

Appendix 1.2

EIA Scoping Response Table

Scoping Response Table

The table below presents the scoping responses collated as part of the informal (non-statutory) EIA scoping consultations held in June 2018 and in June 2020.

Stakeholder	Environmental factor	Comment topic	Date received	Comment(s) received	Arup Response
TII	Traffic and transport	Baseline environment - roads	12-Jul-18	Consultations should be had with the relevant Local Authority/National Roads Design Office with regard to locations of existing and future national road schemes.	This is not applicable to the proposed flood relief scheme development
TII	Traffic and transport	Impacts on M11	12-Jul-18	TII would be specifically concerned as to potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the proposed development. Particular focus on the M11 would be required.	The traffic and transportation assessment has had regard impacts on the national road network including the M11 – Refer to the assessment in Chapter 7 ‘Traffic and Transport.’
TII	Landscape and visual	Visual impacts from existing roads	12-Jul-18	The developer should assess visual impacts from existing national roads.	Section 12.3.3 of Chapter 12 ‘Landscape and Visual’ outlines the significant and sensitive visual aspects of relevance to the proposed scheme, which include: <ul style="list-style-type: none"> • Views along, to and from the river edge, and in particular along River Walk and South Quay; • The setting and character of Avoca River within its urban context, including its quaysides and river banks; • Changes to the character of the Arklow Town Marsh; • The setting and presentation of Arklow Bridge;

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					<ul style="list-style-type: none"> • Changes in the character and amenity of the southern quayside and river setting; and, • Views from nearby residential properties.
TII	Traffic and transport	Cumulative impacts	12-Jul-18	The developer should have regard to any Environmental Impact Statement and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area. The developer should in particular have regard to any potential cumulative impacts.	The traffic and transportation assessment has had regard potential cumulative impacts - Refer to Chapter 7. However, it should be noted that no road developments in the area have been identified as relevant to the proposed development.
TII	Traffic and transport	Assessment methodology	12-Jul-18	The developer, in conducting Environmental Impact Assessment, should have regard to TII Publications (formerly DMRB and the Manual of Contract Documents for Road Works).	The traffic and transportation assessment as outlined in Chapter 7 of the EIAR has had regard to the relevant guidance including TII publications.
TII	Air quality	Assessment methodology	12-Jul-18	The developer, in conducting Environmental Impact Assessment, should have regard to TII's Environmental Assessment and Construction Guidelines, including the Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes (National Roads Authority, 2006).	The air quality assessment has been undertaken in accordance with the TII's Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes - Refer to Chapter 8, Air Quality and Odour.
TII	Noise and vibration	Assessment methodology	12-Jul-18	The EIAR/EIS should consider the Environmental Noise Regulations 2006 (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see Guidelines for the Treatment of Noise and Vibration in National Road Schemes (1st Rev., National Roads Authority, 2004)).	The noise and vibration assessment has been undertaken in accordance with the relevant legislation. Mitigation measures have been proposed, where potential for noise effects are identified.

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TII	Traffic and transport	Assessment methodology	12-Jul-18	It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network and junctions of lower category roads with national roads. TII's Traffic and Transport Assessment Guidelines (2014) should be referred to in relation to proposed development with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of the NRA/TII TTA Guidelines which addresses requirements for sub-threshold TTA.	The traffic and transportation assessment has had been carried out in accordance with relevant guidance.
TII	Traffic and transport	Mitigation measures	12-Jul-18	The designers are asked to consult TII Publications to determine whether a Road Safety Audit is required.	It has been determined that a Road Safety Audit is not required
TII	Traffic and transport	Mitigation measures	12-Jul-18	In the interests of maintaining the safety and standard of the national road network, the EIS should identify the methods/techniques proposed for any works traversing/in proximity to the national road network.	No works are proposed in proximity/traversing the national road network.
TII	Traffic and transport	Construction / Mitigation measures	12-Jul-18	In relation to haul route identification, the applicant/developer should clearly identify haul routes proposed and fully assess the network to be traversed. Separate structure approvals/permits and other licences may be required in connection with the proposed haul route and all structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed.	The traffic and transportation assessment has identified and assessed haul roads - Refer to Chapter 7 Traffic and Transport.

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Irish Water	Front end	Project integration with WWTP	12-Jul-18	While the report references the construction of the interceptor sewers as part of the Arklow Sewerage Scheme, it does not specifically state that the interceptor sewers would be constructed as part of the flood relief scheme	The description of the proposed development (Ch 4 of EIAR) has described the overlapping elements of the proposed scheme and the Arklow Wastewater Treatment Plant Project
Irish Water	Front end	Project integration with WWTP	12-Jul-18	It will be extremely difficult, if not impossible, to construct a new interceptor sewer behind the flood defence walls without damaging them	As outlined in Section 2.6.3 of Chapter 2 Background and Need for the Scheme, a Memorandum of Understanding (MOU) has been jointly prepared by Irish Water and OPW to set out the agreed approach regarding the overlapping elements of both projects. It is agreed that the project that is first able to progress the directly overlapping construction works on site will do so- i.e. the FRS will construct sections of the new interceptor sewer in advance of, or at the same time as the construction of the flood defence walls, to minimise impact.
Irish Water	Landscape and visual	Project integration with WWTP	12-Jul-18	The construction of the interceptor sewer post completion of the flood relief scheme would impact the public realm works planned under the flood relief scheme	As outlined in Section 2.6.3 of Chapter 2 Background and Need for the Scheme, a Memorandum of Understanding (MOU) has been jointly prepared by Irish Water and OPW to set out the agreed approach regarding the overlapping elements of both projects. It is agreed that the project that is first able to progress the directly overlapping construction works on site will do so- i.e. the FRS will construct sections of the new interceptor sewer in advance of, or at the

