-62**). The latter area retains an amenity rest area (CH14, see **Table 18-18**) installed by the local community, which is a modern replica ringfort reflecting the recorded archaeological ringforts in the townland of Rathkip (**Appendix 18.2, Plate 18-60 – Plate 18-61**). Rathkip bridge, a single arched stone road over river bridge (built c. 1850, of uncoursed quarry-faced masonry, soldier rubble coping and concrete strap pointing) does not form part of the Proposed Scheme and will not be modified (**Appendix 18.2, Plate 18-63**).

Flood walls and embankments are required on the northwestern side of the river downstream of the bridge. This area is largely a greenfield location of level pasture with an adjacent residence, alongside a bend on the River Brusna. The maximum height of flood walls is approximately 1.4 m, and 1.7 m for the embankments; a support a beam spanning the river in front of the Rathkip/ Shanaghy access bridge is required as is scour protection for the riverbanks.

The underwater archaeological dive and metal detection surveys (**Appendix 18.3**) observed that towards the Rathkip/ Shanaghy bridge area, the Brusna (Glenree) river is an average of 0.40m deep, with a central channel of 0.80m deep. There were the remains of a possible weir observed c. 15m upstream of the bridge (UCH07) comprising: *large boulders roughly aligned across the stream, creating a drop of c. 0.30m. There was no evidence that any more formal weir structure was located there. It is likely that this feature was put in place in the mid- to late-20th century, as it does not correspond with the 25-inch edition map [CH09] and may have been an attempt to control water flow associated with fisheries or with the construction of the Rathkip/ Shanaghy Bridge.*

The 25-inch edition map shows a weir [CH09] c. 25m downstream, crossing the river at a west-northwest to east-southeast alignment, with a set of stepping-stones [CH08] c. 20m further upstream. These are also both indicated together with 'Ford' on the 3rd ed OS map (see **Section 18.3.1.2.1**). However, the remains of both features seem to have been cleared, possibly during the construction of Rathkip/ Shanaghy Bridge.

No other underwater archaeological features were noted within the river survey area extending between both bridges. Some very modern debris was encountered but not retained, including part of a number plate, modern tiles and an iron gate fixing.

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18.3.1.3 Tullyegan

18.3.1.3.1 Desk-based assessment

There are no recorded SMR/RMP sites located at the Tullyegan Proposed Scheme study area (including temporary works area). There is one recorded architectural heritage site within the Tullyegan study area (Table 18-19).

Table 18-19: Recorded architectural sites within Tullyegan Study Area

RPS	NIAH	Type	Street	Townland	ITM Easting	ITM Northing
-	31303016	Railway bridge	-	Behybaun	523679	817538

This comprises a railway bridge at Behybaun townland (Figure 18-8).

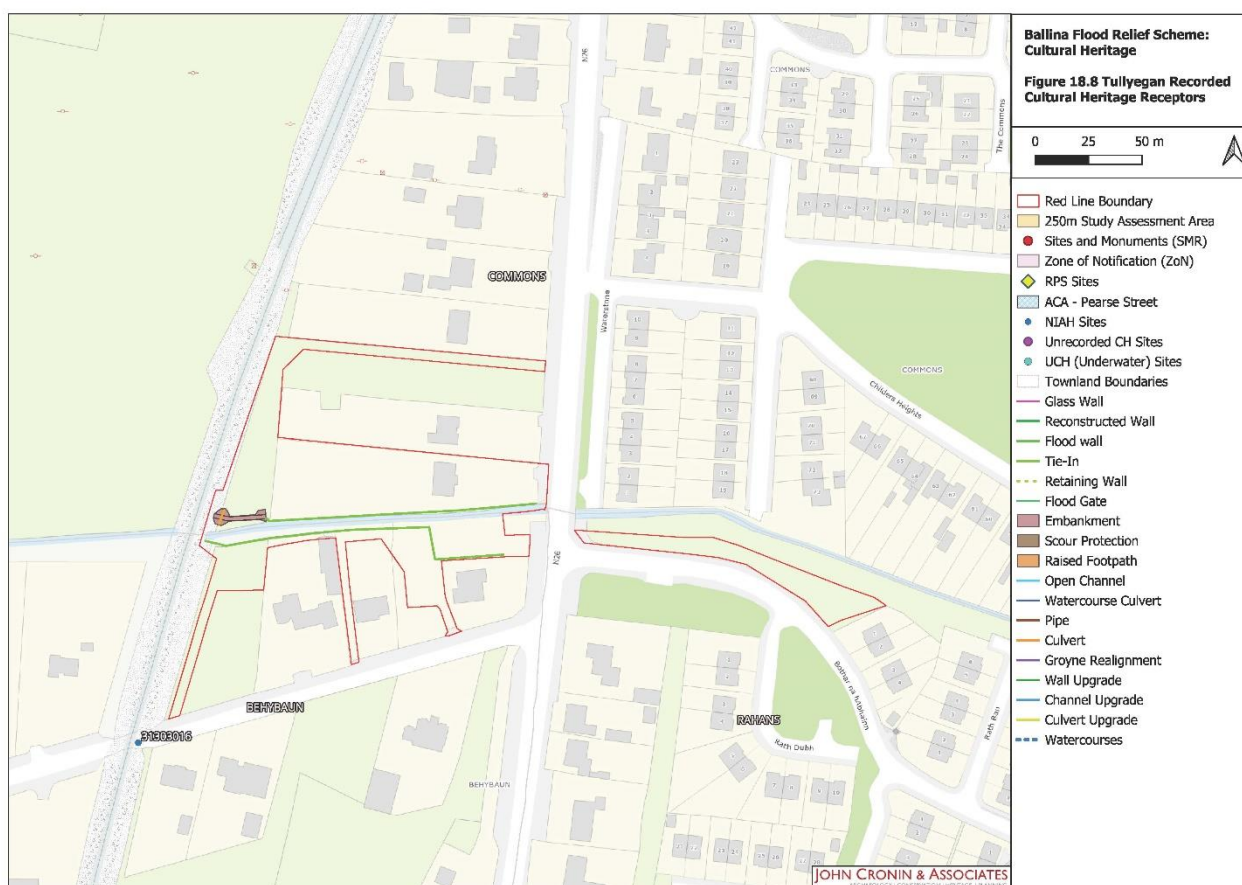


Figure 18-8: Tullyegan Recorded Cultural Heritage Receptors

A review of the Topographical Finds database in the National Museum of Ireland (NMI) indicates that no artefacts are recorded to have been recovered from Commons, Rahan or Behybaun townlands. A review of previous archaeological excavations from the Excavations Database of Ireland indicates that a testing investigation for the Connolly Car Dealership site at Behybaun was undertaken in 2023 (Licence Ref. 23E0345) but no archaeological features were observed at the greenfield site.

A review of the townland names the associated with the study area per is presented in Table 18-20. The townlands are each indicative of topographical landscape descriptions.

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Table 18-20 Placenames Review: Tullyegan Study Area

Townland	Irish	Translation/Meaning	Indicative Cultural Heritage potential
Commons	<i>An Choimín</i>		BS:AL OSNB 1838: NB. " <i>Mullauns West & Commons, formerly so called, has been divided into 2 townlands by a late alteration. The east part next the Moy is called Mullauns N. the part W. Commons, as above</i> " [dúch];
Rahans	<i>Na Rathanna</i>	O'Donovan 1838: 'Na rathannaidhe', the ferny hills	Topographical description
Behybaun	<i>An Bheithigh Bhán</i>	White; lea-ground, grassy	Topographical description

A review of historic mapping for the Tullyegan study area indicates that the area adjacent the stream is of wet/marginal land with an east-west extending road network, including Rahans Bridge (CH16) (now along the N26 MA-N26-001.00) to the east. The Ballina (Iarnrod Éireann) railway line extends north-south to the immediate west of the Proposed Scheme with the railway bridge located to the south (NIAH 31303016) which is indicated as the Midland Great Western Railway (Mayo Branch) on the 2nd ed OS map and the Great Southern Railway on the 3rd ed OS map (**Figure 18-9**). An Engine House (pumping) is indicated north of the works area on the 2nd and 3rd ed OS mapping (CH15).

Table 18-21 Tullyegan - Unrecorded Cultural Heritage Receptors

ID Ref.	Townland	Type	ITM Easting	ITM Northing
CH15	Commons	Engine House (pumping)	523741	817724
CH16	Rahans	Road bridge	523875	817645
UCH09	Commons/Behybaun	Townland boundary	523710	817636

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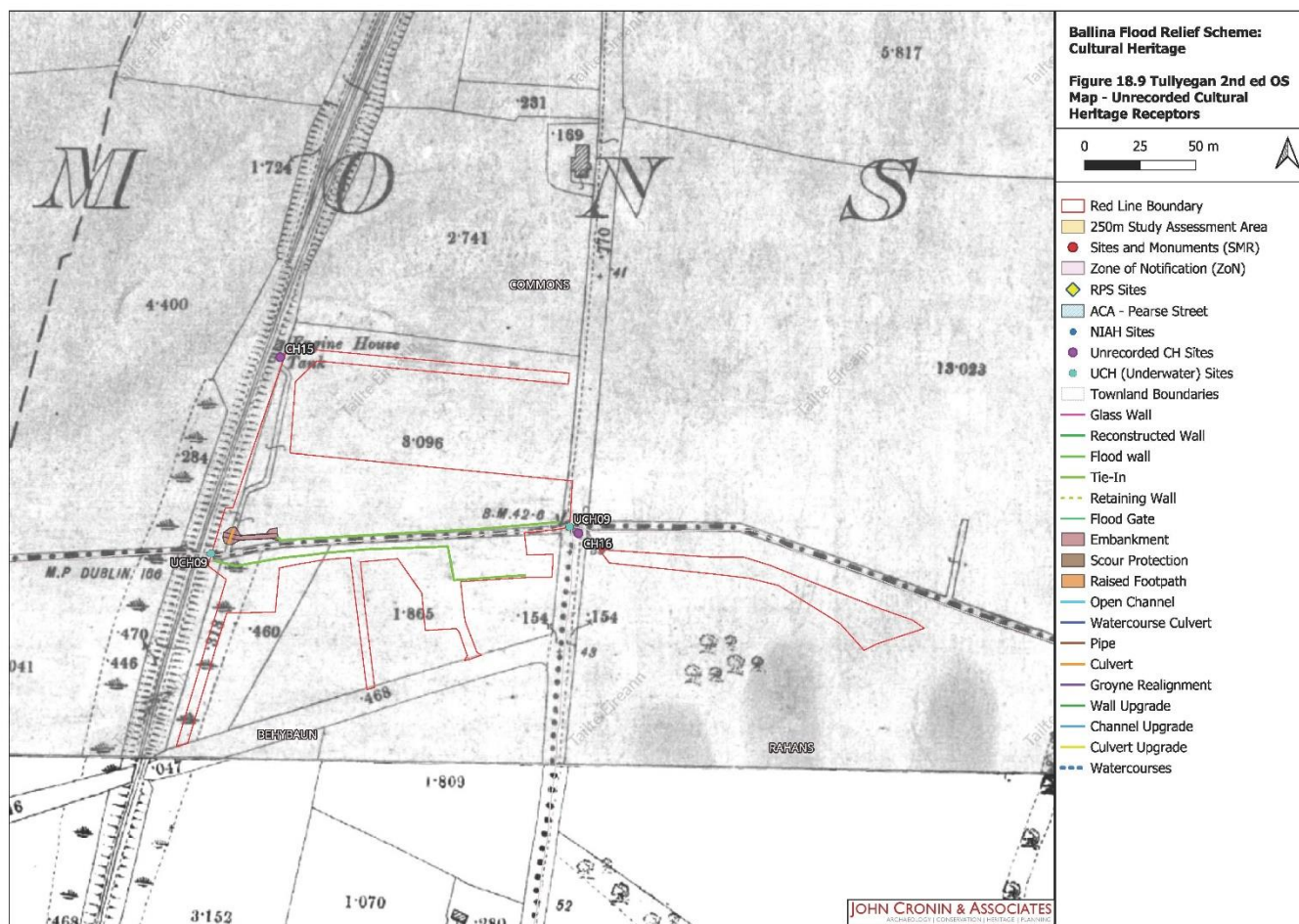


Figure 18-9: 2nd edition OS map extract, Tullyegan - Unrecorded Cultural Heritage Receptors

18.3.1.3.2 Field survey assessment

The Tullyegan stream is a small, mainly open watercourse located at the southern end of Ballina. Flood walls are proposed on either side of the stream up to 0.75 m in height, between the N26 and the railway crossing. Some of the southern wall will be set back from the riverbank to prevent the removal of trees which line the riverbank (see **Appendix 18.2, Plate 18-67**). An embankment will be installed on the northwestern section where the flood defence ties in with the Iarnród Éireann/Irish Rail embankment. The railway bridge NIAH 31303016 is in active use and will not be modified as part of the Proposed Scheme (**Appendix 18.2, Plate 18-64**).

The parapets to the former Rahans Bridge (CH16) are of uncoursed quarry-faced limestone masonry with full-width flat coping stones with evidence of cement render atop and cement strap repointing throughout (**Appendix 18.2, Plates 18-65 – 18-66**). The bridge will not be modified.

The underwater archaeological wade and metal detection surveys (**Appendix 18.3**) noted that *the eastern end of the survey has near vertical banks, c. 3m high, which are heavily overgrown. The stream is 0.35m deep on average and 3-3.5m wide. The streambed is silty, with a slow flow from west to east. Inclusions of modern rubbish are visible along the streambed. The townland boundary (UCH09) runs parallel to the survey areas in Tullyegan.*

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18.3.1.4 Bunree/Behy Road

18.3.1.4.1 Desk-based assessment

There are four recorded SMR/RMP sites located within the Proposed Scheme study area at Bunree/Behy Road (Table 18-22).

Table 18-22: Recorded Archaeological Sites within Bunree/Behy Road Study Area

SMR No.	Townland	Type	ITM Easting	ITM Northing	RPS	NAIAH
MA030-055----	Ballina (Tirawley By.)	Castle - unclassified	525330	819691	7	31303024
MA030-058----	Quignashee	Ringfort - rath	526527	819725	-	-
MA030-059----	Ballyholan	Megalithic tomb - court tomb	526727	819409	-	-
MA030-061----	Quignashee	Redundant record	527172	819637	-	-
MA030-093----	Quignalecka	Barrow - mound barrow	526069	819717	-	-

These comprise prehistoric monuments (court tomb and barrow), a medieval ringfort and a 13th century castle site in the grounds of the present-day Ballina Manor House. The latter is also listed on the RPS (Ref. 7) however it will not be affected by the proposed Scheme Area (Figure 18-10). It is noted that one SMR record (MA030-061---) is now classified as redundant and will not be further assessed.

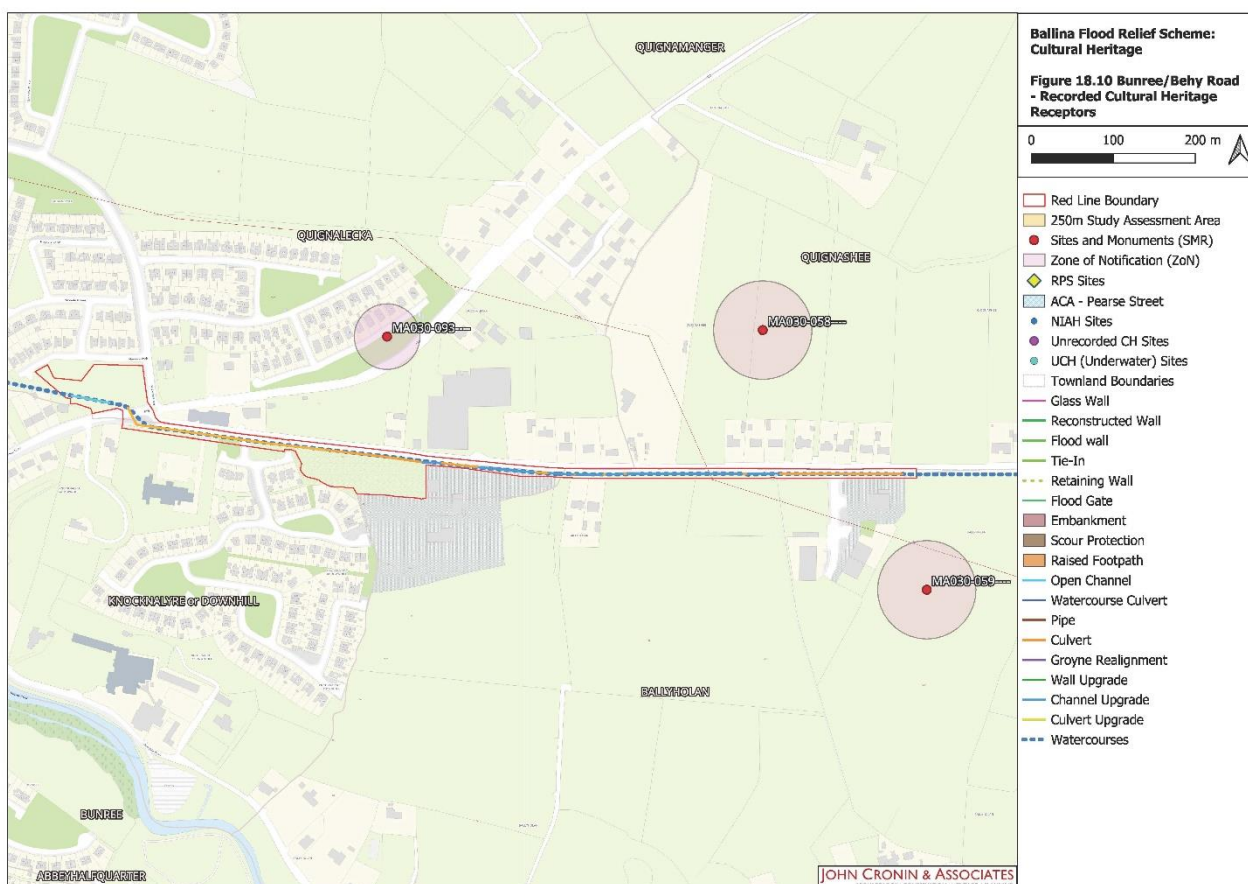


Figure 18-10: Bunree/Behy Road - Recorded Cultural Heritage Receptors

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There are two recorded architectural heritage sites within the Bunree/Behy Road study area (**Table 18-23**). These comprise Bunree road bridge (RPS 6) and a derelict store/warehouse (NIAH 31303032) on the Downhill Road (**Figure 18-10**).

Table 18-23: Recorded Architectural Heritage Sites within Bunree/Behy Road Study Area

RPS	NIAH	Type	Street	Townland	ITM Easting	ITM Northing
6	31303031	Bridge	-	Bunree, Knocknalyre or Downhill	525432	819452
-	31303032	Store/warehouse	Downhill Road	Knocknalyre or Downhill	525477	819463

A review of the Topographical Finds database in the National Museum of Ireland (NMI) indicates that no artefacts are recorded to have been recovered from Knocknalyre or Downhill, Quignalecka or Quignashee townlands.

A review of previous archaeological excavations from the Excavations Database of Ireland indicates that a testing investigation and subsequent excavation of mound barrow MA030-093—was undertaken at a housing development in Quignalecka in 2007 (Licence Ref. 070E0627), and it was subsequently fully excavated (070E0627 extension). Interestingly the site is likely to have had a cremation pyre and pits uncovered contained fragments of cremated bone and Late Neolithic pottery sherds (as opposed to Bronze Age/ Early Iron Age era material which is typical for barrow sites).

A fulacht fiadh was identified during road widening of the Sligo Road (N59) at Quignashee (Licence Ref. 05E1201) while testing in 2012 (Licence Ref. 12E0189) at Quignashee townland did not have any archaeological significance.

A review of the townland names the associated with the study area per is presented in **Table 18-24**. The townlands of Quignalecka and Knocknalyre or Downhill are likely indicative of topographical landscape descriptions, while Quignashee may infer folklore reference to 'shee' or a 'fairy hill' (MA030-061--- a natural hill and redundant SMR record).

Table 18-24 Placenames Review: Bunree/Behy Road Study Area

Townland	Irish	Translation/Meaning	Indicative Cultural Heritage potential
Quignalecka	<i>Cúige na Leice</i>	Fifth of the 'leac' flat stone or rock, flagstone	Topographical description
Quignashee	<i>Cúige na Sí</i>	Fifth of the fairy hills	May refer to local placename 'Sheerooagh' that is a natural hill (MA030-061--- redundant record). It forms a prominent landmark in the surrounding landscape and provides panoramic views from the top. Although this is a natural feature, with no obvious features of archaeological significance, the 'shee' (sidh; fairy, fairy hill) element in the placename suggests that the hill had some importance in local tradition or folklore. (Source: HEV)
Knocknalyre or Downhill	<i>Cnoc na Ladhar</i>	Down Hill or Hill of the fork	Topographical description

A review of historic mapping for the Bunree/Behy Road study area indicates that Behy Road is not indicated on the 1st ed OS mapping but is present on the 2nd edition OS. By the 3rd edition OS Ballina Flax Mill is noted north of Behy Road at the present-day site of O'Donnell Meat Distributors Ltd and low-lying wetlands are indicated to the south of same (**Figure 18-11**).

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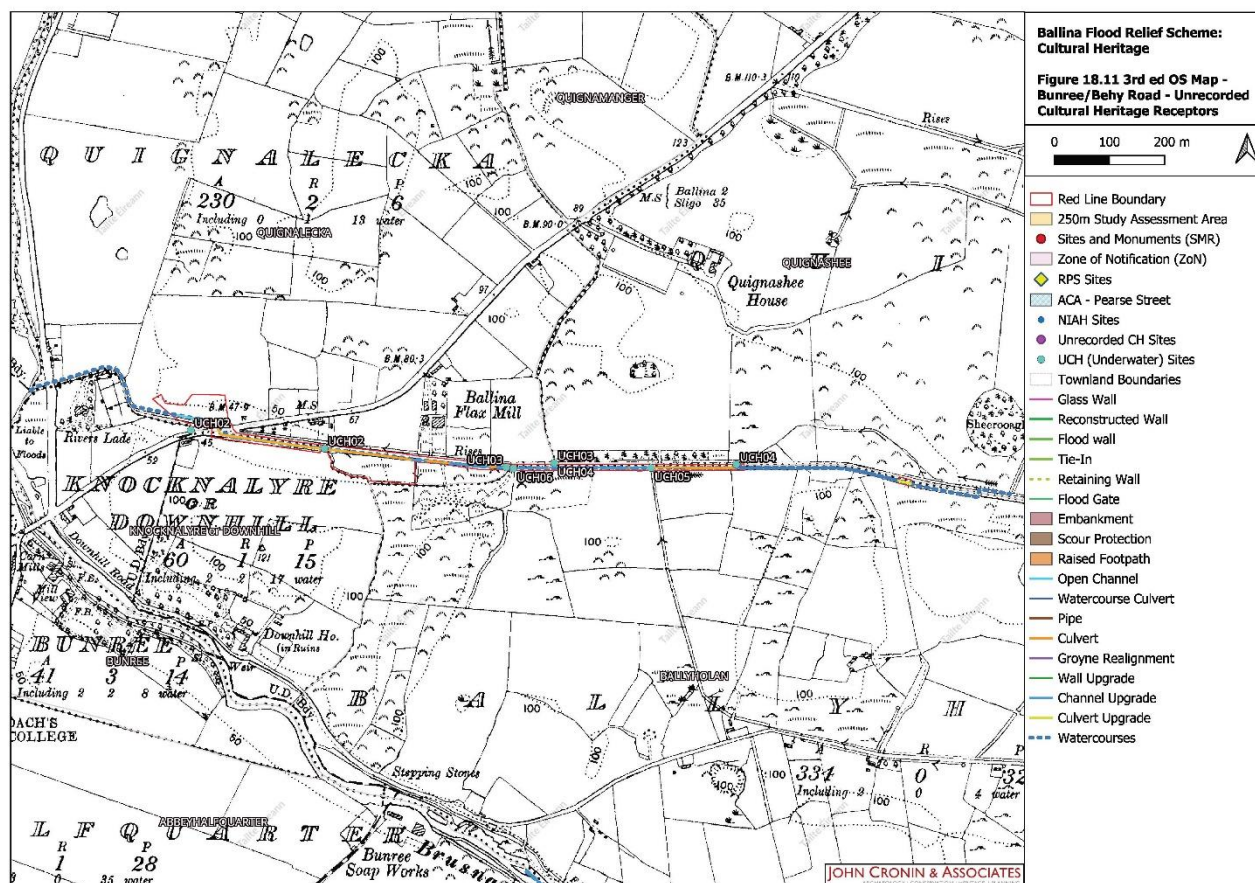


Figure 18-11: 3rd Edition OS map extract, Bunree/Behy Road - Unrecorded Cultural Heritage Receptors

18.3.1.4.2 Field survey assessment

The Bunree is a small watercourse with numerous culverts of varying dimensions, many of which are undersized and so out of bank flooding therefore occurs in numerous locations along Behy Road.

The proposed works include the installation of a new replacement culverts, to follow the existing stream channel. A new 1.5 m culvert will be installed at the upstream section of the works from Behy Business Park. The section near the Knocknalyre housing estate will be increased to a 1.8 m diameter culvert (**Appendix 18.2, Plate 18.70**). A 1.5 m diameter piped culvert will also be installed to upgrade an existing field bridge access upstream of the works. A culverted section downstream of the N59 at Moyvale Park, which causes a constriction to flood flows, will be removed and the open channel reinstated (**Appendix 18.2, Plate 18.68, and Plate 18.69**).

There were no unrecorded terrestrial Cultural Heritage features identified at this area during field survey. Underwater archaeological wade and metal detection surveys (**Appendix 18.3**) observed that the stream is culverted for the majority of its length (nine areas), with two stone-built culverts of earlier construction (UCH05 and UCH06) noted (**Figure 18-11**). The stone culvert UCH05 comprises *rough squares stones* (0.20 x 0.23m to 0.30 x 0.45m) with a *lintel stone* (0.64m x 0.09m) and a *single red brick* (0.06 x 0.11m), possibly from a repair. At least three types of mortar are present, indicating multiple repairs or alterations to the culvert, though all types contain cement. The interior width is 0.33m and height is 0.37m. The stream depth as it exits the culvert is 0.07m. The banks to the west of the culvert appear reinforced with stones, possibly taken from the culvert itself, and are visible in the bank up to 4m away, where a field drain empties into the stream from the south bank.

At the middle section of the assessment area, possible stone lintels from an earlier stone culvert (UCH06) were noted along the bank to the immediate west of one of the domestic access roads: *at least three*

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possible collapsed lintels were visible under a covering of vegetation, measuring an average of 0.40m long x 0.60m wide x 0.04m thick. No lintels were identified to the east of the domestic access. It is possible these stones are the remains of an earlier access at the location, which was damaged and mostly removed to accommodate the present access.

Table 18-25 Quignamanger - Unrecorded Cultural Heritage Receptors

ID Ref.	Townland	Type	ITM Easting	ITM Northing
UCH05	Ballyholan	Stone culvert	524819	819029
UCH06	Ballyholan	Stone culvert	524901	819110

18.3.1.5 Quignamanger

18.3.1.5.1 Desk-Based Assessment

There are three recorded SMR/RMP sites located within the Proposed Scheme study area at Quignamanger (**Table 18-26**).

Table 18-26: Recorded Archaeological Sites within Quignamanger Study Area

SMR No.	Townland	Type	ITM Easting	ITM Northing	RPS	NIAH
MA030-037---	Garrankeel	Monument	525379	820982	3/ Co007	31303019
MA030-038----	Quignalecka	Enclosure	525709	820827	-	-
MA030-039----	Quignalecka, Quignamanger	Enclosure	525740	820816	-	-

These comprise two adjacent enclosures (possibly of early to late medieval date), at Quignalecka townland, overlooking the eastern banks of the River Moy; and a 19th century Knox monument on the Belleek Castle estate, close to the western bank of the River Moy (**Figure 18-12**).

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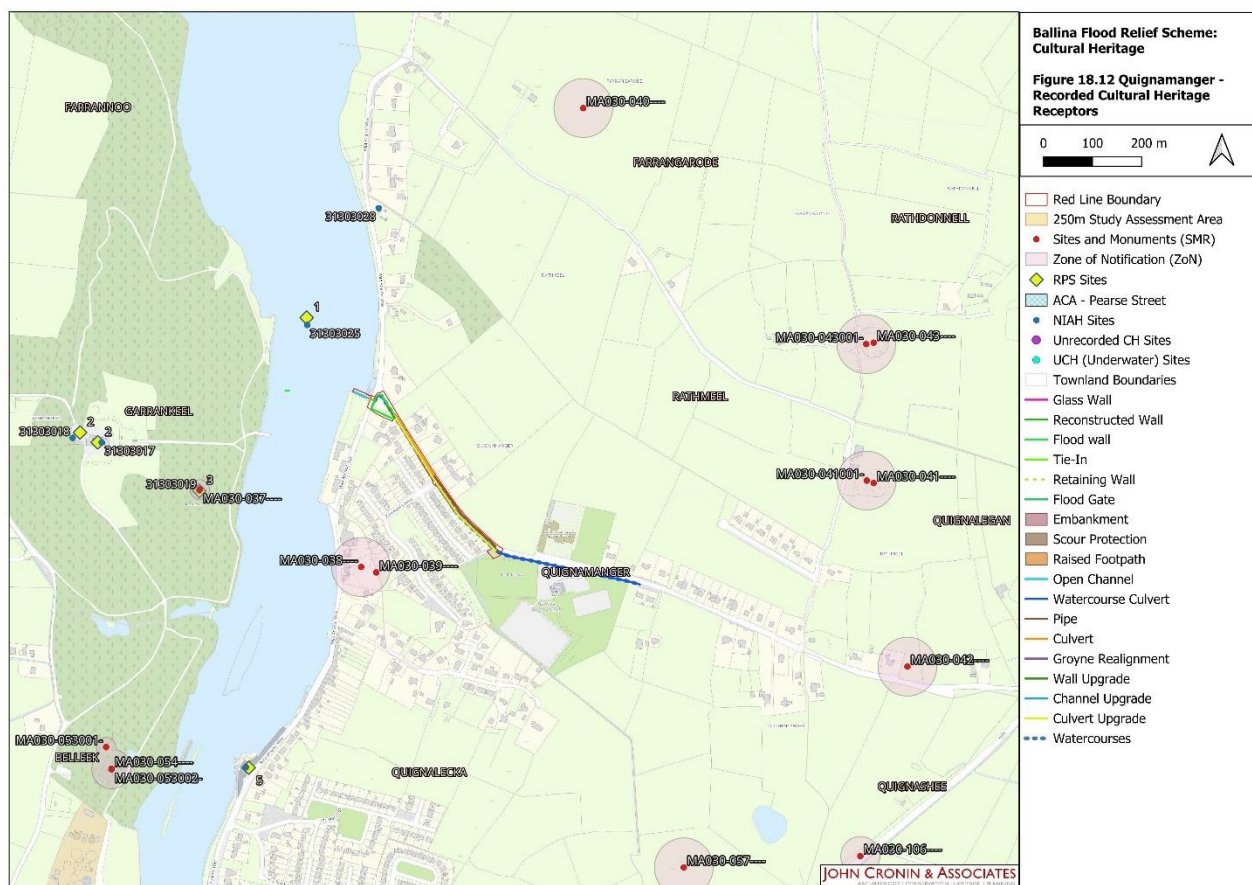


Figure 18-12: Quignamanger - Recorded Cultural Heritage Receptors

The Knox monument is also listed on the RPS (Ref. 3/Co007), while there is one other recorded architectural heritage site within the Quignamanger study area. This comprises the Creteboom shipwreck (RPS 1) sited beyond the quays on the River Moy (Table 18-27 and Figure 18-12). A concrete ship for iron ore transport between Britain and Spain (one of a flotilla of twelve), the SS Creteboom is a partially submerged reinforced concrete tugboat hull, built 1919 and decommissioned in 1924. It was re-purposed in the 1930s and positioned on a marsh bank in the River Moy in 1974.

Crockett’s Quay along the River Moy within the environs of the Quignamanger study area is an ACA per the Mayo County Development Plan 2022-2028.

Table 18-27: Recorded Architectural Heritage Sites within Quignamanger Study Area

RPS	NIAH	Type	Street	Townland	ITM Easting	ITM Northing
1	31303025	Shipwreck	River Moy	Garrankeel	525598	821335
3/ Co007	31303019	Monument	Belleek Manor estate	Garrankeel	525379	820982

A review of the Topographical Finds database in the National Museum of Ireland (NMI) indicates that no artefacts are recorded to have been recovered from Garrankeel, Quignalecka or Quignamanger townlands.