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					same time as the construction of the flood defence walls, to minimise impact.
Irish Water	Front end	Project integration with WWTP	12-Jul-18	Report does not appear to reference the requirement to construct the interceptor sewers as part of the Flood Relief Scheme	This has now been described and assessed as part of the EIAR.
DCHG	Front end	Guidance	13-Sep-18	<p>Due to the recent transposition of the requirements of Directive 2014/52/EU into Irish planning law with effect from 1st September 2018, the following documents and guidelines should be consulted during preparation of the EIAR:</p> <ul style="list-style-type: none"> • Circular Letter: PL 05/2018 Transposition into Planning Law of Directive 2014/52/EU • Dept. of Housing, Planning and Local Government (2018), Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. <p>Other important guidance documents that should be consulted include the following:</p> <ul style="list-style-type: none"> • Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports, Environmental Protection Agency, 2017. • European Commission guidance document on the implementation of the EIA Directive (Directive 2011/92/EU as amended by 2014/52/EU): Environmental Impact Assessment of 	Relevant guidance has been considered as part of this EIAR. Refer to Section 1.3 in Chapter 1 Introduction for overarching EIA guidance and Section 10.2.2 of Chapter 10, Biodiversity for biodiversity-specific guidance that has been considered.

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				Projects: Guidance on the preparation of the Environmental Impacts Assessment Report, European Commission, 2017	
DCHG	Biodiversity	Pre-planning consultation	13-Sep-18	You should also consult the requirements of this Department in relation to pre-planning at https://www.npws.ie/development%20consultations , in particular the section entitled preapplication consultation/engagement which has recently been updated.	Pre-application consultation has been undertaken with the Department including NPWS. Refer to Section 1.6 of Chapter 1 Introduction for a summary of the consultation undertaken and outcomes of this engagement. Refer also to Section 10.2.4 Biodiversity for further details of consultation undertaken.
DCHG	Interactive effects and MAND	Assessment methodology		Assessment must also be made of significant effects of the project on the interaction between the environmental factors listed in Article 3 of the Directive. Assessment of effect shall also include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters relevant to the project.	Within the EIAR an assessment of interactive effects and major accidents and natural disaster has been undertaken - Refer to Chapter 18 and 20 respectively.
DCHG	Biodiversity	Assessment methodology	13-Sep-18	Assessment of the direct and indirect significant effects of the project on biodiversity should be made, where applicable, with regard to: <ul style="list-style-type: none"> • Natura 2000 sites, i.e. Special Areas of Conservation (SAC) designated under the EC Habitats Directive (Council Directive 92/43/EEC) and Special Protection Areas (SPA) designated under the EC Birds Directive (Directive 2009/147 EC), • Habitats and species protected under Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur), Bird species protected under 	An assessment of biodiversity has been undertaken with regard to the relevant guidance and best practice -Refer to Section 10.2 of Chapter 10, Biodiversity.

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				<p>the Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur),</p> <ul style="list-style-type: none"> • Other designated sites, or sites proposed for designation, such as Natural Heritage Areas and proposed Natural Heritage Areas, Nature Reserves and Refuges for Fauna or Flora, designated under the Wildlife Acts 1976 to 2012, • Species protected under the Wildlife Acts including protected flora • Important bird areas such as those identified by Birdwatch Ireland, • Features of the landscape, which are of major importance for wild flora and fauna, such as those with a “stepping stone” and ecological corridors function, as referenced in Article 10 of the Habitats Directive. • Other habitats of ecological value in a national to local context (such as those identified as locally important biodiversity areas within Local Biodiversity Action Plans and County Development Plans), • Red data book species, • and biodiversity in general 	
DCHG	Biodiversity	Policy	13-Sep-18	Reference should be made to the National Biodiversity Action Plan 2017-2021 and any relevant County Biodiversity Plan, as well as the All Ireland Pollinator Plan 2015-2020.	Relevant policy has been considered as part of this EIAR. Refer to Section 10.2 of Chapter 10, Biodiversity.
DCHG	Biodiversity	Policy	13-Sep-18	It should be noted that the National Biodiversity Action Plan sets out Government policy on nature conservation and includes as Objective 1 to “mainstream biodiversity into decision making”, including for all public authorities to move towards no net loss of biodiversity. It also	Comment noted. This is addressed within the EIAR in Section 10.6.2 of Chapter 10, Biodiversity.

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				requires Local Authorities to develop policies and objectives for the protection and restoration of biodiversity.	
DCHG	Biodiversity Land and Soils Water	Baseline data	13-Sep-18	In order to assess impacts, it may be necessary to obtain hydrological and/or geological data. In particular any impact on water table levels or groundwater flows may impact on wetland sites some distance away. As EU Member States have to report every 6 years on the National resource of habitats and species listed under the Habitats Directive it is important that any impact on such habitats and species both inside and outside of Natura 2000 sites is recorded.	A land and soils and water assessment has been undertaken including baseline data gathering which has considered hydrological and/or geological data - Refer to Chapter 13 and 14 respectively.
DCHG	Biodiversity	Baseline data	13-Sep-18	With regard to scoping for an EIAR for a proposed development, in order to assess impacts on biodiversity, ecological surveys should be carried out of the site of the proposed project including the route of any access roads, pipelines or cables etc. to survey the habitats and species present.	Baseline ecological surveys have been carried out for bats, birds, invasive species, aquatic ecology, terrestrial habitats - Refer to Chapter 10, Biodiversity.
DCHG	Biodiversity Traffic and transport	Study area / scope of assessment	13-Sep-18	Any improvement or reinforcement works required for access and transport anywhere along any proposed haul route(s) should be included in the EIAR and subjected to ecological impact assessment with the inclusion of mitigation measures, as appropriate.	All proposed temporary and permanent works have been assessed as part of the biodiversity impact assessment- refer to Chapter 10, Biodiversity.
DCHG	Biodiversity	Study area / scope of assessment	13-Sep-18	Where ex-situ impacts are possible survey work may be required outside of the development sites.	Surveys have been carried out of all areas where potential situ and ex-situ effects are identified. Refer to Chapter 10, Biodiversity.

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DCHG	Biodiversity	Baseline data	13-Sep-18	Surveys should be carried out by suitably qualified persons at an appropriate time of the year depending on the species being surveyed for. The EIAR should include the results of the surveys, and detail the survey methodology and timing of such surveys. It is expected by this Department, that in any survey methodology used, best practice will be adhered to and if necessary non-Irish methodology adapted for the Irish situation.	Baseline ecological surveys have been carried out at the appropriate timings, unless otherwise stated. Refer to Chapter 10, Biodiversity.
DCHG	Overarching	Scope of assessment	13-Sep-18	The EIAR should cover the whole project, including construction, operation and, if applicable, restoration or decommissioning phases.	All elements of the proposed scheme are described and assessed in the EIAR,
DCHG	Overarching	Scope of assessment	13-Sep-18	Alternatives examined should also be included in the EIAR.	Refer to Chapter 3, Alternatives for a full assessment of the alternatives considered.
DCHG	Biodiversity	Consultation	13-Sep-18	Inland Fisheries Ireland should be consulted with regard to fish species if applicable.	Pre-application consultation has been undertaken with Inland Fisheries Ireland. Refer also to Section 10.2.4 Biodiversity for details of consultation undertaken.

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DCHG	Biodiversity	Baseline data	13-Sep-18	With regard to the scope of baseline data, details of designated sites can be found at www.npws.ie . For flora and fauna the data of the National Parks and Wildlife Service (NPWS) should be consulted at www.npws.ie . Where further detail is required on any information on the website, a data request form should be submitted. This can be found at www.npws.ie/sites/default/files/general/Data%20request%20form.doc . Further information may be found at http://dahg.maps.arcgis.com/home/index.html . Other sources of information relating to habitats and species include that of the National Biodiversity Data Centre (www.biodiversityireland.ie), Inland Fisheries Ireland (www.fisheriesireland.ie), BirdWatch Ireland (www.birdwatchireland.ie) and Bat Conservation Ireland (www.batconservationireland.org). Data may also exist at a County level within the Planning Authority.	Relevant baseline data has been considered as part of this biodiversity assessment. Refer to Chapter 10, Biodiversity.
DCHG	Cumulative	Scope of assessment	13-Sep-18	Effects of the project must be considered cumulatively. Cumulative effects may arise from: <ul style="list-style-type: none"> • The interaction between the various impacts within a single project • The interaction between all of the different existing and/or approved plans and projects in the same area as the proposed project. Two such projects are the planned Arklow Waste Water Treatment Plant and on-going harbour dredging by the Arklow Port Authority. 	Cumulative effects are considered throughout the EIAR, and in Chapter 20, Interactive and Cumulative Effects.

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DCHG	Biodiversity	Mitigation measures	13-Sep-18	The EIAR should refer to features and/or measures to address significant effects on biodiversity. Any losses of biodiverse habitat associated with this proposed development (including access roads and cabling) such as woodland, scrub, hedgerows and other habitats should be mitigated for.	This is provided for in the EIAR- refer to Section 10.6.2 of Chapter 10, Biodiversity.
DCHG	Front end	CEMP	13-Sep-18	<p>For large and complex projects such as this, where environmental management may entail multiple aspects, a project specific Construction Environmental Management Plan (CEMP) may be developed. This will form a framework for all environmental management processes, mitigation measures and monitoring and will include other environmental requirements such as invasive species management measures, if applicable.</p> <p>A designated environmental officer and project ecologist should be appointed, as appropriate for the project. Complete project details, including outline CEMPs need to be provided in the EIAR in order to allow an adequate assessment to be undertaken. Applicants need to be able to demonstrate that CEMPs and other such plans are adequate and effective mitigation, supported by scientific information and analysis, and that they are feasible within the physical constraints of the site.</p>	A CEMP has been prepared and appended to the EIAR - Refer to Appendix 5.1.
DCHG	Front end	Construction methodology	13-Sep-18	No significant details of the project or its construction may be deferred to the post-consent stage as this may suggest that the impacts are not fully known at consent stage. The positions, locations and sizes of construction infrastructure and mitigation, such as settlement ponds, disposal sites	Noted. No significant details of the project or its construction have been deferred to the post-consent stage

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				and construction compounds, may significantly affect European sites, other designated sites, habitats, and species in their own right and could have an effect for example on drainage, water quality, habitat loss, and disturbance. If these are undetermined at time of the assessment, all potential effects of the development on the site are not being considered. If applicants are not in a position to decide the exact location and details of these at time of application, then they need to consider the range of options that may be used in their assessment so that all issues are covered.	
DCHG	Front end	Construction methodology	13-Sep-18	In particular, details of how and where dredged material and other material such as topsoil and construction material will be stored, recovered and/or disposed of, both within and outside the works areas, should be given. Consideration should be given to whether there are existing licensed facilities that could accept the type(s) of waste material(s) generated.	Comment noted. This is addressed within the EIAR in Chapter 5, Construction Strategy, the CEMP in Appendix 5.1 and Chapter 15 Resource and Waste Management.
DCHG	Front end	Construction monitoring	13-Sep-18	This Department recognises the importance of pre- and post-construction monitoring. The applicant should not use any proposed post-construction monitoring as mitigation to supplement inadequate information in the assessment. The EIAR process should identify any pre- and post-construction monitoring which should be carried out. Monitoring results should be made available to the Planning Authority and copied to this Department. A plan of action needs to be agreed at planning stage with the Planning Authority should future results show a significant mortality of birds and/or bat species or impacts to habitats.	Comment noted. The EIAR outlines all pre- and post-construction monitoring which should be carried out. Monitoring measures are outlined throughout the EIAR and summarised in Chapter 21 'Summary.'