A review of previous archaeological excavations from the Excavations Database of Ireland indicates that a designed tree-ring forming part of the Belleek Manor estate was excavated in 1998 (Licence Ref. 98E0214). Excavation of a mound barrow MA030-093—was undertaken at a housing development in Quignalecka in 2007 (Licence Ref. 070E0627) (see Section 18.3.1.3.1).

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A review of the townland names the associated with the study area per is presented in **Table 18-28**. The townlands of Quignalecka, Garrankeel and Quignamanger are likely indicators of landscape and topographical descriptors.

Table 18-28 Placenames Review: Quignamanger Study Area

Townland	Irish	Translation/Meaning	Indicative Cultural Heritage potential
Quignalecka	<i>Cúige na Leice</i>	Fifth of the 'leac' flat stone or rock, flagstone	Topographical description
Garrankeel	<i>An Garrán Caol</i>	'caol' narrow; a narrow; marshy stream; 'garrán' grove	Topographical description
Quignamanger	<i>Cúige na Mainséar</i>	O'Donovan 1836: 'Cuig na mainseir': fifth of the mangers	Agricultural lands division/use

A review of historic mapping for the Quignamanger study area indicates that the Crocketts Quays (ACA) (ITM 525662, 821023) along the River Moy were established by the 1st edition OS map with a residence set back and overlooking same later labelled 'Quay View House' (CH17) by the 2nd edition OS (**Figure 18-13**). This house is now levelled.

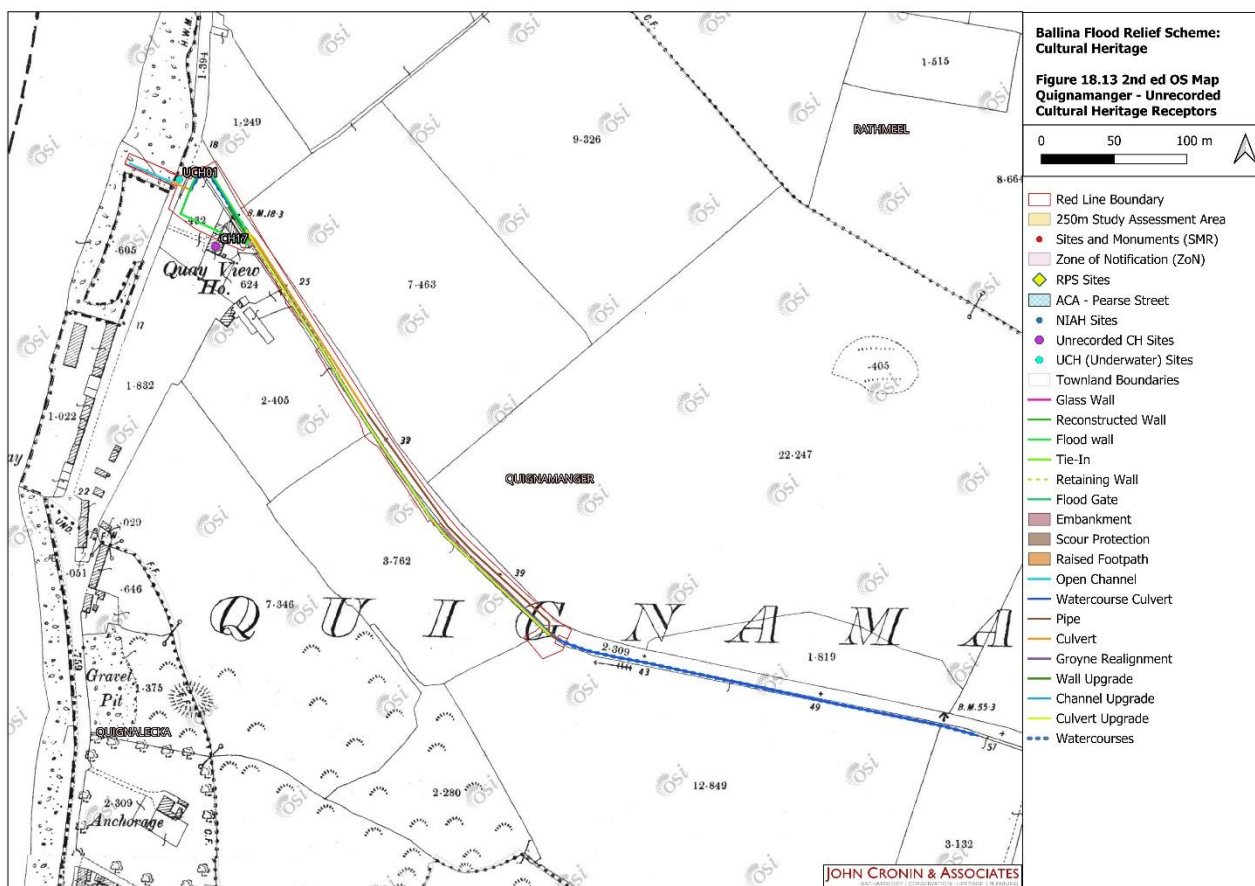


Figure 18-13: 2nd edition OS map extract, Quignamanger - Unrecorded Cultural Heritage Receptors

The 2nd ed OS also shows that the quays have also been modified by way of a terrace of built structures to its landward (east) side and some land reclamation to the north side adjacent the works footprint.

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Table 18-29 Quignamanger – Unrecorded Cultural Heritage Receptors

ID Ref.	Townland	Type	ITM Easting	ITM Northing
CH17	Quignamanger	Quay View House (levelled)	525754	821127
UCH01	Quignamanger	Townland boundary	525729	821173

18.3.1.5.2 Field survey assessment

The Quignamanger is a small watercourse with numerous culverted sections (including in road) with diverted upstream flows re-joining the Quignamanger Stream just upstream of Quay Road. Out of bank flooding travels overland through Rathmeel Lawns housing estate and Creggs Road.

The proposed works involve the replacement of the existing culvert which follows Creggs Road for discharge back into the Moy. Flood walls (maximum height 1.1 m) will be installed along the open reach of the channel at this discharge area. The in-road culvert at Quay Road will also be upgraded while removal of a culvert downstream at Quay Road will allow an open channel discharge to the River Moy.

The Moy Boat Club building is a modern structure (**Appendix 18.2 Plate 18-72 and 18-73**) built adjacent to the proposed culvert replacement at the Moy discharge area at Creggs Road/Quay Road junction. Views are afforded to the Creteboom SS for this location (**Appendix 18.2 Plate 18-71**). The quays are in active use with renovation of quayside buildings noted (**Appendix 18.2 Plate 18-74**). No works are proposed at the quay area (also an ACA 'Crockett's Quay'). The site of the former Quay View House (CH17) is covered with dense vegetation with the proposed flood walling at this area crossing the foundation footprint of same (partial upstanding remains of a SW-NE extending building range are indicated on basemap mapping to the immediate north).

The Quignamanger stream is culverted for the majority of its length with the underwater wade and metal detection survey area not accessible at the southeast due to heavy vegetation. Towards the northwest end however, the open stream (0.9 m wide and 0.4 m deep) was visible for c. 100 m. The water level was very low during survey and parts of the streambed were dried out. A wall 3.5m high of roughly squared stones, set to courses with cement mortar is covered in vegetation and extends along the majority of the southern bank. There is modern walling to the north bank. No features or objects of archaeological potential were identified during the wade survey, though a townland boundary (UCH01) intersects the confluence of the Moy with the Quignamanger stream.

18.3.2 Evolution of the Environment in the Absence of the Proposed Scheme

In a No Change scenario, there is no likely predicted significant effect on the recorded terrestrial cultural heritage resource and the existing environment therein. However, it is noted that the evolution of the existing environment in the context of increased risk of extreme flooding events (including fast rising water levels and/or water surge events) could negatively (directly or indirectly) impact on cultural heritage receptors, in particular those elements within the riverine environment (bridges, quays, riverbed submerged finds and adjacent built heritage properties).

18.4 Description of the Likely Significant Effects

The characteristics of the Proposed Scheme at construction stage, which has significance of effect on the Cultural Heritage resource, will involve (but is not limited to):

- Clearance works (trees, vegetation).
- Topsoil removal.
- Ground reduction/excavation (including in-river) to facilitate construction of the proposed hard defences (embankments, flood walls, existing pavement removal/replacement for new drainage installation), any temporary compound/storage areas and any replanting areas.

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- Removal of existing structures where required to facilitate replacement and/or new construction of proposed hard defences (embankments, flood walls)

Access routes are via existing roadways and trackways and will not require any augmentation as part of the proposed works.

Any Cultural Heritage receptors identified within the works areas that are subject to clearance/removal and ground reduction/excavation works are likely to be directly and significantly affected by same. This can take the form of damage to or loss of Cultural Heritage receptors, in whole or in part, by means of:

- Physical changes to the existing ground level (including in-river) during construction (removal of upstanding and/or sub-surface features/deposits).
- Routing of heavy machinery (ground rutting/damage to features/deposits, vibration/stability risk to extant/partially extant structures or features).
- Ground consolidation/embankment areas (weight damage risk to buried features/deposits, particularly in wet ground areas).

It is noted in **Sections 18.4.1.1 to 18.4.1.5** that there are no predicted likely Significant significance of effects on the Cultural Heritage resource during construction phase.

The characteristics of the Proposed Scheme at operational stage which has significance of effect on the Cultural Heritage resource, will involve (but is not limited to) physical changes to the existing environment by means of newly introduced flood defence measures. Any Cultural Heritage receptors located within the immediate environs of the operational flood relief scheme are likely to be indirectly affected by same. This can take the form of negative quality of effect by intrusion to the landscape setting of a Cultural Heritage receptor which forms an integral part of, or makes a significant contribution to, the original form, layout, and function of same. At operational stage, elements such as the following can result in indirect significance of effect on the Cultural Heritage resource:

- Physical changes to the riverbed due to increased scouring, erosion or hydrological changes in water depths or flow intensity. This in turn can lead to erosion of cultural heritage underwater/riverine features and sites, or movement of submerged archaeological objects.
- Physical changes or loss to the setting of receptor(s) and/or spatial interconnectivity with the historic landscape.
- Physical changes to the visual amenity value of receptor(s) due to the built infrastructure at operational stage.
- Positive quality of effect can also be achieved by improving and/or facilitating amenity access to Cultural Heritage receptors where such opportunities present.

It is noted in **Sections 18.4.2.1 to 18.4.2.5** that there are no predicted likely Significant significance of effects on the Cultural Heritage resource during operational phase.

By proportioning the magnitude of the likely impact (direct or indirect) together with a consideration of the value or sensitivity of the receptor (including protection status, site type, condition/preservation, documentation/historical significance, group value, rarity, visibility in the landscape, fragility/vulnerability, amenity value, and potential contribution to research agendas), a determination can be made on the significance of effect on same.

Based on a methodological approach combining both desk-based assessment and field survey there are a number of designated and undesignated Cultural Heritage receptors within the study area.

18.4.1 Construction Phase

18.4.1.1 River Moy

The proposed works on the River Moy include flood walls of up to 1.2 m height along the west and 1.3 m along the east banks of the river (an increase of 0.5 m and 0.6 m in height respectively, relative to the existing flood walling). Construction will require pavement removal and replacement to accommodate the ground reduction measures required for foundation of the new walls and drainage (along same alignment as

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existing). Wall removal and replacement will be required along the banks of Ridgepool Road, Cathedral Road, Clare Street and Bachelors Walk.

The existing quay walling along Emmett Street will be retained, but made good, by careful dismantling, match re-building and re-pointing (it is currently misaligned and inappropriately pointed with cement mortar). Further, the existing iron railings to the quayside openings along the quay walling will be removed and the openings blocked up with match (locally sourced) ashlar stone and glass walling (900mm) to existing historic stepped riverside access points. This will allow for sympathetic tie-in of the new and improved flood defences (see Alastair Coey Architects Conservation Report prepared for the scheme). A temporary works area is designated north of Bachelors Walk at the former Ballina Dairy co-operative brownfield site.

The IFI building near the Salmon Weir will form part of the flood defences and will be sympathetically water-proofed internally (tanking) as necessary (see Alastair Coey Architects Conservation Report prepared for the scheme). Glass walling in combination with flood walling will be used in front of Ballina Manor Hotel and the IFI building to maintain views from affected properties.

Each of the recorded archaeological SMR sites in the Moy study area retain multiple designations and are high value receptors in that regard. The architectural heritage is also notable given the high volume of protected structures that form part of the historic nineteenth century core and ACA of Ballina Town. Of these protected structures/portion of ACA an only those along the riverbanks are of direct relevance to the Proposed Scheme.

Cultural Heritage field survey assessment of the area also noted unrecorded Cultural Heritage items of local value interest/significance. A large quantity of artefacts has been recovered from the Moy study area (including the river and riverbanks), many of which are bronze tools (axeheads and swords). These are indicative of the prehistoric settlement of the area and the importance of the River Moy as a fording place, means of transportation and a food source long before the establishment of the historic town as known today.

All Cultural Heritage receptors relevant to each of the six works areas along the Moy are detailed in **Table 18-30** together with an assessment of impact duration, impact type and impact quality.

Table 18-30 Moy Area Direct and Indirect Impacts on the Cultural Heritage Resource at Construction Stage

Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
Area 1	MA030-055---	Castle - unclassified	255 m	Not Applicable	No predicted effect (neutral)
Area 1	RPS 31	Dillon Terrace	47 m	Temporary	Indirect (-)
Area 1	RPS 4	Ballina House gate-lodge	108 m	Temporary	Indirect (-)
Area 1	Bachelors Walk walling	Flood walls (west riverbank)	0 m	Permanent	Direct (-)
Area 1	31204099	House	85 m	Temporary	No predicted effect (neutral)
Area 1	UCH11	Townland boundary	0 m	Permanent	Direct (-)
Area 1	UCH17	Stone steps	0 m	Temporary	Indirect (-)
Area 1 – 4	MA030-056001-/RPS 11/ NIAH 31204105 / UCH15 / UCH10	Lower Bridge	0 m	Temporary Potential Permanent	& Indirect (-) & Potential Direct (-)
Area 1 – 4	MA030-056002- / UCH15	Gatehouse	0 m	Potential Permanent	Potential Direct (-)
Area 2	Clare Street (Howley Street) walling	Flood walls (east bank)	0 m	Permanent	Direct (-)
Area 2	CH01	Stone wall access crossover and steps	0 m	Permanent	Direct (-)
Area 2	CH02	Stone wall access crossover and steps	0 m	Permanent	Direct (-)

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
Area 2	CH03	Access steps and pier (2 nd ed OS)	0 m	Permanent	Direct (-)
Area 2	CH04	Marian Shrine (1954)	1 m	Permanent	Indirect (-)
Area 2	RPS 8	St Muredach's College (gates and railings)	6.5 m	Temporary	Indirect (-)
Area 2	31204120	St Muredach's House	34 m	Temporary	No predicted effect (neutral)
Area 2	31204121	House	94 m	Temporary	No predicted effect (neutral)
Area 3	31204116	School	16.5 m	Temporary	Indirect (-)
Area 3	31204114	St Muredach's Cathedral Cross	17 m	Temporary	Indirect (-)
Area 3	RPS 29	St Muredach's Cathedral	14.5 m	Temporary	Indirect (-)
Area 3	Cathedral Road walling	Amenity area (east bank)	0 m	Permanent	Direct (-)
Area 3	CH05	Riverside stone paved platform adjacent Upper Bridge	0 m	Temporary	Indirect (-)
Area 3	CH06	Cut dressed stone drainage feature	0 m	Temporary	Indirect (-)
Area 3 & 5	31204122	House	30 m	Temporary	No predicted effect (neutral)
Area 3 & 5	31204123	House	51 m	Temporary	No predicted effect (neutral)
Area 3 & 5	31204124	House	61 m	Temporary	No predicted effect (neutral)
Area 3 & 5	31204127	Post Box	72 m	Temporary	No predicted effect (neutral)
Area 3 & 5	RPS 32 & 31204132	House	29 m	Temporary	No predicted effect (neutral)
Area 3 – 5	MA030-074001- / RPS 30 / NIAH 31204112	Religious house - Augustinian friars	13.5 m	Temporary	Indirect (-)
Area 3 – 5	MA030-074002- / RPS 30 / NIAH 31204112	Building	13.5 m	Temporary	Indirect (-)
Area 3 – 5	MA030-074003- / RPS 30 / NIAH 312041123-	Graveyard	13.5 m	Temporary	Indirect (-)
Area 3 – 5	MA030-091----	Redundant record	Not Applicable	Not Applicable	Not Applicable
Area 4	Pearse Street (incl Emmet Street in part)	Architectural Conservation Area (ACA)	13 m	Permanent	Indirect (-)
Area 4	NIAH 31204106 / UCH14	Quays – Emmet Street	0 m	Permanent	Direct (-)
Area 4	NIAH 31204110	Miller's House	20 m	Permanent	Indirect (-)
Area 4	RPS 28 / NIAH 31204108	House (Pair)	13 m	Permanent	Indirect (-)

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
Area 4	NIAH 31204107	Commercial premises	13 m	Permanent	Indirect (-)
Area 4	NIAH 31204090	Heffernan's House	69 m	Not Applicable	No predicted effect (neutral)
Area 4	NIAH 31204089	Post Box	75 m	Not Applicable	No predicted effect (neutral)
Area 3 - 6	RPS 33 / NIAH 31204104 / UCH12	Upper Bridge	0 m	Temporary	Indirect (-)
Area 5 – 6	RPS 35 / NIAH 31204103 / UCH13	Salmon Weir (incl IFI building)	0 m	Permanent	Direct (-)
Area 5	CH07	Gallowglasses Massacre 1586	0 m	Potential Permanent	Potential Direct (-)
Area 5	Memorial Monument	Art installation - Ardnaree Massacre (1586) commemoration	0 m	Temporary	Direct (-)
Area 5	Ridgepool Rd walling	Flood walls (east bank)	0 m	Permanent	Direct (-)
Area 5	UCH16	Misc Objects (underwater)	0 m	Potential Permanent	Potential Direct (-)
Area 6	Barret Street (riverside) railings	Raised platforms (west bank)	0 m	Permanent	Direct (-)
Area 6	NIAH 31204097	Water Pump	81 m	Not Applicable	No predicted effect (neutral)

A consideration of the magnitude of impact and the value/sensitivity of the cultural heritage receptor has facilitated a determination of the significance of effect per impact assessment criteria set out in **Section 18.2.5**. The significance of effects at construction stage is set out in **Table 18-31**.