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DCHG	Biodiversity	Baseline data	13-Sep-18	Details of bird surveys undertaken to establish the use of the project areas by wintering birds and the potential significance of disturbance if works are undertaken in winter months should be included in the EIAR. Details of breeding bird surveys undertaken and of mitigation required to ensure that birds and their nests, all of which are protected under the Wildlife Acts 1976-2000, are not disturbed or destroyed during the bird nesting season should also be included;	Relevant baseline data has been considered as part of this biodiversity assessment. Refer to Chapter 10, Biodiversity.
DCHG	Biodiversity	Guidance	13-Sep-18	IFI should be consulted with regard to impacts on fish species and the applicant may find it useful to consult their publication entitled “Planning for watercourses in the urban environment” which can be downloaded from their web site at http://www.fisheriesireland.ie/fisheries-management-1/86-planning-for-watercourses-in-theurban-environment-1/file .	Pre-application consultation has been undertaken with Inland Fisheries Ireland. As outlined in Section 10.2 of Chapter 10. Biodiversity, relevant guidance has been consulted and considered in the biodiversity assessment. Refer also to Section 10.2.4 Biodiversity for details of consultation undertaken.
DCHG	Biodiversity	Baseline data	13-Sep-18	Details of botanical and rare plant surveys undertaken within the area of impact of the scheme should be included in the EIAR. The scarce Broad-leaved Cottongrass (<i>Eriophorum latifolium</i>) has been recorded within Arklow Marsh pNHA (NPWS Site Synopsis). The protected plant species <i>Equisetum x moorei</i> is locally abundant from Seapark Bay, Magherabeg to the south side of Arklow town (Curtis & Wilson, 2008). The species <i>Eleocharis parvula</i> , formerly present at the site of Arklow Pond is now presumed extinct (Curtis & Wilson, 2008).	Relevant baseline data has been considered as part of this biodiversity assessment. Refer to Chapter 10, Biodiversity. A survey of bryophytes in the area around Arklow Bridge carried out in November 2020 by Denyer Ecology. A specific habitat survey for <i>Equisetum x moorei</i> undertaken near site compound 6 (SC6) by AQUAFAC.

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DCHG	Biodiversity	Guidance	13-Sep-18	Marine information is available at www.npws.ie/marine . In particular the best practice guidelines at www.npws.ie/marine/best-practice-guidelines should be adhered to.	An assessment of biodiversity, including the aquatic environment has been undertaken with regard to the relevant guidance and best practice - Refer to Chapter 10, Biodiversity.
DCHG	Biodiversity	Baseline data	13-Sep-18	The EIAR should also address the issue of invasive alien plant and animal species, such as Himalayan balsam (<i>Impatiens glandulifera</i>), Rhododendron ponticum, Japanese knotweed (<i>Fallopia japonica</i>), all of which have been found within the project area. Detail of methods required to ensure they are not accidentally introduced or spread during construction must be included in the EIAR. Information on alien invasive species in Ireland can be found at http://invasives.biodiversityireland.ie/ and at http://invasivespeciesireland.com/ .	An Invasive Species Management Plan has been prepared and forms part of the CEMP (Refer to Appendix 5.1).
DCHG	Biodiversity	Scope of assessment	13-Sep-18	Masonry bridges are a valuable habitat for a myriad of saxicolous vascular, bryophyte and lichen species. Many species have as their preferred habitat such structures whilst a smaller, restricted number of rarer species are dependant solely on such structures (usually on the mortar between the masonry). In reference to bryophytes, several Irish Red List species are found on walls or bridges, including <i>Grimmia orbicularis</i> on the NW side of Kilkenny town, <i>Funaria pulchella</i> at its only Irish site in Co Tipperary, <i>Funaria muhlenbergii</i> at its only Irish site in Co Cork, <i>Brachytheciastrum velutinum</i> on a bridge top in Co Wicklow etc. (details can be provided). There are doubtless many other colonies of Red List species on walls and bridges, these are just a few. There is a very good chance that cleaning the mosses off bridges and walls could have a real impact on Irish biodiversity.	A bryophyte survey has been carried out of Arklow Bridge and has been considered in the Biodiversity Impact assessment- Refer to Chapter 10, Biodiversity.