There are indirect negative impacts noted with respect to temporary impacts during construction (detraction of receptor setting and appreciation during construction work activities) which are considered slight significance of effects, including the portion of streetscape forming part of the ACA, fronting onto Emmet Street. However, the indirect temporary impact during construction on the recently renovated houses RPS 28 (Mary Robinson Centre) at Emmet Street (and also part of Ballina ACA) is considered marginally more significant, given the proximity and value of the receptor, and deemed a Moderate significance of effect.

Replacement of existing flood walls/defences at Bachelors Walk, Clare Street (Howley Street), Ridgepool Road and Barret Street are direct impacts of high magnitude. Portions of walling are likely to date to the mid-late nineteenth century and are of low (local) value. As such, the significance of effect of the removal of these walls (and any noted features along same) are deemed moderate significance of effects.

Upper Bridge and Lower Bridge will not be modified in any way as part of the Proposed Scheme, however careful tie-in of new replacement walls will be needed at the northern parapet wingwalls of Lower Bridge (RPS 11) (Bachelors Walk and Clare Street (Howley Street)) and at the southern parapet wingwalls of Upper Bridge (RPS 33) (Ridgepool Road and Barrett Street). Given the Cultural Heritage value of the bridges, these are considered moderate significance of effects. Similarly, internal water-proofing modifications to the IFI building forming part of the Salmon Weir (RPS 35) is considered a moderate significance of effect at construction stage.

The quay walling at Emmet Street is of good architectural heritage quality. The process of dismantling and rebuilding the existing walling above road-surface areas, removal of the existing (modern) railings and insertion of new (match) ashlar blockwork to the openings and glass panels is considered a moderate significance of effect during construction stage. The quay walling does not form part of Ballina ACA itself, although it is noted that works will result in visual contextual improvements to same, and to Emmet Street streetscape as a whole.

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The archaeological resource is represented by levelled/'site of' SMRs with relevance to the Moy study area. This includes the site of an early bridge and gatehouse (MA030-056001- and MA030-056002-) at the location of Lower Bridge and the site of a massacre of Scottish gallowglasses at Ardnaree (CH07) along the river in 1586. The Proposed Scheme footprint also falls within the Zone of Notification for the 15th century Augustinian abbey site along Cathedral Road. Although there are no above ground surface remains associated with these archaeological monuments, there is potential for both associated sub-surface remains and unassociated sub-surface remains (of the historic town footprint generally) to exist within the scheme footprint where ground reduction and preparatory works are required (replacement flood walls, raised platform(s), pavement removal and drainage works etc.). Further, it is noted that a recent art installation commemorating the Ardnaree massacre (CH18) will require temporary removal during the works at its location along the footpath at Ridgepool Road and is considered a slight significance of effect.

Table 18-31 Moy Area Significance of Effect on the Cultural Heritage Resource at Construction Phase

Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
Area 1	MA030-055- --	Castle - unclassified	255 m	No predicted effect (neutral)	None	Medium	No Change
Area 1	RPS 31	Dillon Terrace	47 m	Indirect (-)	Negligible	High	Slight
Area 1	RPS 4	Ballina House gate-lodge	108 m	Indirect (-)	Negligible	High	Slight
Area 1	Bachelors Walk walling	Flood walls (west riverbank)	0 m	Direct (-)	High	Low	Moderate
Area 1	31204099	House	85 m	No predicted effect (neutral)	None	Medium	No Change
Area 1	UCH11	Townland boundary	0 m	Direct (-)	Low	Medium	Slight
Area 1	UCH17	Stone steps	0 m	Indirect (-)	Low	Low	Not Significant
Area 1 – 4	MA030-056001-/ RPS 11/ NIAH 31204105 / UCH15 & UCH10	Lower Bridge	0 m	Indirect (-) & Potential Direct (-)	Low (indirect) & Potential Low (direct)	High Medium	Moderate Potential Slight
Area 1 – 4	MA030-056002- / UCH15	Gatehouse	0 m	Potential Direct (-)	Potential Low	Medium	Potential Slight
Area 2	Clare Street (Howley Street) walling	Flood walls (east bank)	0 m	Direct (-)	High	Low	Moderate
Area 2	CH01	Stone wall access crossover and steps	0 m	Direct (-)	High	Low	Moderate
Area 2	CH02	Stone wall access crossover and steps	0 m	Direct (-)	High	Low	Moderate
Area 2	CH03	Access steps and pier (2 nd ed OS)	0 m	Direct (-)	High	Low	Moderate
Area 2	CH04	Marian Shrine (1954)	1 m	Indirect (-)	High	Low	Slight

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
Area 2	RPS 8	St Muredach's College (gates and railings)	6.5 m	Indirect (-)	Negligible	High	Slight
Area 2	31204120	St Muredach's House	34 m	No predicted effect (neutral)	None	Medium	No Change
Area 2	31204121	House	94 m	No predicted effect (neutral)	None	Medium	No Change
Area 3	31204116	School	16.5 m	Indirect (-)	Low	Medium	Slight
Area 3	31204114	St Muredach's Cathedral Cross	17 m	Indirect (-)	Low	High	Slight
Area 3	RPS 29	St Muredach's Cathedral	14.5 m	Indirect (-)	Low	High	Slight
Area 3	Cathedral Road walling	Amenity area (east bank)	0 m	Direct (-)	High	Low	Slight
Area 3	CH05	Riverside stone paved platform adjacent Upper Bridge	0 m	Indirect (-)	Low	Low	Not Significant
Area 3	CH06	Cut dressed stone drainage feature	0 m	Indirect (-)	Low	Low	Not Significant
Area 3 & 5	31204122	House	30 m	No predicted effect (neutral)	None	Medium	No Change
Area 3 & 5	31204123	House	51 m	No predicted effect (neutral)	None	Medium	No Change
Area 3 & 5	31204124	House	61 m	No predicted effect (neutral)	None	Medium	No Change
Area 3 & 5	31204127	Post Box	72 m	No predicted effect (neutral)	None	Medium	No Change
Area 3 & 5	RPS 32 & 31204132	House	29 m	No predicted effect (neutral)	None	Medium	No Change
Area 3 – 5	MA030-074001- / RPS 30 / NIAH 31204112	Religious house - Augustinian friars	13.5 m	Indirect (-)	Low	Medium	Slight
Area 3 – 5	MA030-074002- / RPS 30 / NIAH 31204112	Building	13.5 m	Indirect (-)	Low	Medium	Slight
Area 3 – 5	MA030-074003- / RPS 30 / NIAH 312041123-	Graveyard	13.5 m	Indirect (-)	Low	Medium	Slight

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
Area 3 – 5	MA030-091- ---	Redundant record	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Area 4	Pearse Street (incl Emmet Street in part)	Architectural Conservation Area (ACA)	13 m	Indirect (-)	Low	High	Slight
Area 4	NIAH 31204106 / UCH14	Quays – Emmet Street	0 m	Direct (-)	Medium	Medium	Moderate
Area 4	NIAH 31204110	Miller's House	20 m	Indirect (-)	Low	Low	Not Significant
Area 4	RPS 28 / NIAH 31204108	House (Pair)	13 m	Indirect (-)	Medium	High	Moderate
Area 4	NIAH 31204107	Commercial premises	13 m	Indirect (-)	Medium	Low	Slight
Area 4	NIAH 31204090	Heffernan's House	69 m	No predicted effect (neutral)	None	Medium	No Change
Area 4	NIAH 31204089	Post Box	75 m	No predicted effect (neutral)	None	Medium	No Change
Area 3 - 6	RPS 33 / NIAH 31204104 / UCH12	Upper Bridge	0 m	Indirect (-)	Low	High	Moderate
Area 5 – 6	RPS 35 / NIAH 31204103 / UCH13	Salmon Weir (incl IFI building)	0 m	Direct (-)	Medium	High	Moderate
Area 5	CH07	Gallowglasses Massacre 1586 (site of)	0 m	Potential Direct (-)	Potential Low	Potential Medium	Potential Slight
Area 5	Memorial Monument	Art installation - Ardnaree Massacre (1586) commemoration	0 m	Direct (-)	High	Low	Slight
Area 5	Ridgepool Rd walling	Flood walls (east bank)	0 m	Direct (-)	High	Low	Moderate
Area 5	UCH16	Misc Objects (underwater)	0 m	Potential Direct (-)	Potential High	Potential Low-Medium	Potential Moderate
Area 6	Barret Street (riverside) railings	Raised platforms (west bank)	0 m	Direct (-)	High	Negligible	Not Significant
Area 6	NIAH 31204097	Water Pump	81 m	No predicted effect (neutral)	None	Medium	No Change

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18.4.1.2 Brusna (Glenree)

The proposed works on the Brusna (Glenree) River include hard defences consisting of flood walls and embankments (Max height 1.7 m). Flood walls and embankments are required on both sides of the river upstream of the access bridge to Rathkip/ Shanaghy. Flood walls and embankments are also required on the northwestern side of the river downstream of the bridge. Construction will require ground reduction measures required for foundation of the new walls and drainage as well as ground preparations and reduction for embankments. A reinforced concrete beam is required to span the river on the upstream side of the access bridge to Rathkip/ Shanaghy, which will be supported by two reinforced concrete piers set into the new floodwalls on either side of the river.

There are three recorded SMR/RMP sites located at the Brusna (Glenree) Proposed Scheme study area (including temporary works area at Abbeyhalfquarter). These comprise probable early-late medieval site types of an enclosure (levelled) and two ringforts, one of which is levelled (MA030-076---). Given the distance to the proposed works area there are no predicted impacts on these sites. A number of unrecorded Cultural Heritage receptors are also noted per historic cartographic sources, some with direct impact noted including former fording point and possible weir at the access bridge (CH08 and UCH07), part of a townland boundary (UCH08) and a community amenity installation of a replica ringfort at Rathkip (CH14).

All Cultural Heritage receptors relevant to the Brusna (Glenree) works area are detailed in **Table 18-32** together with an assessment of impact duration, impact type and impact quality.

Table 18-32 Brusna (Glenree) Area Direct and Indirect Impacts on the Cultural Heritage Resource at Construction Stage

Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
MA030-075----	Enclosure	140 m	Not Applicable	No predicted effect (neutral)
MA030-076----	Ringfort - rath	154 m	Not Applicable	No predicted effect (neutral)
MA030-077---	Ringfort - rath	261 m	Not Applicable	No predicted effect (neutral)
CH08	Fording point and stepping stones	0 m	Temporary	Direct (-)
CH09	Weir (River Brusna)	6 m	Temporary	Indirect (-)
CH10	Fording point and stepping stones	88 m	Not Applicable	No predicted effect (neutral)
UCH08	Townland boundary	0 m	Permanent	Direct (-)
UCH07	Possible Weir	0 m	Permanent	Direct (-)
CH11	Rathkip Bridge	31 m	Temporary	Indirect (-)
CH12	Tuck Mill (1 st ed OS)	74 m	Not Applicable	No predicted effect (neutral)
CH13	Flax Mill and sluice (3 rd ed OS)	50 m	Not Applicable	No predicted effect (neutral)
CH14	Rathkip amenity area	0 m	Permanent	Direct (-)

A consideration of the magnitude of impact and the value/sensitivity of the cultural heritage receptor has facilitated a determination of the significance of effect per impact assessment criteria set out in **Section 18.2.5**. The significance of effects at construction stage is set out in

Table 18-33. Each of the identified direct construction stage impacts (CH08, UCH07 fording point and possible weir), part of a townland boundary (UCH08) and replica ringfort (CH14) are considered Slight significance of effects.

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Table 18-33 Brusna (Glenree) Area Significance of Effect on the Cultural Heritage Resource at Construction Phase

Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/Sensitivity of Receptor	Significance of Effect
MA030-075-- --	Enclosure	140 m	No predicted effect (neutral)	None	Medium	No Change
MA030-076-- --	Ringfort - rath	154 m	No predicted effect (neutral)	None	Medium	No Change
MA030-077-- -	Ringfort - rath	261 m	No predicted effect (neutral)	None	Medium	No Change
CH08	Fording point and stepping stones	0 m	Direct (-)	Low	Low	Slight
CH09	Weir (River Brusna)	6 m	Indirect (-)	Low	Low	Slight
CH10	Fording point and stepping stones	88 m	No predicted effect (neutral)	None	Low	No Change
UCH08	Townland boundary	0 m	Direct (-)	Low	Medium	Slight
UCH07	Possible Weir	0 m	Direct (-)	High	Low	Moderate
CH11	Rathkip Bridge	31 m	Indirect (-)	Negligible	Low	No Change
CH12	Tuck Mill (1 st ed OS)	74 m	No predicted effect (neutral)	None	Low	No Change
CH13	Flax Mill and sluice (3 rd ed OS)	50 m	No predicted effect (neutral)	None	Low	No Change
CH14	Rathkip amenity area	0 m	Direct (-)	High	Low	Slight

18.4.1.3 Tullyegan

The Tullyegan stream is a small, mainly open watercourse located at the southern end of Ballina. Flood walls are proposed on either side of the stream up to 2.96 m in height, between the N26 and the railway crossing. An embankment will be installed on the northwestern section where the flood defence ties in with the Iarnród Éireann/Irish Rail embankment. The railway bridge NIAH 31303016 is in active use and will not be modified as part of the Proposed Scheme (flood relief embankment abuts the railway embankment only). Similarly, no modification to Rahan Bridge along the N26 is required to facilitate the works. In both cases the construction stage significance of effect is determined as Not Significant.

There are no recorded SMR/RMP sites located at the Tullyegan Proposed Scheme study area (including temporary works area).

Table 18-34 Tullyegan Area Direct and Indirect Impacts on the Cultural Heritage Resource at Construction Stage

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Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
31303016	Railway bridge	0 m	Permanent	Indirect (-)
CH15	Engine House (pumping)	43 m	Not Applicable	No predicted effect (neutral)
CH16	Rahans bridge	0 m	Permanent	Indirect (-)
UCH09	Townland boundary	0 m	Permanent	Direct (-)

A consideration of the magnitude of impact and the value/sensitivity of the cultural heritage receptor has facilitated a determination of the significance of effect per impact assessment criteria set out in **Section 18.2.5**. The significance of effects at construction stage is set out in **Table 18-41**.

Table 18-35 Tullyegan Area Significance of Effect on the Cultural Heritage Resource at Construction Phase

Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
31303016	Railway bridge	0 m	Indirect (-)	Low	Medium	Not Significant
CH15	Engine House (pumping)	43 m	No predicted effect (neutral)	None	Low	No Change
CH16	Rahans bridge	0 m	Indirect (-)	Low	Low	Not Significant
UCH09	Townland boundary	0 m	Direct (-)	Low	Medium	Slight

18.4.1.4 Bunree/Behy Road

The Bunree is a small watercourse with numerous culverts of varying dimensions. The proposed works include the installation of a new replacement culverts, to follow the existing stream channel.

There are four recorded SMR/RMP sites located within the Proposed Scheme study area at Bunree/Behy Road and two recorded architectural heritage sites. There were no unrecorded Cultural Heritage features identified at this area during field survey. There is no predicted significance of effect on any of these receptors at construction stage.

Table 18-36 Bunree/Behy Road Area Direct and Indirect Impacts on the Cultural Heritage Resource at Construction Stage

Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
MA030-055----	Castle - unclassified	345 m	Not Applicable	No predicted effect (neutral)
MA030-058----	Ringfort - rath	169 m	Not Applicable	No predicted effect (neutral)
MA030-059----	Megalithic tomb - court tomb	141 m	Not Applicable	No predicted effect (neutral)
MA030-093----	Quignalecka	137 m	Not Applicable	No predicted effect (neutral)
RPS 6 / NIAH 31303031	Bridge	328 m	Not Applicable	No predicted effect (neutral)
NIAH 31303032	Store/ warehouse	306 m	Not Applicable	No predicted effect (neutral)
UCH02	Townland boundary	0 m	Permanent	Direct (-)
UCH03	Townland boundary	0 m	Permanent	Direct (-)
UCH04	Townland boundary	0 m	Permanent	Direct (-)
UCH05	Stone culvert	0 m	Permanent	Direct (-)
UCH06	Possible stone culvert	0 m	Permanent	Direct (-)

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A consideration of the magnitude of impact and the value/sensitivity of the cultural heritage receptor has facilitated a determination of the significance of effect per impact assessment criteria set out in **Section 18.2.5**. The significance of effects at construction stage is set out in **Table 18-43**. There is no predicted significance of effect on any of the receptors at construction stage.

Table 18-37 Bunree/Behy Road Area Significance of Effect on the Cultural Heritage Resource at Construction Phase

Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/Sensitivity of Receptor	Significance of Effect
MA030-055-- --	Castle - unclassified	345 m	No predicted effect (neutral)	None	Medium	No Change
MA030-058-- --	Ringfort - rath	169 m	No predicted effect (neutral)	None	Medium	No Change
MA030-059-- --	Megalithic tomb - court tomb	141 m	No predicted effect (neutral)	None	Medium	No Change
MA030-093-- --	Quignalecka	137 m	No predicted effect (neutral)	None	Medium	No Change
RPS 6 / NIAH 31303031	Bridge	328 m	No predicted effect (neutral)	None	High	No Change
NIAH 31303032	Store/ warehouse	306 m	No predicted effect (neutral)	None	Medium	No Change
UCH02	Townland boundary	0 m	Direct (-)	Low	Medium	Slight
UCH03	Townland boundary	0 m	Direct (-)	Low	Medium	Slight
UCH04	Townland boundary	0 m	Direct (-)	Low	Medium	Slight
UCH05	Stone culvert	0 m	Direct (-)	High	Low	Slight
UCH06	Possible stone culvert	0 m	Direct (-)	High	Low	Slight

18.4.1.5 Quignamanger

The Quignamanger is a small watercourse with numerous culverted sections (including in road). The proposed works involve the replacement of the existing culvert which follows Creggs Road for discharge back into the Moy. Flood walls (max height 1.1m) will be installed along the open reach of the channel upstream of Quay Road at the discharge area. The in-road culvert at Quay Road will also be upgraded.

There are three recorded SMR/RMP sites located within the study area at Quignamanger. These comprise two enclosures (possibly of early to late medieval date and a 19th century Knox monument on the Belleek Castle estate, close to the western bank of the River Moy. The Knox monument is also listed on the RPS (Ref. 3/Co007), while the Creteboom shipwreck (RPS 1) is sited beyond the quays in the River Moy.

Table 18-38 Quignamanger Area Direct and Indirect Impacts on the Cultural Heritage Resource at Construction Stage

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Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
MA030-037--- RPS 3/ Co007 / NIAH 31303019	Monument	363 m	Not Applicable	No predicted effect (neutral)
MA030-038----	Enclosure	219 m	Not Applicable	No predicted effect (neutral)
MA030-039----	Enclosure	200 m	Not Applicable	No predicted effect (neutral)
RPS 1 / NIAH 31303025	Shipwreck	158 m	Not Applicable	No predicted effect (neutral)
CH17	Quay View House (levelled)	0 m	Permanent	Direct (-)
UCH01	Townland boundary	0 m	Permanent	Direct (-)

A consideration of the magnitude of impact and the value/sensitivity of the cultural heritage receptor has facilitated a determination of the significance of effect per impact assessment criteria set out in Section 18.2.5. The significance of effects at construction stage is set out in **Table 18-51**. There is no predicted significance of effect on any of the designated receptors at construction stage. There is an identified direct impact on the site of the former Quay View House (CH17) and part of the townland boundary (UCH01), both of which are considered Slight significance of effects at construction stage.

Table 18-39 Quignamanger Road Area Significance of Effect on the Cultural Heritage Resource at Construction Phase

Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
MA030-037- --RPS 3/ Co007 / NIAH 31303019	Monument	363 m	No predicted effect (neutral)	None	High	No Change
MA030-038- ---	Enclosure	219 m	No predicted effect (neutral)	None	Medium	No Change
MA030-039- ---	Enclosure	200 m	No predicted effect (neutral)	None	Medium	No Change
RPS 1 / NIAH 31303025	Shipwreck	158 m	No predicted effect (neutral)	None	Medium	No Change
CH17	Quay View House (levelled)	0 m	Direct (-)	High	Low	Slight
UCH01	Townland boundary	0 m	Direct (-)	Low	Medium	Slight

18.4.2 Operational Phase

A consideration of the operational phase of the Proposed Scheme largely considered the indirect impact of the new infrastructure on the overall setting and amenity value of the identified Cultural Heritage receptors in terms of loss (including spatial interconnectivity) visual character in terms of amenity value including any access modification (positive and negative).

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18.4.2.1 River Moy

The operational phase impacts on the Cultural Heritage receptors identified at the Moy study area are presented in

Table 18-40 and the significance of effect is presented in **Table 18-41**. All identified operational impacts are considered permanent (>60 years).

Table 18-40 Moy Area Direct and Indirect Impacts on the Cultural Heritage Resource at Operational Stage

Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
Area 1	MA030-055---	Castle - unclassified	255 m	Not applicable	Not applicable
Area 1	RPS 31	Dillon Terrace	47 m	Permanent	Indirect (+) (improved presentation of and visual approach to Quay Walls at Emmett St from Dillon Terrace)
Area 1	RPS 4	Ballina House gate-lodge	108 m	Not applicable	Not applicable
Area 1	Bachelors Walk walling	Flood walls (west riverbank)	0 m	Not Applicable	Not Applicable
Area 1	31204099	House	85 m	Not applicable	Not applicable
Area 1	UCH11	Townland boundary	0 m	Permanent	Indirect (-) (partial loss of spatial connectivity)
Area 1	UCH17	Stone steps	0 m	Not applicable	Not applicable
Area 1 – 4	MA030-056001- / RPS 11/ NIAH 31204105 / UCH15	Lower Bridge	0 m	Permanent & Potential Permanent	Indirect (+) & Potential Direct (-) (improved presentation to new flood walling tie in; potential scouring impact to bridge)
Area 1 – 4	MA030-056002- / UCH15 / UCH10	Gatehouse	0 m	Potential Permanent	Potential Direct (-) (potential dislodging of in situ artefactual/material remains, post-construction stage mitigation)
Area 2	Clare Street (Howley Street) walling	Flood walls (east bank)	0 m	Not Applicable	Not Applicable
Area 2	CH01	Stone wall access crossover and steps	0 m	Not Applicable	Not Applicable
Area 2	CH02	Stone wall access crossover and steps	0 m	Not Applicable	Not Applicable
Area 2	CH03	Access steps and pier (2 nd ed OS)	0 m	Not Applicable	Not Applicable
Area 2	CH04	Marian Shrine (1954)	1 m	Permanent	Indirect (-) (new flood walling to immediate rear)

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
Area 2	RPS 8	St Muredach's College (gates and railings)	6.5 m	Not applicable	Not applicable
Area 2	31204120	St Muredach's House	34 m	Not applicable	Not applicable
Area 2	31204121	House	94 m	Not applicable	Not applicable
Area 3	31204116	School	16.5 m	Permanent	Indirect (+) (improved visual amenity via proposed measures in combination with planned public realm at Cathedral Rd)
Area 3	31204114	St Muredach's Cathedral Cross	17 m	Permanent	Indirect (+) (improved visual amenity via proposed measures in combination with planned public realm at Cathedral Rd)
Area 3	RPS 29	St Muredach's Cathedral	14.5 m	Permanent	Indirect (+) (improved visual amenity via proposed measures in combination with planned public realm at Cathedral Rd)
Area 3	Cathedral Road walling	Amenity area (east bank)	0 m	Not Applicable	Not applicable
Area 3	CH05	Riverside stone paved platform adjacent Upper Bridge	0 m	Permanent	Indirect (+) (improved visual amenity via proposed measures in combination with planned public realm at Cathedral Rd)
Area 3	CH06	Cut dressed stone drainage feature	0 m	Permanent	Indirect (+) (improved visual amenity via proposed measures in combination with planned public realm at Cathedral Rd)
Area 3 & 5	31204122	House	30 m	Not applicable	Not applicable
Area 3 & 5	31204123	House	51 m	Not applicable	Not applicable
Area 3 & 5	31204124	House	61 m	Not applicable	Not applicable
Area 3 & 5	31204127	Post Box	72 m	Not applicable	Not applicable
Area 3 & 5	RPS 32 & 31204132	House	29 m	Not applicable	Not applicable
Area 3 – 5	MA030-074001- / RPS 30 / NIAH 31204112	Religious house - Augustinian friars	13.5 m	Permanent	Indirect (+) (improved visual amenity via proposed measures in combination with planned public realm at Cathedral Rd)
Area 3 – 5	MA030-074002- / RPS 30 / NIAH 31204112	Building	13.5 m	Permanent	Indirect (+) (improved visual amenity via proposed measures in combination with planned public realm at Cathedral Rd)

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
Area 3 – 5	MA030-074003- / RPS 30 / NIAH 312041123-	Graveyard	13.5 m	Permanent	Indirect (+) (improved visual amenity via proposed measures in combination with planned public realm at Cathedral Rd)
Area 3 – 5	MA030-091----	Redundant record	Not Applicable	Not Applicable	Not Applicable
Area 4	Pearse Street (incl Emmet Street in part)	Architectural Conservation Area	13 m	Permanent	Indirect (+) (improved presentation of Quay Walls at Emmet Street via removal of modern railings and sensitive blocking of openings)
Area 4	NIAH 31204106 / UCH14	Quays – Emmet Street	0 m	Permanent	Direct (+) (improved presentation of Quay Walls at Emmet Street via making good existing walling and removal of modern railings and sensitive blocking of openings)
Area 4	NIAH 31204110	Miller's House	20 m	Permanent	Indirect (+) (improved presentation of Quay Walls at Emmet Street via removal of modern railings and sensitive blocking of openings)
Area 4	RPS 28 / NIAH 31204108	House (Pair)	13 m	Permanent	Indirect (+) (improved presentation of Quay Walls at Emmet Street via removal of modern railings and sensitive blocking of openings)
Area 4	NIAH 31204107	Commercial premises	13 m	Permanent	Indirect (+) (improved presentation of Quay Walls at Emmet Street via removal of modern railings and sensitive blocking of openings)
Area 4	NIAH 31204090	Heffernan's House	69 m	Not Applicable	Not Applicable
Area 4	NIAH 31204089	Post Box	75 m	Not Applicable	Not Applicable
Area 3 - 6	RPS 33 / NIAH 31204104 / UCH12	Upper Bridge	0 m	Permanent	Indirect (+) (improved presentation of Quay Walls at Emmet Street via removal of modern railings and sensitive blocking of openings)
Area 5 – 6	RPS 35 / NIAH 31204103 / UCH13	Salmon Weir (incl IFI building)	0 m	Permanent	Indirect (+) (improved presentation riverbank along adjacent Ridgepool Rd area via new flood walling and removal of existing railings)
Area 5	CH07	Gallowglasses Massacre 1586	0 m	Potential Permanent	Potential Direct (-) (potential dislodging of in situ artefactual/material remains, post-

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
					construction stage mitigation)
Area 5	CH18	Memorial Monument	0 m	Not Applicable	Not Applicable
Area 5	Ridgepool Rd walling	Flood walls (east bank)	0 m	Not Applicable	Not Applicable
Area 5	UCH16	Misc Objects (underwater)	0 m	Not Applicable	Not Applicable
Area 6	Barret Street (riverside) railings	Flood walls (west bank)	0 m	Permanent	Indirect (+) (improved presentation of riverbank amenity area along Barrett Street via replacement flood walling (incl glass panels), and removal of existing railings)
Area 6	NIAH 31204097	Water Pump	81m	Not applicable	Not applicable

Table 18-41 Moy Area Significance of Effect on the Cultural Heritage Resource at Operational Phase

Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
Area 1	MA030-055-- -	Castle - unclassified	255 m	Not applicable	None	Medium	No Change
Area 1	RPS 31	Dillon Terrace	47 m	Indirect (+)	Negligible	High	Slight
Area 1	RPS 4	Ballina House gate-lodge	108 m	Not applicable	None	High	No Change
Area 1	Bachelors Walk walling	Flood walls (west riverbank)	0 m	Not Applicable	None	Low	No Change
Area 1	31204099	House	85 m	Not applicable	None	Medium	No Change
Area 1	UCH11	Townland boundary	0 m	Indirect (-)	Negligible	Medium	Not Significant
Area 1	UCH17	Stone steps	0 m	Not applicable	Not applicable	Low	No Change
Area 1 – 4	MA030-056001-/ RPS 11/ NIAH 31204105 / UCH15 / UCH10	Lower Bridge	0 m	Indirect (+) & Potential Direct (-)	Low (indirect +) & Potential Low (direct -)	High Medium	Moderate Potential Slight
Area 1 – 4	MA030-056002- / UCH15	Gatehouse	0 m	Potential Direct (-)	Potential Low	Medium	Potential Slight
Area 2	Clare Street (Howley Street) walling	Flood walls (east bank)	0 m	Not Applicable	None	Low	No Change
Area 2	CH01	Stone wall access crossover and steps	0 m	Not Applicable	None	Low	No Change
Area 2	CH02	Stone wall access	0 m	Not Applicable	None	Low	No Change

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
		crossover and steps					
Area 2	CH03	Access steps and pier (2 nd ed OS)	0 m	Not Applicable	None	Low	No Change
Area 2	CH04	Marian Shrine (1954)	1 m	Indirect (-)	High	Low	Slight
Area 2	RPS 8	St Muredach's College (gates and railings)	6.5 m	Not applicable	None	Medium	No Change
Area 2	31204120	St Muredach's House	34 m	Not applicable	None	Medium	No Change
Area 2	31204121	House	94 m	Not applicable	None	Medium	No Change
Area 3	31204116	School	16.5 m	Indirect (+)	Low	Medium	Slight
Area 3	31204114	St Muredach's Cathedral Cross	17 m	Indirect (+)	Low	High	Slight
Area 3	RPS 29	St Muredach's Cathedral	14.5 m	Indirect (+)	Low	High	Slight
Area 3	Cathedral Road walling	Amenity area (east bank)	0 m	Not Applicable	None	Low	No Change
Area 3	CH05	Riverside stone paved platform adjacent Upper Bridge	0 m	Indirect (+)	Low	Low	No Significant
Area 3	CH06	Cut dressed stone drainage feature	0 m	Indirect (+)	Low	Low	Not Significant
Area 3 & 5	31204122	House	30 m	Not applicable	None	Medium	No Change
Area 3 & 5	31204123	House	51 m	Not applicable	None	Medium	No Change
Area 3 & 5	31204124	House	61 m	Not applicable	None	Medium	No Change
Area 3 & 5	31204127	Post Box	72 m	Not applicable	None	Medium	No Change
Area 3 & 5	RPS 32 & 31204132	House	29 m	Not applicable	None	Medium	No Change
Area 3 – 5	MA030-074001- / RPS 30 / NIAH 31204112	Religious house - Augustinian friars	13.5 m	Indirect (+)	Low	Medium	Slight
Area 3 – 5	MA030-074002- / RPS 30 / NIAH 31204112	Building	13.5 m	Indirect (+)	Low	Medium	Slight
Area 3 – 5	MA030-074003- / RPS 30 / NIAH 312041123-	Graveyard	13.5 m	Indirect (+)	Low	Medium	Slight
Area 3 – 5	MA030-091--	Redundant record	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

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Moy Works Area	Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
Area 4	Pearse Street (incl Emmet Street in part)	Architectural Conservation Area	13 m	Indirect (+)	Low	High	Slight
Area 4	NIAH 31204106 UCH14	Quays – Emmet Street	0 m	Direct (+)	Medium	Medium	Moderate
Area 4	NIAH 31204110	Miller's House	20 m	Indirect (+)	Low	Low	Not Significant
Area 4	RPS 28 / NIAH 31204108	House (Pair)	13 m	Indirect (+)	Low	High	Slight
Area 4	NIAH 31204107	Commercial premises	13 m	Indirect (+)	Low	Low	Not Significant
Area 4	NIAH 31204090	Heffernan's House	69 m	Not Applicable	None	Medium	No Change
Area 4	NIAH 31204089	Post Box	75 m	Not Applicable	None	Medium	No Change
Area 3 - 6	RPS 33 / NIAH 31204104/ UCH12	Upper Bridge	0 m	Indirect (+)	Low	High	Slight
Area 5 – 6	RPS 35 / NIAH 31204103 / UCH13	Salmon Weir (incl IFI building)	0 m	Indirect (+)	Low	High	Slight
Area 5	CH07	Gallowglasses Massacre 1586 (site of)	0 m	Potential Direct (-)	Potential Low	Potential Medium	Potential Slight
Area 5	Ridgepool Rd walling	Flood walls (east bank)	0 m	Not Applicable	None	Low	No Change
Area 5	UCH16	Misc Objects (underwater)		Not Applicable	None	Potential Low-Medium	No Change
Area 6	Barret Street (riverside) railings	Flood walls (west bank)	0 m	Indirect (+)	High	Negligible	Slight
Area 6	NIAH 31204097	Water Pump	81 m	Not applicable	None	Medium	No Change

18.4.2.2 Brusna (Glenree)

The operational phase impacts on the Cultural Heritage receptors identified at the Brusna (Glenree) study area are presented in **Table 18-42** and the significance of effect is presented in **Table 18-43**. All identified operational impacts are considered permanent (>60 years).