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DCHG	Biodiversity	Guidance	13-Sep-18	<p>Whilst there is no statutory protection for such species, the recommendations below are made in the interests of maintaining this aspect of Ireland’s biodiversity (highlighted in the publication of ‘The Rare and Threatened Bryophytes of Ireland’).</p> <p>Recommendations:</p> <ul style="list-style-type: none"> • Where possible only lime mortar should be used for repointing, grouting etc. (as per NRA guidelines as stated) • The removal of vegetation from the bridge surface, parapets and embankment, should be carried out judiciously so as to avoid the wholesale removal of small vascular plants, bryophytes and lichens – their removal should be deemed only necessary for imperative reasons of engineering integrity. 	It has been determined that the removal of vegetation from Arklow Bridge surface is necessary for imperative reasons of engineering integrity. Refer to Chapter 10. Biodiversity for information.
DCHG	Biodiversity	Guidance	13-Sep-18	<p>From a biodiversity point of view it is important to take note of the EU Green Infrastructure Strategy. Further information on this can be found at: http://ec.europa.eu/environment/nature/ecosystems/docs/green_infrastructure_broc.pdf . Care should be taken to ensure that green infrastructure involves greening existing infrastructure rather than adding built infrastructure to existing biodiversity corridors.</p>	An assessment of biodiversity, including green infrastructure has been undertaken with regard to the relevant guidance and best practice - Refer to Chapter 10, Biodiversity.
DCHG	Biodiversity	Guidance	13-Sep-18	<p>With regard to waterways, it may be useful to consult the IFI publication entitled “Planning for watercourses in the urban environment” which can be downloaded from their web site at: http://www.fisheriesireland.ie/fisheries-management-1/86-planning-for-watercourses-in-theurban-environment-1/file</p>	An assessment of biodiversity, including the aquatic environment has been undertaken with regard to the relevant guidance and best practice - Refer to Chapter 10, Biodiversity.

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DCHG	Biodiversity	Scope of assessment	13-Sep-18	Riparian zones act as ecological corridors as referenced in Article 10 of the Habitats Directive. They enhance connectivity and create links within and between habitat patches. They provide routes along which animals can disperse, as well as certain plant seeds which may be carried by mammals, birds, or even water. They provide areas for birds to nest in. In addition, badger setts may be present. If suitable trees are present, bats may roost there. The riparian zone should be maintained where possible.	The riparian zone has been maintained in so far as possible given the nature of the proposed flood relief scheme. Refer to Chapter 4 Description of the Scheme and Chapter 10, Biodiversity.
DCHG	Biodiversity	Scope of assessment	13-Sep-18	The EIAR should provide an estimate of the length of woodland or treelines that will be lost, if any. Where trees have to be removed there should be suitable planting of native species in mitigation. Trees should not be removed during the nesting season (i.e. March 1st to August 31st).	A tree survey has been undertaken as part of the EIAR for the Arklow Flood Relief Scheme. This baseline information and consideration of tree loss has been considered as part of the biodiversity assessment - Refer to Chapter 10, Biodiversity and Appendix 12.2 (Tree Survey)
DCHG	Biodiversity	Scope of assessment		The impacts of proposed on-going vegetation maintenance every 5 years in the riparian zone must be assessed.	Operational effects (including vegetation maintenance) have been considered as part of the biodiversity assessment - Refer to Chapter 10, Biodiversity.

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	Biodiversity	Policy	13-Sep-18	It is proposed to construct a flood defence embankment 628m in length on the eastern side of the Arklow Town Marsh pNHA. This site has been assigned the status 'B Nationally Important' in the County Wicklow Wetlands Survey II, 2012. It is listed in the Wicklow County Development Plan 2016-2022, where the biodiversity objective (NH5) is to maintain its conservation value. It is listed in the Arklow and Environs Local Area Plan 2018 where the Heritage Objective (HT1) is to maintain the favourable conservation status of all proposed and future Natural Heritage Areas (NHAs) in the plan area in particular the Arklow Marsh and to support environmentally sensitive measures to enhance the understanding and enjoyment of such natural areas and (HT9) to maintain the conservation value of all proposed and future Natural Heritage Areas (NHAs). The scarce Broad-leaved Cottongrass (<i>Eriophorum latifolium</i>) has been recorded growing on this site (NPWS Site Synopsis).	Noted. The conservation status of Arklow Marsh has been considered in the biodiversity assessment- refer to Chapter 10, Biodiversity.
DCHG	Biodiversity	Scope of assessment	13-Sep-18	The construction of the embankment will result in direct loss of habitat, including marsh (GM1), tall-herb swamps (FS2) and reed and large sedge swamps (FS1) (Source: Arklow Flood Relief Habitat and Invasive Species Draft Survey Results Drawing No. 001). Marsh and tall-herb swamps can include pockets of the annexed habitat 'hydrophilous tall herb fringe communities of plains and the montane to alpine levels (EU Habitat Code 6430)' (Fossit, 2000) and the presence or otherwise of this habitat must be examined. The presence or absence of peat formation within Arklow Marsh proposed Natural	A habitat map of Arklow Marsh has been prepared as part of the EIAR, following relevant ecological surveys. The biodiversity impact assessment is based on the findings of these surveys and other available baseline information. Refer to Chapter 10, Biodiversity.

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				Heritage Area Site Code 01931 should be investigated as this will provided further habitat information.	
DCHG	Biodiversity	Scope of assessment	13-Sep-18	Embankment construction may also have impacts on species such as frog (<i>Rana temporaria</i>) and newt (<i>Trituris vulgaris</i>) protected under the Wildlife Acts and kingfishers (<i>Alcedo atthis</i>) protected under the Wildlife Acts and listed on Annex I of the Birds Directive (Council Directive 79/409 EEC).	A habitat map of Arklow Marsh has been prepared as part of the EIAR, following relevant ecological surveys. The biodiversity impact assessment is based on the findings of these surveys and other available baseline information. Refer to Chapter 10, Biodiversity.
DCHG	Front end	Construction methodology	13-Sep-18	The source of suitable material required to construct the outer part of the embankment should be identified, and consideration should be given of the likely significant effects of this aspect of the project in the EIAR. Consideration should be given to whether there are existing licensed facilities that could supply the type(s) of material(s) required; It is proposed to use the dredged material from the Avoca River to construct the interior area of the embankment. To prevent seepage from the embankment causing ground water contamination, the dredge material must be characterised to ensure it is safe to use in embankment construction. Details of dredge material analysis must be included in the EIAR.	Comment noted. This is addressed within the EIAR in Chapter 5, Construction Strategy, the CEMP in Appendix 5.1 and Chapter 15 Resource and Waste Management.
	Land and soils	Scope of assessment		It is not specified whether channels to convey water through the Arklow Marsh pNHA will be necessary but impact of channel excavation, dredging of old channels and on-going channel maintenance on the habitats, species and hydrology of the marsh must be assessed.	Chapter 10, Biodiversity considers potential effects from channel excavation, dredging of old channels and on-going channel maintenance on the habitats, species and hydrology of the marsh must be assessed