Table 18-42 Brusna (Glenree) Area Direct and Indirect Impacts on the Cultural Heritage Resource at Operational Stage

Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
MA030-075----	Enclosure	140 m	Not Applicable	No predicted effect (neutral)

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Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
MA030-076----	Ringfort - rath	154 m	Not Applicable	No predicted effect (neutral)
MA030-077---	Ringfort - rath	261 m	Not Applicable	No predicted effect (neutral)
CH08	Fording point and stepping stones	0 m	Not Applicable	No predicted effect (neutral)
CH09	Weir (River Brusna)	6 m	Not Applicable	No predicted effect (neutral)
CH10	Fording point and stepping stones	88 m	Not Applicable	No predicted effect (neutral)
UCH08	Townland boundary	0 m	Permanent	Indirect (-) (partial loss of spatial connectivity)
UCH07	Possible Weir	0 m	Not Applicable	No predicted effect (neutral)
CH11	Rathkip Bridge	31 m	Not Applicable	No predicted effect (neutral)
CH12	Tuck Mill (1 st ed OS)	74 m	Not Applicable	No predicted effect (neutral)
CH13	Flax Mill and sluice (3 rd ed OS)	50 m	Not Applicable	No predicted effect (neutral)
CH14	Rathkip amenity area	0m	Permanent	Direct (-) (partial loss of spatial connectivity of community heritage installation)

Table 18-43 Brusna (Glenree) Area Significance of Effect on the Cultural Heritage Resource at Operational Phase

Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
MA030-075-- --	Enclosure	140 m	No predicted effect (neutral)	None	Medium	No Change
MA030-076-- --	Ringfort - rath	154 m	No predicted effect (neutral)	None	Medium	No Change
MA030-077-- -	Ringfort - rath	261 m	No predicted effect (neutral)	None	Medium	No Change
CH08	Fording point and stepping stones	0 m	No predicted effect (neutral)	None	Low	No Change
CH09	Weir (River Brusna)	6 m	No predicted effect (neutral)	None	Low	No Change
CH10	Fording point and stepping stones	88 m	No predicted effect (neutral)	None	Low	No Change
UCH07	Townland boundary	0 m	Indirect (-)	Negligible	Medium	Not Significant
UCH08	Possible Weir	0 m	No predicted effect (neutral)	None	Low	No Change
CH11	Rathkip Bridge	31 m	No predicted effect (neutral)	None	Low	No Change
CH12	Tuck Mill (1 st ed OS)	74 m	No predicted effect (neutral)	None	Low	No Change

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Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
CH13	Flax Mill and sluice (3 rd ed OS)	50m	No predicted effect (neutral)	None	Low	No Change
CH14	Rathkip amenity area	0 m	Direct (-)	High	Low	Slight

18.4.2.3 Tullyegan

The operational phase impacts on the Cultural Heritage receptors identified at the Tullyegan study area are presented in **Table 18-44** and the significance of effect is presented in **Table 18-45**. All identified operational impacts are considered permanent (>60 years).

Table 18-44 Tullyegan Area Direct and Indirect Impacts on the Cultural Heritage Resource at Operational Stage

Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
31303016	Railway bridge	0 m	Permanent	Indirect (-) (close proximity of new flood infrastructure in relation to original landscape setting which is linked to the built heritage character of the bridge)
CH15	Engine House (pumping)	43 m	Not Applicable	No predicted effect (neutral)
CH16	Rahans bridge	0 m	Permanent	Indirect (-) (close proximity of new flood infrastructure in relation to original landscape setting which is linked to the built heritage character of the bridge)
UCH09	Townland boundary	0 m	Permanent	Indirect (-) (partial loss of spatial connectivity)

Table 18-45 Tullyegan Area Significance of Effect on the Cultural Heritage Resource at Operational Phase

Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
31303016	Railway bridge	0 m	Indirect (-)	Low	Medium	Not Significant
CH15	Engine House (pumping)	43 m	No predicted effect (neutral)	None	Low	No Change
CH16	Rahans bridge	0 m	Indirect (-)	Low	Low	Not Significant
UCH09	Townland boundary	0 m	Indirect (-)	Negligible	Medium	Not Significant

18.4.2.4 Bunree/Behy Road

The operational phase impacts on the Cultural Heritage receptors identified at the Bunree/Behy Road study area are presented in **Table 18-46** and the significance of effect is presented in **Table 18-47**. All identified operational impacts are considered permanent (>60 years).

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Table 18-46 Bunree/Behy Road Area Direct and Indirect Impacts on the Cultural Heritage Resource at Operational Phase

Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
MA030-055----	Castle - unclassified	345 m	Not Applicable	No predicted effect (neutral)
MA030-058----	Ringfort - rath	169 m	Not Applicable	No predicted effect (neutral)
MA030-059----	Megalithic tomb - court tomb	141 m	Not Applicable	No predicted effect (neutral)
MA030-093----	Quignalecka	137 m	Not Applicable	No predicted effect (neutral)
RPS 6 / NIAH 31303031	Bridge	328 m	Not Applicable	No predicted effect (neutral)
NIAH 31303032	Store/ warehouse	306 m	Not Applicable	No predicted effect (neutral)
UCH02	Townland boundary	0 m	Permanent	Indirect (-) (partial loss of spatial connectivity)
UCH03	Townland boundary	0 m	Permanent	Indirect (-) (partial loss of spatial connectivity)
UCH04	Townland boundary	0 m	Permanent	Indirect (-) (partial loss of spatial connectivity)
UCH05	Stone culvert	0 m	Not Applicable	No predicted effect (neutral)
UCH06	Possible stone culvert	0 m	Not Applicable	No predicted effect (neutral)

Table 18-47 Bunree/Behy Road Area Significance of Effect on the Cultural Heritage Resource at Operational Phase

Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
MA030-055-- --	Castle - unclassified	345 m	No predicted effect (neutral)	None	Medium	No Change
MA030-058-- --	Ringfort - rath	169 m	No predicted effect (neutral)	None	Medium	No Change
MA030-059-- --	Megalithic tomb - court tomb	141 m	No predicted effect (neutral)	None	Medium	No Change
MA030-093-- --	Quignalecka	137 m	No predicted effect (neutral)	None	Medium	No Change
RPS 6 / NIAH 31303031	Bridge	328 m	No predicted effect (neutral)	None	High	No Change
NIAH 31303032	Store/ warehouse	306 m	No predicted effect (neutral)	None	Medium	No Change
UCH02	Townland boundary	0 m	Indirect (-)	Negligible	Medium	Not Significant
UCH03	Townland boundary	0 m	Indirect (-)	Negligible	Medium	Not Significant
UCH04	Townland boundary	0 m	Indirect (-)	Negligible	Medium	Not Significant
UCH05	Stone culvert	0 m	No predicted effect (neutral)	None	Medium	No Change
UCH06	Possible stone culvert	0 m	No predicted effect (neutral)	None	Medium	No Change

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18.4.2.5 Quignamanger

The operational phase impacts on the Cultural Heritage receptors identified at the Quignamanger study area are presented in **Table 18-48** and the significance of effect is presented in **Table 18-49**. All identified operational impacts are considered permanent (>60 years).

Table 18-48 Quignamanger Area Direct and Indirect Impacts on the Cultural Heritage Resource at Operational Stage

Receptor Ref.	Type	Distance to Works Area	Impact Duration	Impact Type & Quality (Positive+ / Negative-)
MA030-037--- RPS 3/ Co007 / NIAH 31303019	Monument	363 m	Not Applicable	No predicted effect (neutral)
MA030-038----	Enclosure	219 m	Not Applicable	No predicted effect (neutral)
MA030-039----	Enclosure	200 m	Not Applicable	No predicted effect (neutral)
RPS 1 / NIAH 31303025	Shipwreck	158 m	Not Applicable	No predicted effect (neutral)
CH17	Quay View House (levelled)	0 m	Not Applicable	Not Applicable
UCH01	Townland boundary	0 m	Permanent	Indirect (-)

Table 18-49 Quignamanger Area Significance of Effect on the Cultural Heritage Resource at Operational Phase

Receptor Ref.	Type	Distance to Works Area	Impact Type	Magnitude of Impact	Value/ Sensitivity of Receptor	Significance of Effect
MA030-037-- -RPS 3/ Co007 / NIAH 31303019	Monument	363 m	No predicted effect (neutral)	None	High	No Change
MA030-038-- --	Enclosure	219 m	No predicted effect (neutral)	None	Medium	No Change
MA030-039-- --	Enclosure	200 m	No predicted effect (neutral)	None	Medium	No Change
RPS 1 / NIAH 31303025	Shipwreck	158 m	No predicted effect (neutral)	None	Medium	No Change
CH17	Quay View House (levelled)	0 m	Not Applicable	None	Low	No Change
UCH01	Townland boundary	0 m	Indirect (-)	Negligible	Medium	Not Significant

18.5 Mitigation Measures

Preservation by *avoidance* is the principle mitigatory measure applicable to the Cultural Heritage resource. Where avoidance in whole or in part via design refinement has been exhausted, recourse to preservation in situ or preservation by record shall be the primary applicable mitigation measures, subject to statutory agreement.

For instances where the cultural heritage receptor cannot be avoided but can be incorporated into the Proposed Scheme footprint, without additional ground reduction, drainage measures, or amenity impact such

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that preservation in situ can *avoid or reduce* the level of impact, this measure shall be adopted (subject to statutory agreement). In principle, given the continued sub-surface site preservation (although altered site context), this shall provide a lesser residual significance of effect on same.

For instances where the cultural heritage receptor cannot be incorporated into the Proposed Scheme footprint, preservation *by record* shall be adopted (subject to statutory agreement). This shall involve a full and detailed licenced archaeological excavation (archaeological sites, vernacular and industrial heritage structures) and (extant) built heritage survey records (written, drawn and photographic). In principle, given the creation of a full and detailed archaeological and built heritage record, the results of which shall be publicly accessible and disseminated, this shall provide a lesser residual significance of effect on same.

For instances where the cultural heritage receptor is located outside the Proposed Scheme footprint but within any lands made available for temporary works areas during construction, designation of exclusion zones appropriate to the extent and sensitivity of the receptor will be applied.

18.5.1 Construction Phase

Detailed in **Table 18-50 – Table 18-54** are the proposed mitigation measures for construction stage in relation to the identified Cultural Heritage impacts within the study area. In addition to this it is proposed to carry out licenced archaeological monitoring of all ground reduction/topsoil stripping areas within the design footprint and works areas (including compensatory woodland planting areas, temporary storage/compound areas and in-river works areas), during construction stage.

Any identified built heritage features sited along access routes or immediately adjacent to works areas/along streetscapes shall be protected by temporary hi-visibility fencing measures, where required, to avoid any inadvertent strike damage by vehicular movements. Furthermore, any commemorative wall-mounted plaques or free-standing artwork installed by the local community (in particular along Ridgpool Road) will require careful removal, temporary storage, and reinstatement post-works, in consultation with relevant local community groups. All mitigation measures are subject to statutory prior agreement by National Monuments Service/National Museum of Ireland.

18.5.1.1 River Moy

Table 18-50 Moy Area Construction Stage Mitigation Measures

Works Area	Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
Area 1	MA030-055---	Castle - unclassified	No predicted effect (neutral)	No Change	None required
Area 1	RPS 31	Dillon Terrace	Indirect (-)	Slight	Protective temporary hi-visibility fencing, if required
Area 1	RPS 4	Ballina House gate-lodge	Indirect (-)	Slight	Protective temporary hi-visibility fencing, if required
Area 1	Bachelors Walk walling	Flood walls (west riverbank)	Direct (-)	Moderate	Preservation by record (to include for townland boundary element UCH11): written, digital/photogrammetry survey and drawing, including tie-in with Lower bridge, with photographic built heritage record. To also include sample drawn and survey section through walling prior to removal as part of advance works programme. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library

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Works Area	Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
					On-site archaeological monitoring during wall removal and ground reduction measures for new hard defences, within works area, including in-river
Area 1	31204099	House	No predicted effect (neutral)	No Change	None required
Area 1	UCH11	Townland boundary	Direct (-)	Slight	On-site archaeological monitoring during vegetation clearance, adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river.
Area 1	UCH17	Stone steps	Indirect (-)	Not Significant	Protective temporary hi-visibility fencing around the steps to avoid damage from access along the berm.
Area 1 – 4	MA030-056001-/ RPS 11/ NIAH 31204105 / UCH15 / UCH10	Lower Bridge	Indirect (-) & Potential Direct (-)	Moderate Potential Slight	Protective temporary hi-visibility fencing (with 5m buffer at stone culvert area UCH10 if feasible). Removal of existing flood walling by hand at tie-in points with wingwalls, to avoid any inadvertent damage. On-site archaeological monitoring during adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river. Should any sub-surface/underwater features be encountered these will be preserved in situ or by record (full excavation) as appropriate. Hydrological impact of accretion extension on the water flow to be monitored to avoid potential scouring impact to bridge.
Area 1 – 4	MA030-056002- / UCH15	Gatehouse	Potential Direct (-)	Potential Slight	On-site archaeological monitoring during adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river. Should any sub-surface/underwater features be encountered these will be preserved in situ or by record (full excavation) as appropriate.
Area 2	Clare Street (Howley Street) walling	Flood walls (east bank)	Direct (-)	Moderate	Preservation by record: written, digital/photogrammetry survey and drawing, including tie-in with Lower bridge, with photographic built heritage record. To also include sample drawn and survey section through walling prior to removal

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Works Area	Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
					as part of advance works programme. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library On-site archaeological monitoring during wall removal and ground reduction measures for new hard defences, within works area, including in-river.
Area 2	CH01	Stone wall access crossover and steps	Direct (-)	Moderate	Preservation by record: written, digital/photogrammetry survey and drawing, with photographic built heritage record. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library.
Area 2	CH02	Stone wall access crossover and steps	Direct (-)	Moderate	Preservation by record: written, digital/photogrammetry survey and drawing, with photographic built heritage record. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library.
Area 2	CH03	Access steps and pier (2 nd ed OS)	Direct (-)	Moderate	Preservation by record: written, digital/photogrammetry survey and drawing, with photographic built heritage record. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library.
Area 2	CH04	Marian Shrine (1954)	Indirect (-)	Slight	Protective temporary hi-visibility fencing and exclusion zone during works
Area 2	RPS 8	St Muredach's College (gates and railings)	Indirect (-)	Slight	Protective temporary hi-visibility fencing, if required
Area 2	31204120	St Muredach's House	No predicted effect (neutral)	No Change	None required
Area 2	31204121	House	No predicted effect (neutral)	No Change	None required
Area 3	31204116	School	Indirect (-)	Slight	Protective temporary hi-visibility fencing, if required
Area 3	31204114	St Muredach's Cathedral Cross	Indirect (-)	Slight	None required (in Cathedral grounds)
Area 3	RPS 29	St Muredach's Cathedral	Indirect (-)	Slight	Protective temporary hi-visibility fencing
Area 3	Cathedral Road walling	Amenity area (east bank)	Direct (-)	Slight	Preservation by record: written, and photographic built heritage record of existing amenity area in context of landscape setting (Upper and Lower Bridges). Submission of digital record to