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DCHG	Water	Scope of assessment	13-Sep-18	Impacts on any streams (i.e. Sheepbanks stream) or other watercourses which flow via Arklow Town Marsh should be assessed.	This is addressed in Chapter 14 Water.
DCHG	Land and soils Water	Baseline data Scope of assessment	13-Sep-18	Dredging the river channel to a depth of approximately 1 metre for approximately 325 metres upstream of Arklow Bridge may result in the lowering of the water table locally which may have significant impacts on the hydrology of Arklow Town Marsh. Channel dredging will be repeated every 5 years and so impacts will be permanent. Impact assessment will require collection of baseline hydrological and hydrogeological data. Impacts of the proposed project in combination with the future impacts of climate change on the hydrology and hydrogeology of the marsh should be assessed.	This is addressed in Chapter 14 Water
DCHG	Biodiversity Landscape and visual	Scope of assessment	13-Sep-18	Habitat on the north bank of the river adjacent to the bridge has been mapped as a treeline. If treelines are more than 4m wide at the base they should be considered as narrow stretches of woodland. It should also be ascertained whether the habitat in this area contains the priority annex I habitat ' <i>Alluvial forests with Alnus glutinosa & Fraxinus excelsior</i> ' (EU Habitat Code 91EO). The impacts on this woodland area must be assessed.	Refer to Chapter 10, Biodiversity for information on the assessment of tree loss as part of the proposed scheme and proposed mitigation measures.
DCHG	Biodiversity	Scope of assessment	13-Sep-18	The impacts of increased human activity on the Arklow Marsh pNHA should be assessed, both during construction of the embankment and due to the provision of a new walking route on the top of it. In relation to the above, where significant effects are identified, suitable mitigation measures must be proposed.	It is not proposed to provide a new walking route on top of the embankment. Effects of the construction phase and operational phase of the proposed scheme on Arklow marsh are considered fully in Chapter 10, Biodiversity.

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DCHG	Land and soils Water	Scope of assessment	13-Sep-18	<p>It is proposed to construct a flood defence embankment 628m in length on the eastern side of the Arklow Town Marsh. Impacts to the hydrology and hydrogeology of Arklow Ponds and important habitats and species therein much be assessed.</p> <p>Arklow Ponds are listed as a nationally important bird site (Crowe, 2005). Arklow Ponds which have been described in the County Wicklow Wetlands Survey 2011 and 2012 as an eroded and much modified dune system still retaining typical dry and wet areas, one of which runs into a lagoonal lake at the south end, and has been given a conservation rating of C+ (County Conservation Value) (Data from County Wicklow Wetlands Survey 2011 and 2012 (Data source: Wicklow County Council) held by Wetland Surveys Ireland - Map of Irish Wetlands, www.WetlandSurveysIreland.com, accessed 23rd July, 2018).</p>	This is addressed in Chapter 14 Water.
DCHG	Land and soils Water	Baseline data	13-Sep-18	It should be investigated whether any surface water streams flow via Arklow Town Marsh to Arklow ponds (i.e. Sheepbanks stream) and the impact of the embankment on these, if any.	This is addressed in Chapter 14 Water.
DCHG	Land and soils Water	Baseline data Scope of assessment	13-Sep-18	It is proposed to put sheetpiles along the centreline of the embankment to cut off groundwater as well as a land drain on the dry side of the embankment. Groundwater connection between Arklow Town Marsh and Arklow Ponds must be investigated and impacts of cutting off groundwater flow assessed.	Refer to Chapter 4, Description of the Proposed Scheme' for a full description of the proposed works in Arklow Marsh. Potential effects on groundwater flow are addressed in Chapter 14 Water.

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DCHG	Water	Scope of assessment	13-Sep-18	Currently medium and low probability river flood events are conveyed through Arklow Town Marsh and extend to Arklow Ponds (source: https://www.floodinfo.ie/map/floodmaps/), however after embankment construction flood waters will be diverted out at the side of Arklow Bridge. Impacts to the hydrology of Arklow Ponds must be assessed. Where significant effects are identified, suitable mitigation measures must be proposed.	This is addressed in Chapter 14 Water.
DCHG	Biodiversity Water	Scope of assessment	13-Sep-18	The Avoca Estuary covers an area of 0.17km ² and divides the town of Arklow, Co. Wicklow. It is a relatively small, narrow estuary with a high degree of modification to the lower two thirds (i.e. area below the bridge) (CRFB, 2008). Estuaries (EU Habitat Code 1130) are listed on Annex I of Habitats Directive and therefore impacts of the project on this habitat must be assessed. The Annex I habitat 'Mudflats and sandflats not covered by seawater at low tide (1140)' is often a subset of the Annex I habitat Estuaries and impacts on this habitat must also be assessed	Section 10.5.4 of Chapter 10, Biodiversity includes an assessment of the proposed scheme on all habitats in the study area.
DCHG	Biodiversity Water	Scope of assessment	13-Sep-18	Cumulative impacts on these habitats must be assessed including maintenance dredging of the harbour entrance and channel every 7 to 10 years by Arklow Port Authority and the planned Waste Water Treatment Plant. Where significant effects are identified, suitable mitigation measures must be proposed.	Cumulative effects are considered throughout the EIAR, and in Chapter 20 Interactive and Cumulative Effects.
DCHG	Biodiversity	Scope of assessment	13-Sep-18	Otters (<i>Lutra lutra</i>) are protected under the Wildlife Acts and listed on Annexes II and IV of the Habitats Directive. This project has potential have significant effects on otters	The potential for effects on otters as a result of the construction and operational phase of the proposed scheme has been assessed as