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Works Area	Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
					Irish Architectural Archive (IAA) and Ballina Library. On-site archaeological monitoring during paving/amenity space removal and ground reduction measures for new raised platform, within works area
Area 3	CH05	Riverside stone paved platform adjacent Upper Bridge	Indirect (-)	Not Significant	Protective temporary hi-visibility fencing, if required
Area 3	CH06	Cut dressed stone drainage feature	Indirect (-)	Not Significant	Protective temporary hi-visibility fencing, if required
Area 3 & 5	31204122	House	No predicted effect (neutral)	No Change	None required
Area 3 & 5	31204123	House	No predicted effect (neutral)	No Change	None required
Area 3 & 5	31204124	House	No predicted effect (neutral)	No Change	None required
Area 3 & 5	31204127	Post Box	No predicted effect (neutral)	No Change	None required
Area 3 & 5	RPS 32 & 31204132	House	No predicted effect (neutral)	No Change	None required
Area 3 – 5	MA030-074001- / RPS 30 / NIAH 31204112	Religious house - Augustinian friars	Indirect (-)	Slight	Protective temporary hi-visibility fencing
Area 3 – 5	MA030-074002- / RPS 30 / NIAH 31204112	Building	Indirect (-)	Slight	Protective temporary hi-visibility fencing
Area 3 – 5	MA030-074003- / RPS 30 / NIAH 312041123-	Graveyard	Indirect (-)	Slight	Protective temporary hi-visibility fencing
Area 3 – 5	MA030-091----	Redundant record	Not Applicable	Not Applicable	Not Applicable
Area 4	Pearse Street (incl Emmet Street in part)	Architectural Conservation Area	Indirect (-)	Slight	Protective temporary hi-visibility fencing, if required
Area 4	NIAH 31204106 / UCH14	Quays – Emmet Street	Direct (-)	Moderate	Preservation by record: written, and photographic built heritage record of existing quay walls with railings in context of existing urban landscape setting (Upper and Lower Bridges). Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library. Careful dismantling and rebuilding of existing ashlar walling and glass panel

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Works Area	Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
					inserts per detailed Project Conservation Architect specification and instruction; use of match stone for blocking of current rail openings.
Area 4	NIAH 31204110	Miller's House	Indirect (-)	Not Significant	None required
Area 4	RPS 28 / NIAH 31204108	House (Pair)	Indirect (-)	Moderate	Protective temporary hi-visibility fencing
Area 4	NIAH 31204107	Commercial premises	Indirect (-)	Slight	Protective temporary hi-visibility fencing
Area 4	NIAH 31204090	Heffernan's House	No predicted effect (neutral)	No Change	None required
Area 4	NIAH 31204089	Post Box	No predicted effect (neutral)	No Change	None required
Area 3 - 6	RPS 33 / NIAH 31204104 / UCH12	Upper Bridge	Indirect (-)	Moderate	<p>Protective temporary hi-visibility fencing. Removal of existing flood walling by hand at tie-in points with southerly wingwalls, to avoid any inadvertent damage.</p> <p>On-site archaeological monitoring during adjacent flood wall removal and ground reduction measures for new hard defences, within works area (including in-river). Should any sub-surface/underwater features be encountered these will be preserved in situ or by record (full excavation) as appropriate.</p> <p>Hydrological impact of accretion extension on the water flow to be monitored to avoid potential scouring impact to bridge.</p>
Area 5 – 6	RPS 35 / NIAH 31204103 / UCH13	Salmon Weir (incl IFI building)	Direct (-)	Moderate	<p>Preservation by record: written, and photographic built heritage record of existing walling at Ridgepool Road in context of existing urban landscape setting (Salmon Weir).</p> <p>Removal of existing flood walling by hand at tie-in points at IFI building, to avoid any inadvertent damage.</p> <p>On-site archaeological monitoring during adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river. Should any sub-surface/underwater features be encountered these will be preserved in situ or by record (full excavation) as appropriate.</p>

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Works Area	Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
Area 5	CH07	Gallowglasses Massacre 1586	Potential Direct (-)	Potential Slight	On-site archaeological monitoring during all flood wall removal and ground reduction measures for new hard defences, within works area. Should any sub-surface features be encountered these will be preserved in situ or by record (full excavation) as appropriate.
Area 5	CH18	Memorial Monument	Direct (-)	Slight	Careful removal prior to construction stage to a designated storage location for safe-keeping for re-installation upon completion of works. The removal, storage, and re-installation plan to be agreed with local community group and artist in advance of works.
Area 5	Ridgepool Rd walling	Flood walls (east bank)	Direct (-)	Moderate	Preservation by record: written, digital photogrammetry survey and drawing, including tie-in with Upper Bridge, with photographic built heritage record. To also include sample drawn and survey section through walling prior to removal. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library. On-site archaeological monitoring during wall removal and ground reduction measures for new hard defences, within works area, including in-river.
Area 5	UCH16	Misc Objects (underwater)	Potential Direct (-)	Potential Low-Medium	On-site archaeological monitoring at all in-river works areas. Should any underwater finds be encountered, these will be removed, recorded, stored, and archived as appropriate.
Area 6	Barret Street (riverside) railings	Flood walls (west bank)	Direct (-)	Not Significant	On-site archaeological monitoring during wall removal and ground reduction measures for new hard defences, within works area
Area 6	NIAH 31204097	Water Pump	No predicted effect (neutral)	No Change	None required

18.5.1.2 Brusna (Glenree)

Table 18-51 Brusna (Glenree) Area Construction Stage Mitigation Measures

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Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
MA030-075----	Enclosure	No predicted effect (neutral)	No Change	None required
MA030-076----	Ringfort - rath	No predicted effect (neutral)	No Change	None required
MA030-077---	Ringfort - rath	No predicted effect (neutral)	No Change	None required
CH08	Fording point and stepping stones	Direct (-)	Slight	On-site archaeological monitoring during ground reduction measures for new hard defences, within works area, including in-river
CH09	Weir (River Brusna)	Indirect (-)	Slight	On-site archaeological monitoring during ground reduction measures for new hard defences, within works area, including in-river
CH10	Fording point and stepping stones	No predicted effect (neutral)	No Change	None required
UCH08	Townland boundary	Direct (-)	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction. On-site archaeological monitoring during in-river works.
UCH07	Possible Weir	Direct (-)	Moderate	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction. On-site archaeological monitoring during in-river works.
CH11	Rathkip Bridge	Indirect (-)	No Change	Careful routing of site traffic to avoid inadvertent damage to parapets
CH12	Tuck Mill (1 st ed OS)	No predicted effect (neutral)	No Change	None required
CH13	Flax Mill and sluice (3 rd ed OS)	No predicted effect (neutral)	No Change	None required
CH14	Rathkip amenity area	Direct (-)	Slight	Direct liaison with community to scope feasibility and/or need for re-siting at an appropriate alternative location nearby

18.5.1.3 Tullyegan

Table 18-52 Tullyegan Area Construction Stage Mitigation Measures

Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
31303016	Railway bridge	Indirect (-)	Not Significant	None required
CH15	Engine House (pumping)	No predicted effect (neutral)	No Change	None required
CH16	Rahans bridge	Indirect (-)	Not Significant	Protective temporary hi-visibility fencing to west parapet, if required

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Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
UCH09	Townland boundary	Direct (-)	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction. On-site archaeological monitoring during in-stream works.

18.5.1.4 Bunree/Behy Road

Table 18-53 Bunree/Behy Road Area Construction Stage Mitigation Measures

Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
MA030-055----	Castle - unclassified	No predicted effect (neutral)	No Change	None required
MA030-058----	Ringfort - rath	No predicted effect (neutral)	No Change	None required
MA030-059----	Megalithic tomb - court tomb	No predicted effect (neutral)	No Change	None required
MA030-093----	Quignalecka	No predicted effect (neutral)	No Change	None required
RPS 6 / NIAH 31303031	Bridge	No predicted effect (neutral)	No Change	None required
NIAH 31303032	Store/ warehouse	No predicted effect (neutral)	No Change	None required
UCH02	Townland boundary	Direct (-)	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction.
UCH03	Townland boundary	Direct (-)	Slight	On-site archaeological monitoring during in-stream works.
UCH04	Townland boundary	Direct (-)	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction.
UCH05	Stone culvert	No predicted effect (neutral)	No Change	None required
UCH06	Possible stone culvert	No predicted effect (neutral)	No Change	None required

18.5.1.5 Quignamanger

Table 18-54 Quignamanger Area Construction Stage Mitigation Measures

Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
MA030-037--- RPS 3/ Co007 / NIAH 31303019	Monument	No predicted effect (neutral)	No Change	None required
MA030-038----	Enclosure	No predicted effect (neutral)	No Change	None required

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Receptor Ref.	Type	Impact Type	Significance of Effect	Mitigation Measures
MA030-039----	Enclosure	No predicted effect (neutral)	No Change	None required
RPS 1 / NIAH 31303025	Shipwreck	No predicted effect (neutral)	No Change	None required
CH17	Quay View House (levelled)	Direct (-)	Slight	Preservation by record: written, digital survey and drawing, including tie-in with Upper Bridge, with photographic built heritage record. To also include sample drawn and survey section through walling prior to removal. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library. On-site archaeological monitoring during ground reduction measures for new hard defences, within works area. Followed by preservation by record of any sub-surface foundation remains/upstanding footings (written, digital survey and drawing, photographic record and any archaeological - based recording methods as appropriate – contexts, stratigraphy, finds etc).
UCH01	Townland boundary	Direct (-)	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction.

18.5.2 Operational Phase

18.5.2.1 Moy

There are no predicted impacts on the Cultural Heritage resource at the Moy area that will require mitigation as part of any future maintenance regime for the operational phase (vegetation and condition management of the flood walls or embankments, clearance of debris at culvert inlets, checking of structures and any necessary ad hoc repairs). On-going monitoring of hydrological processes that affect water velocity will be undertaken in order to avoid and prevent any potential scouring impact to the protected in-river structures of Upper Bridge, Lower Bridge, and the Salmon Weir along the River Moy (See **Chapter 12: Water**).

18.5.2.2 Brusna (Glenree)

There are no predicted impacts on the Cultural Heritage resource at the Brusna (Glenree) area that will require mitigation as part of any future maintenance regime for the operational phase (vegetation and condition management of the flood walls or embankments, clearance of debris at culvert inlets, checking of structures and any necessary ad hoc repairs).

18.5.2.3 Tullyegan

There are no predicted impacts on the Cultural Heritage resource at the Tullyegan area that will require mitigation as part of any future maintenance regime during the operational phase (vegetation and condition management of the flood walls or embankments, clearance of debris at culvert inlets, checking of structures and any necessary ad hoc repairs).

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18.5.2.4 Bunree/Behy Road

There are no predicted impacts on the Cultural Heritage resource at the Bunree/Behy Road area that will require mitigation as part of any future maintenance regime during the operational phase (vegetation and condition management of the flood walls or embankments, clearance of debris at culvert inlets, checking of structures and any necessary ad hoc repairs).

18.5.2.5 Quignamanger

There are no predicted impacts on the Cultural Heritage resource at the Quignamanger area that will require mitigation as part of any future maintenance regime during the operational phase (vegetation and condition management of the flood walls or embankments, clearance of debris at culvert inlets, checking of structures and any necessary ad hoc repairs).

18.6 Residual Impacts

Construction and operational stage impacts identified on the Cultural Heritage resource shall be mitigated by the measures outlined in **Section 18.5**. The presence and/or extent of the potential sub-surface archaeological resource within the Proposed Scheme footprint is currently unknown, and as such any measurable impact is largely indeterminable at this stage and can only be postulated as potential impacts and potential significance of effects.

Should archaeological remains be encountered during construction stage, these direct impacts shall be mitigated by either preservation in situ (avoided) or preservation by record (fully archaeologically excavated), per consultations and agreements with NMS. Similarly, any architectural heritage receptors requiring full or partial removal as part of the Proposed Scheme will be mitigated by preservation by record (written, measured, drawn, photographic). Nonetheless any physical loss of a Cultural Heritage receptor is noted as a residual effect both in the context of the loss of the heritage site itself as well as a loss to the overall Cultural Heritage resource on a local, regional and/or national level.

Preservation in situ shall allow for a negligible magnitude of impact albeit on a hitherto unknown value/sensitivity asset, resulting in a potential Not Significant or Slight significance of effect in the context of residual impact on the cultural heritage resource.

Preservation by record shall allow for a high magnitude of impact, albeit ameliorated by the creation of a full and detailed archaeological/built heritage record, the results of which shall be publicly disseminated. This shall result in a potential Slight significance of effect in the context of residual impact on the overall cultural heritage resource.

With consideration of the mitigation measures identified Residual Impacts (post-mitigation) are set out in **Table 18-55** to **Table 18-59**. In some instances of operational stage negative significance of effect, there are no appropriate mitigation measures to reduce or offset the effect, and so the residual impact remains the same as operational stage.

18.6.1.1 Moy

There is Slight negative residual impact noted for the removal of existing flood walls at Bachelors Walk, Clare Street (Howley Street) and Ridgepool Road. However, removal of existing surfaces and walling at the amenity area along Cathedral Road is considered a Slight positive impact with indirect Slight positive impact on the setting of adjacent Cultural Heritage receptors (in the context of future Public Realm plans for this location). Similarly, replacement high quality walling at tie in points with Upper and Lower Bridges as well as the removal of modern railings at the quays along Emmet Street are considered Slight positive residual impact on the receptors in and of themselves as well as indirectly for adjacent receptors (setting).

Table 18-55 Moy Area Residual Impact on the Cultural Heritage resource

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Works Area	Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
Area 1	MA030-055--	Castle - unclassified	No Change	None required	No Change
Area 1	RPS 31	Dillon Terrace	Slight	Protective temporary hi-visibility fencing, if required	No Change
Area 1	RPS 4	Ballina House gate-lodge	Slight	Protective temporary hi-visibility fencing, if required	No Change
Area 1	Bachelors Walk walling	Flood walls (west riverbank)	Moderate	Preservation by record: written, digital/photogrammetry survey and drawing, including tie-in with Lower bridge, with photographic built heritage record. To also include sample drawn and survey section through walling prior to removal as part of advance works. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library On-site archaeological monitoring during wall removal and ground reduction measures for new hard defences, within works area, including in-river.	Slight (overall built riverine resource)
Area 1	31204099	House	No Change	None required	No Change
Area 1	UCH11	Townland boundary	Slight	On-site archaeological monitoring during vegetation clearance, adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river.	Imperceptible
Area 1	UCH17	Stone steps	Not Significant	Protective temporary hi-visibility fencing around the steps to avoid damage from access along the berm.	Imperceptible
Area 1 – 4	MA030-056001-/RPS 11/NIAH 31204105 / UCH15 / UCH10	Lower Bridge	Moderate Potential Slight	Protective temporary hi-visibility fencing (with 5m buffer at stone culvert area UCH10 if feasible). Removal of existing flood walling by hand at tie-in points with wingwalls, to avoid any inadvertent damage. On-site archaeological monitoring during adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river. Should any sub-surface/underwater features be encountered these will be preserved in situ or by record (full excavation) as appropriate. Hydrological impact of accretion extension on the water flow to be monitored to avoid potential scouring impact to bridge.	Slight Potential Not Significant
Area 1 – 4	MA030-056002- / UCH15	Gatehouse	Potential Slight	On-site archaeological monitoring during adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river. Should any sub-surface/underwater features be encountered these will be preserved in situ or by record (full excavation) as appropriate.	Potential Not Significant
Area 2	Clare Street (Howley Street) walling	Flood walls (east bank)	Moderate	Preservation by record: written, digital/photogrammetry survey and drawing, including tie-in with Lower bridge, with photographic built heritage record. To also include sample drawn and survey section through walling prior to removal as part of advance works. Re-use of salvaged stone where feasible. Submission of digital record	Slight (overall built riverine resource)

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Works Area	Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
				to Irish Architectural Archive (IAA) and Ballina Library On-site archaeological monitoring during wall removal and ground reduction measures for new hard defences, within works area, including in-river.	
Area 2	CH01	Stone wall access crossover and steps	Moderate	Preservation by record: written, digital survey and drawing, with photographic built heritage record. Re-use of salvaged stone where feasible Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library.	Not Significant
Area 2	CH02	Stone wall access crossover and steps	Moderate	Preservation by record: written, digital survey and drawing, with photographic built heritage record. Re-use of salvaged stone where feasible Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library.	Not Significant
Area 2	CH03	Access steps and pier (2 nd ed OS)	Moderate	Preservation by record: written, digital survey and drawing, with photographic built heritage record. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library.	Not Significant
Area 2	CH04	Marian Shrine (1954)	Slight	Protective temporary hi-visibility fencing and exclusion zone during works	Not Significant
Area 2	RPS 8	St Muredach's College (gates and railings)	Slight	Protective temporary hi-visibility fencing, if required	No Change
Area 2	31204120	St Muredach's House	No Change	None required	No Change
Area 2	31204121	House	No Change	None required	No Change
Area 3	31204116	School	Slight	Protective temporary hi-visibility fencing, if required	Slight (setting) (+)
Area 3	31204114	St Muredach's Cathedral Cross	Slight	None required (in Cathedral grounds)	Slight (setting) (+)
Area 3	RPS 29	St Muredach's Cathedral	Slight	Protective temporary hi-visibility fencing	Slight (setting) (+)
Area 3	Cathedral Road walling	Amenity area (east bank)	Slight	Preservation by record: written, and photographic built heritage record of existing amenity area in context of landscape setting (Upper and Lower Bridges). Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library. On-site archaeological monitoring during paving/amenity space removal and ground reduction measures for new raised platform, within works area	Slight (setting) (+)
Area 3	CH05	Riverside stone paved platform adjacent Upper Bridge	Not Significant	Protective temporary hi-visibility fencing, if required	No Change
Area 3	CH06	Cut dressed stone	Not Significant	Protective temporary hi-visibility fencing, if required	No Change

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Works Area	Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
		drainage feature			
Area 3 & 5	31204122	House	No Change	None required	No Change
Area 3 & 5	31204123	House	No Change	None required	No Change
Area 3 & 5	31204124	House	No Change	None required	No Change
Area 3 & 5	31204127	Post Box	No Change	None required	No Change
Area 3 & 5	RPS 32 & 31204132	House	No Change	None required	No Change
Area 3 – 5	MA030-074001- / RPS 30 / NIAH 31204112	Religious house – Augustinian friars	Slight	Protective temporary hi-visibility fencing	Slight (setting) (+)
Area 3 – 5	MA030-074002- / RPS 30 / NIAH 31204112	Building	Slight	Protective temporary hi-visibility fencing	Slight (setting) (+)
Area 3 – 5	MA030-074003- / RPS 30 / NIAH 312041123-	Graveyard	Slight	Protective temporary hi-visibility fencing	Slight(setting) (+)
Area 3 – 5	MA030-091- ---	Redundant record	Not Applicable	Not Applicable	Not applicable
Area 4	Pearse Street (incl Emmet Street in part)	Architectural Conservation Area (ACA)	Slight	Protective temporary hi-visibility fencing, if required	Slight (setting) (+)
Area 4	NIAH 31204106 / UCH14	Quays – Emmet Street	Moderate	Preservation by record: written, and photographic built heritage record of existing quay walls with railings in context of existing urban landscape setting (Upper and Lower Bridges). Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library. Careful dismantling and rebuilding of existing ashlar walling and glass panel inserts per detailed Project Conservation Architect specification and instruction; use of match stone for blocking of current rail openings.	Slight (setting) (+)
Area 4	NIAH 31204110	Miller's House	Not Significant	None required	No Change
Area 4	RPS 28 / NIAH 31204108	House (Pair)	Moderate	Protective temporary hi-visibility fencing	Slight (setting) (+)
Area 4	NIAH 31204107	Commercial premises	Slight	Protective temporary hi-visibility fencing	Slight (setting) (+)
Area 4	NIAH 31204090	Heffernan's House	No Change	None required	No Change

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Works Area	Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
Area 4	NIAH 31204089	Post Box	No Change	None required	No Change
Area 3 – 6	RPS 33 / NIAH 31204104 / UCH12	Upper Bridge	Moderate	<p>Protective temporary hi-visibility fencing. Removal of existing flood walling by hand at tie-in points with southerly wingwalls, to avoid any inadvertent damage.</p> <p>On-site archaeological monitoring during adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river. Should any sub-surface/underwater features be encountered these will be preserved in situ or by record (full excavation) as appropriate.</p> <p>Hydrological impact of accretion extension on the water flow to be monitored to avoid potential scouring impact to bridge.</p>	Slight setting (+)
Area 5 – 6	RPS 35 / NIAH 31204103 / UCH13	Salmon Weir (incl IFI building)	Moderate	<p>Preservation by record: written, and photographic built heritage record of existing walling at Ridgepool Road in context of existing urban landscape setting (Salmon Weir). Removal of existing flood walling by hand at tie-in points at IFI building, to avoid any inadvertent damage.</p> <p>On-site archaeological monitoring during adjacent flood wall removal and ground reduction measures for new hard defences, within works area, including in-river. Should any sub-surface/underwater features be encountered these will be preserved in situ or by record (full excavation) as appropriate.</p> <p>Hydrological impact of accretion extension on the water flow to be monitored to avoid potential inadvertent impact to weir structure.</p>	Slight setting (+)
Area 5	CH07	Gallowglasses Massacre 1586	Potential Slight	On-site archaeological monitoring during all flood wall removal and ground reduction measures for new hard defences, within works area. Should any sub-surface features be encountered these will be preserved in situ or by record (full excavation) as appropriate.	Potential Not Significant
Area 5	CH18	Memorial Monument	Slight	Careful removal prior to construction stage to a designated storage location for safe-keeping for re-installation upon completion of works. The removal, storage, and re-installation plan to be agreed with local community group and artist in advance of works.	No change
Area 5	Ridgepool Rd walling	Flood walls (east bank)	Moderate	<p>Preservation by record: written, digital/photogrammetry survey and drawing, including tie-in with Upper Bridge, with photographic built heritage record. To also include sample drawn and survey section through walling prior to removal. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library.</p> <p>On-site archaeological monitoring during wall removal and ground reduction</p>	Slight (setting) (+)

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Works Area	Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
				measures for new hard defences, within works area, including in-river.	
Area 5	UCH16	Misc Objects (underwater)	Potential Moderate	On-site archaeological monitoring at all in-river works areas. Should any underwater finds be encountered, these will be removed, recorded, stored, and archived as appropriate.	Potential Slight (-)
Area 6	Barret Street (riverside) railings	Flood walls (west bank)	Not Significant	On-site archaeological monitoring during wall removal and ground reduction measures for new hard defences, within works area, including in-river	Not Significant
Area 6	NIAH 31204097	Water Pump	No Change	None required	No Change

18.6.1.2 Brusna (Glenree)

Table 18-56 Brusna (Glenree) Area Residual Impact on the Cultural Heritage Resource

Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
MA030-075-- --	Enclosure	No Change	None required	No Change
MA030-076-- --	Ringfort - rath	No Change	None required	No Change
MA030-077-- -	Ringfort - rath	No Change	None required	No Change
CH08	Fording point and stepping stones	Slight	On-site archaeological monitoring during ground reduction measures for new hard defences, within works area, including in-river	Not Significant
CH09	Weir (River Brusna)	Slight	On-site archaeological monitoring during ground reduction measures for new hard defences, within works area including in-river	Not Significant
CH10	Fording point and stepping stones	No Change	None required	Not Significant
UCH08	Townland boundary	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction. On-site archaeological monitoring during in-river works.	Not Significant
UCH07	Possible Weir	Moderate	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction. On-site archaeological monitoring during in-river works.	Potential Slight
CH11	Rathkip Bridge	No Change	Careful routing of site traffic to avoid inadvertent damage to parapets	No Change
CH12	Tuck Mill (1 st ed OS)	No Change	None required	No Change

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Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
CH13	Flax Mill and sluice (3 rd ed OS)	No Change	None required	No Change
CH14	Rathkip amenity area	Slight	Direct liaison with community to scope feasibility and/or need for re-siting at an appropriate alternative location nearby	Not Significant

18.6.1.3 Tullyegan

Table 18-57 Tullyegan Area Residual Impact on the Cultural Heritage Resource

Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
31303016	Railway bridge	Not Significant	None required	Not Significant
CH15	Engine House (pumping)	No Change	None required	No Change
CH16	Rahans bridge	Not Significant	Protective temporary hi-visibility fencing to west parapet, if required	Not Significant
UCH09	Townland boundary	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction. On-site archaeological monitoring during in-stream works.	Not Significant

18.6.1.4 Bunree/Behy Road

Table 18-58 Bunree/Behy Road Area Residual Impact on the Cultural Heritage Resource

Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
MA030-055- ---	Castle - unclassified	No Change	None required	No Change
MA030-058- ---	Ringfort - rath	No Change	None required	No Change
MA030-059- ---	Megalithic tomb - court tomb	No Change	None required	No Change
MA030-093- ---	Quignalecka	No Change	None required	No Change
RPS 6 / NIAH 31303031	Bridge	No Change	None required	No Change
NIAH 31303032	Store/ warehouse	No Change	None required	No Change
UCH02	Townland boundary	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction.	Not Significant
UCH03	Townland boundary	Slight	On-site archaeological monitoring during in-stream works.	Not Significant
UCH04	Townland boundary	Slight	Preservation by record: written, digital drawing and photographic	Not Significant

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Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
			archaeological/built heritage record in advance of construction.	
UCH05	Stone culvert	No Change	None required	No Change
UCH06	Possible stone culvert	No Change	None required	No Change

18.6.1.5 Quignamanger

Table 18-59 Quignamanger Area Residual Impact on the Cultural Heritage Resource

Receptor Ref.	Type	Significance of Effect	Mitigation Measures	Residual Significance of Effect
MA030-037-- -RPS 3/ Co007 / NIAH 31303019	Monument	No Change	None required	No Change
MA030-038-- --	Enclosure	No Change	None required	No Change
MA030-039-- --	Enclosure	No Change	None required	No Change
RPS 1 / NIAH 31303025	Shipwreck	No Change	None required	No Change
CH17	Quay View House (levelled)	Slight	<p>Preservation by record: written, digital survey and drawing, including tie-in with Upper Bridge, with photographic built heritage record. To also include sample drawn and survey section through walling prior to removal. Re-use of salvaged stone where feasible. Submission of digital record to Irish Architectural Archive (IAA) and Ballina Library.</p> <p>On-site archaeological monitoring during ground reduction measures for new hard defences, within works area. Followed by preservation by record of any sub-surface foundation remains/upstanding footings (written, digital survey and drawing, photographic record and any archaeological -based recording methods as appropriate – contexts, stratigraphy, finds etc).</p>	Not Significant
UCH01	Townland boundary	Slight	Preservation by record: written, digital drawing and photographic archaeological/built heritage record in advance of construction.	Not Significant

18.7 Monitoring

18.7.1 Construction Phase

A range of mitigation measures have been outlined for Construction Stage in **Section 18.5**, to include archaeological monitoring of all ground disturbance works.

18.7.2 Operational Phase

There are no predicted impacts on the Cultural Heritage resource that will require monitoring as part of any future maintenance regime for the scheme. On-going monitoring of hydrological processes that affect water velocity will be undertaken in order to avoid and prevent any potential scouring impact to the protected in-river structures of Upper Bridge, Lower Bridge, and the Salmon Weir along the River Moy (see **Section 18.5.2.1**).

18.8 Interactions and Cumulative Effects

Inter-relationships are the impacts and associated effects of different aspects of the Proposed Scheme on the same receptor. The potential for cumulative effects has been considered for the construction and operation of the Proposed Scheme cumulatively with other projects. Please see **Chapter 20 Interactions and Cumulative Effects** for further details on the potential interactions and cumulative effects for Material Assets: Land and Property.

18.9 Schedule of Environmental Commitments

Please see **Chapter 22 Schedule of Environmental Commitments** which sets out all the mitigation and monitoring commitments to minimise the potential impacts for Cultural Heritage during the construction and operational phase of the Proposed Scheme.

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18.10 Chapter References

- Brady Shipman Martin, 2018. *Draft Ballina Public Realm Strategy*, Dublin: s.n.
- Council, T. H., 2023. *Our Place in Time - Heritage Council Strategic Plan 2023-2028*, Kilkenny: The Heritage Council.
- DAHG, 2011. *Architectural Heritage Protection: Guidelines for Planning Authorities*, s.l.: Department of Arts, Heritage and the Gaeltacht.
- DAHG, 2015. *A National Landscape Strategy for Ireland 2015-2025*, s.l.: Department of Arts, Heritage and the Gaeltacht.
- DAHGI, 1999. *Framework and Principles for the Protection of the Archaeological Heritage*, s.l.: Department of Arts, Heritage, Gaeltacht and the Islands.
- DCHG, 2019. *Built & Archaeological Heritage Climate Change Sectoral Adaptation Plan*, s.l.: Department of Culture, Heritage and the Gaeltacht.
- DCHG, 2020. *Culture 2025 - A National Cultural Policy Framework to 2025*, s.l.: Department of Culture, Heritage and the Gaeltacht.
- Department for Communities NI, 2018. *Guidance on Setting and the Historic Environment*, s.l.: Department for Communities NI - Historic Environment Division (HED).
- Department of Culture, Heritage and the Gaeltacht, 2019. *Built and Archaeological Heritage Climate Change Sectoral Adaptation Plan*, Dublin: Government of Ireland.
- DHLGH, 2008. *National Policy on Town Defences*, s.l.: Department of Environment, Heritage & Local Government.
- DHLGH, 2018. *Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment*, s.l.: Department of Housing, Planning and Local Government.
- DHLGH, 2021. *A Living Tradition: A Strategy to Enhance the Understanding, Minding and Handing on Our Built Vernacular Heritage*, s.l.: Department of Housing, Local Government & Heritage.
- DHLGH, 2022. *Heritage Ireland 2030: A Framework for Heritage*, s.l.: Department of Housing, Local Government & Heritage.
- DHLGH, 2022. *Places for People: National Policy on Architecture*, s.l.: Department of Housing, Local Government & Heritage.
- EPA, 2015. *Advice Notes for Preparing Environmental Impact Statements -Draft*, s.l.: Environmental Protection Agency.
- EPA, 2022. *Guidelines on Information to be Contained in Environmental Impact Assessment Reports*, s.l.: s.n.
- European Commission, 2017c. *Environmental Impact Assessment of Projects - Guidance on the Preparation of the Environmental Impact Assessment Report*, s.l.: s.n.
- Heritage England, 2017. *The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition)*, s.l.: Historic England.
- Heritage Office, Mayo County Council, 2023. *Draft County Mayo Heritage Plan and Biodiversity Strategy (2023-2030)*, s.l.: Mayo County Council.
- Historic Environment Scotland, 2016. *Managing Change in the Historic Environment*, s.l.: s.n.
- ICOMOS, 2011. *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*, s.l.: ICOMOS.
- Lewis, S., 1837. *A Topographical Dictionary of Ireland, Vol. 1*, London: S. Lewis & Co..

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Mayo County Council, n.d. *Draft Ballina Town & Environs Local Area Plan (LAP) 2023-2029*, s.l.: Mayo County Council.

MCC, 2022. *Mayo County Development Plan 2022-2028*, s.l.: Mayo County Council.

NMS, D. -, n.d. *Historic Environment Viewer (HEV)*. [Online]
[Accessed 19 December 2023].

O'Neill, N., 2004. *The massacre at Ardnaree, 1586*. [Online]
Available at: http://www.castlebar.ie/mayo_historical_and_archaeological_society/mhas-20040304.shtml
[Accessed 15 1 2024].

Service, N. M., 2023. *Archaeology and Flood Relief Schemes: Guidelines*, Department of Housing, Local Government & Heritage: Government of Ireland.

The Heritage Council, 2023. *Our Place in Time - Heritage Council Strategic Plan 2023-2028*, Kilkenny: The Heritage Council.

The Heritage Council, M. C. C. B. C. o. C., 2020. *Ballina Collaborative Town Centre Health Check*, s.l.: s.n.