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				(disturbance and/or removal of otter holts/couches and foraging habitat) and impacts must be assessed. In general, a river system with a varied channel structure, located within a floodplain that has not been extensively drained, is likely to provide ideal conditions for otters (SNH, 2006). One of the main threats identified in the threat response plan for otter is habitat destruction (NPWS, 2009). A 10 m riparian buffer on both banks of a waterway is considered to comprise part of the otter habitat. However, it should also be noted that holts and couches may be found some distance from freshwater and in certain areas the availability of frogs, particularly in spring, will draw otters to marshes and ponds several hundred metres from their usual territory (NPWS, 2009).	part of the EIA. Refer to Chapter 10, Biodiversity.
DCHG	Biodiversity	Derogation license	13-Sep-18	Full details of the surveys undertaken to assess the ecological impacts should be included in the EIAR. Where it is not possible to identify a means of avoiding risk completely, consideration should be given as to whether a derogation licence from the Minister under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011-2015 is required.	Refer to Section 10.3 of Chapter 10, Biodiversity for information on the ecological surveys carried out to inform the EIA.
DCHG	Biodiversity	Derogation license	13-Sep-18	Applications for a derogation licence should be made in writing, including survey results and proposed mitigation measures, to Wildlife Licensing Unit, National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht. An application for such a derogation licence should be made in advance of seeking planning permission for works. This will ensure that full consideration can be given to the impacts of the proposed project on the species and to avoid the possibility of delay to the proposed	Comment noted. An application for derogation license has been made to the NPWS and the derogation license was received. Refer to Chapter 10, Biodiversity for further information.

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				project or of a refusal of a derogation licence which would prevent the works being carried out as planned.	
DCHG	Biodiversity	Scope of assessment	13-Sep-18	Bat species are strictly protected under Annex IV of the Habitats Directive. This project has potential to significantly affect bats (disturbance and/or removal of breeding and resting places and foraging habitat) and impacts must be assessed. Works to Arklow Bridge, removal of nearby islands with tree cover and removal of bankside vegetation could have impacts on bats. Full details of the surveys undertaken to assess the ecological impacts should be included in the EIAR.	Relevant baseline data has been considered as part of this biodiversity assessment. Refer to Section 10.3 of Chapter 10, Biodiversity for information on the ecological surveys carried out to inform the EIA.
DCHG	Biodiversity	Mitigation measures	13-Sep-18	Suggested mitigation measures must be included in the EIAR. Mitigation in relation to artificial lighting required to minimise the use of the area by bat species must be clearly outlined. Where so called bat friendly lighting is proposed as mitigation then it should be proven to work as mitigation. Where it is not possible to identify a means of avoiding risk completely, consideration should be given as to whether a derogation licence from the Minister under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011-2015 is required.	Where appropriate, relevant mitigation measures have been included with regard bats - Refer to Section 10.6.6 of Chapter 10, Biodiversity.

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DCHG	Biodiversity	Derogation license	13-Sep-18	Applications for a derogation licence should be made in writing, including survey results and proposed mitigation measures, to Wildlife Licensing Unit, National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht. An application for such a derogation licence should be made in advance of seeking planning permission for works. This will ensure that full consideration can be given to the impacts of the proposed project on the species and to avoid the possibility of delay to the proposed project or of a refusal of a derogation licence which would prevent the works being carried out as planned.	Comment noted. An application for derogation license has been made to the NPWS and the derogation license was received. Refer to Chapter 10, Biodiversity for further information.
DCHG	Biodiversity	Scope of assessment	13-Sep-18	<p>Lamprey ammocoetes have been found directly upstream of the M11 Motorway bridge which has suggested that ammocoetes may be present downstream of the bridge. Several adult river lamprey were found during surveys by the IFI in 2008. Lamprey species are listed under Annex II of the Habitats Directive.</p> <p>Details of lamprey and lamprey habitat surveys in areas of impact, and in the nearby back drains that will be impacted directly (dredged) should be included in the EIAR. Information on the presence and abundance of these Annex II species, at various life stages, and of their habitats, is required to assess the significance of impacts and design mitigation, including specifying any seasonal restrictions on works necessary should be given. The on-going impacts of river dredging, and maintenance of the debris and gravel traps on Lamprey species must be assessed. Where significant effects are identified, suitable mitigation measures must be proposed.</p>	The potential for effects on Lamprey has been considered in the EIAR- refer to Chapter 10, Biodiversity.

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DCHG	Biodiversity	Appropriate assessment	13-Sep-18	The Department notes that while the project may not interact with European sites, nevertheless Appropriate Assessment screening must be carried out.	A report for screening for appropriate assessment has been prepared for the Arklow Flood Relief Scheme.
DCHG	Biodiversity	Appropriate assessment	13-Sep-18	Guidance on AA is available in the Departmental guidance document on Appropriate Assessment, which is available on the NPWS web site at www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf and in the EU Commission guidance entitled “Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC” which can be downloaded from http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf However CJEU and Irish case law has clarified some issues and should also be consulted.	The report for screening for appropriate assessment has been prepared with regard to the relevant guidance and best practice

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DCHG	Biodiversity	Appropriate assessment	13-Sep-18	<p>In order to carry out the appropriate assessment screening, information about the relevant Natura 2000 sites including their conservation objectives will need to be collected. Details of designated sites and species and conservation objectives can be found on www.npws.ie/. Site-specific, as opposed to generic, conservation objectives are now available for some sites. Each conservation objective for a qualifying interest is defined by a list of attributes and targets and are often supported by further documentation. Where these are not available for a site, an examination of the attributes that are used to define site-specific conservation objectives for the same QIs in other sites can be usefully used to ensure the full ecological implications of a proposal for a site's conservation objective and its integrity are analysed and assessed. It is advised, as per the notes and guidelines in the site-specific conservation objectives, that any reports quoting conservation objectives should give the version number and date, so that it can be ensured and established that the most up-to-date versions are used in the preparation of Natura Impact Statements and in undertaking appropriate assessments.</p>	<p>The report for screening for Appropriate Assessment has been prepared with regard to the latest baseline data and NPWS information in relation to European sites</p>

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Baribo Properties	Front end	Construction methodology	20-Jul-18	1. The BRIDGE “The floor of Arklow Bridge would be lowered by approximately 1m with underpinning of the bridge and scour protection for the bridge piers being undertaken; Construction of a debris trap (and a gravel trap), upstream of Arklow Bridge.” “Channel improvement works comprising dredging to a depth of approximately 1m within the river channel; - We are pleased that these works would release the flow of water downstream from Avoca and decrease the risk of flooding caused by the bridge.	Comment noted.
Baribo Properties	Front end Water	Scheme description Flood risk	20-Jul-18	• Local alterations to the river channel on South Quay (downstream of the Arklow Bridge);” - This proposal includes removing the bend in the river, which has no history of flooding, and we query if this widening of the road would result in facilitating increased HGV activity on the South Quay road putting residents who regularly walk and cycle with children on this river walk at dangerous risk of accident. This would be of great concern.	It is no longer proposed to remove the ‘pinch point’ – or the bend of the river- as part of the proposed scheme.
Baribo Properties	Water	Flood risk	20-Jul-18	Removing the existing historic Tyrell Shipyard Slipway and Rock Pylons. The slipway and rock pylons currently provide very effective flood protection to South Quay and were very useful since 1977 when the removal of “The Cemetery” – a protection in the river situated between the North Quay and North Wall – caused severe flooding after a very severe storm that year. A lot of public money had been spent on improving this protection in recent years redirecting storm waters away from South Quay and local residences. It would be a concern that this safety measure would be removed.	Comment noted- refer to Chapter 4 Description of the scheme. A flood wall is proposed to be constructed at the Tyrell Yard Slipway.

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Baribo Properties	Water	Flood risk	20-Jul-18	Widening the river and forcing higher waters to flow nearer the complex without the slipway protection may increase the risk of flooding as an unintended consequence. Please confirm that you will indemnify our development in the event that the OMC loses the ability to get flood cover which has never been a difficulty to the current day.	Comment noted- refer to Chapter 4 Description of the scheme. A flood wall is proposed to be constructed at the Tyrell Yard Slipway.
Baribo Properties	Population and human health	Amenity	20-Jul-18	Anchor Mews was built on the site of the famous Tyrrell's shipyard which used this slipway over many years so its removal means the loss of a renowned Arklow historical industrial reference point. Also many of the residents along the South Quay purchased their apartments on the basis that the slipway provided a public amenity and access to the river. Its removal will be to the detriment of local leisure and amenity activities.	This is noted. Please refer to EIAR for information on proposed river access in the operational phase of the proposed scheme.
Baribo Properties	Water	Flood risk	20-Jul-18	Installation of flood barriers and gates around the port to accommodate access requirements; We would like to know what design input will local residents be able to influence to ensure the future enjoyment of the amenity and river viewing points which they will be placed to block.	Access to the river at existing slipways will be maintained at Arklow Harbour.
GSI	Water	Flood risk	09-Jul-20	National Aquifer and Recharge maps indicate a locally important gravel aquifer in the vicinity of the proposed works at the Arklow Marsh. The Groundwater Vulnerability map indicates the area covered is variable. We would therefore recommend use of the Groundwater Viewer to identify areas of High Vulnerability in your EIAR.	Relevant baseline data has been considered as part of the Water impact assessment. Refer to Chapter 14, Water.

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GSI	Land & Soil	Geohazards	09-Jul-20	the Irish coast is vulnerable to tsunamis from submarine landslides and distant earthquakes. Associated levels of coastal flooding are expected to be similar to those seen during storm surges, but with much more energetic inundation and a much shorter time to react. Ireland participates in an international tsunami detection and alerting system, coordinated by the Intergovernmental Oceanographic Commission of UNESCO. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent and we encourage the use of our data when doing so.	Noted.
GSI	Material Assets	Sustainability	09-Jul-20	Geological Survey Ireland highlights the consideration of mineral and aggregate resources and potential resources as a material asset which should be explicitly recognised within the environmental impact assessment process. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in the proposed flood relief scheme are sustainably sourced from properly recognised and licenced facilities.	Relevant baseline data has been considered as part of the resource and waste management impact assessment. Refer to Chapter 15, Resource and Waste Management.