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PROJECT: Stephen Street Cultural Plaza.

Screening for Appropriate Assessment
Report.

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1 INTRODUCTION

Envest was commissioned by Sligo County Council to complete a Stage 1 Screening for Appropriate Assessment report for the proposed Stephen Street Cultural Plaza development. This AA Screening Report addresses the potential for construction works and the operational phase of the proposed project to impact on Natura 2000 sites within 15Km of the development site.

The purpose of this Screening Report is to inform the Appropriate Assessment process which is carried out by the appropriate competent authority, Sligo County Council. Appropriate Assessment (AA) is an assessment of whether a plan or project, alone and in combination with other plans or projects, has the potential for significant effects on a designated European Site in view of the site's conservation objectives.

The report was drafted by an experienced and qualified ecologist, with specific reference to the European Sites within the zone of influence of the proposed project; taking account the qualifying interests and conservation objectives of these designations. The assessment is determined based on the project description, details provided by Sligo Co. Co., consultation with various stakeholders and a site visit.

2 THE APPROPRIATE ASSESSMENT PROCESS

Legislative Context

The assessment of impacts on designated European sites i.e. Special Protection Areas for birds (SPAs) and Special Areas of Conservation (SACs), derives from the EU Directive on the Conservation of Habitats, Flora and Fauna (92/43/EEC), more commonly known as the '*The Habitats Directive*' which provides legal protection for habitats and species of European importance. SPAs and SACs are sites that form part of a network, known as Natura 2000 sites, designated across Europe in order to protect biodiversity within the European Union (EU).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment: '*Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions*

of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the concerned and, if appropriate, after having obtained the opinion of the general public.'

Article 6(4) states: *'If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.'*

Appropriate Assessment Methodology

Article 6(3) of the EU Habitats Directive (92/43/EEC) defines the requirement for Appropriate Assessment of certain plans and projects. In order to inform the requirements of this Screening Report the following guidance documents have been referred to:

Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 revision);

Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10;

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;

Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, 2000);

Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the European Commission (European Commission, January 2007).

The Department of the Environment Heritage and Local Government Guidelines (DELHG, 2009), outlines the European Commission's methodological guidance (EC, 2002). This guidance promotes a four-stage process in completing an AA and outlines the issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

Stage 1: Screening - Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3):

whether a plan or project is directly connected to or necessary for the management of the site, and

whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.

A project may be "screened-in" if there is a possibility or uncertainty of significant adverse effects upon the European site, thus the process must proceed to Stage 2 (AA). If there is no evidence to suggest significant effects due to the proposed plan or development the project is "screened-out" and AA is not required.

Stage 2: Appropriate Assessment - This stage considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a Natura 2000 site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects. A Natura Impact Statement (NIS) containing a professional scientific examination of the proposal is produced and includes any mitigation measures to avoid, reduce or offset negative impacts.

Stage 3: Alternative Solutions - Where adverse effects on a European Site are identified in the AA process (detailed in the NIS), despite the prescription of mitigation, this third stage examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European Site.

Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)/Derogation - This stage is required where an alternative solution is not available. In this situation, the project can only proceed for Imperative Reasons of Overriding Public Interest (IROPI), despite the plan or project resulting in adverse effects on European Site(s). This stage provides for an assessment of compensation measures to maintain or enhance the overall coherence of the Natura 2000 network. The Commission must be informed of the compensatory measures. Compensatory measures must be practical, implementable, likely to succeed, proportionate and enforceable, and they must be approved by the Minister.

Consultation - Consultation was undertaken with the Developments Application Unit (DAU) of National Parks and Wildlife Service (NPWS), Inland Fisheries Ireland (IFI) and Sligo County Council Heritage Officer (Siobhan Ryan). See the responses from IFI and Sligo County Council Heritage Officer presented in APPENDIX I. The Sligo County Council Heritage Officer (Siobhan Ryan) requested that a bat survey be undertaken in the proposed development area and appended to the AA screening to meet the obligations for the protection of bat species as listed

in Annex IV of the Habitats Directive. The findings of the Bat Survey is presented in APPENDIX III.

Desktop Review - A desktop evaluation of information relating to Natura 2000 sites within 15 km of the proposed project were identified and reviewed using the National Parks and Wildlife Service (NPWS) online map viewer. The EPA Envision mapping system and Google Maps were used to complement the information available from the NPWS system, and identify, where possible, habitats and possible ecological constraints of the proposed site.

Site Visit - A walkover of the proposed site was undertaken on 30th August 2018 by an Envest Ecologist in which habitats on site were assessed and the suitability of the site to support plants, animals or habitats of note was also considered. As appropriate, habitats have been either (i) categorised or (ii) discussed in the context of their Fossitt (2000) classification (*A Guide to Habitats in Ireland*).

This screening report addresses the following elements:

Description of the proposed project.

Identification of Natura 2000 sites within 15km of the proposed project site with screening of such sites for potential individual and cumulative impacts of the proposed works on their conservation objectives.

Assessment of significance of the proposed works on the identified Natura 2000 sites.

This screening report provides the necessary information to enable the Competent Authority to screen the proposed project for the requirement to proceed to Stage 2 Appropriate Assessment, which is required if the effects of the proposed project are deemed to be significant, potentially significant or uncertain.

3 DESCRIPTION OF THE PROPOSED PROJECT

The site of the existing car park has been identified as being suitable for redevelopment due to its central location and attractive surrounding environment. Recent years have seen an increasing use of the site for cultural and entertainment purposes and the future vision involves the permanent redevelopment of the area as an urban square suitable to accommodate a variety of open-air activities such as markets and other events.

The Project will consist of the redevelopment and change of use of the Stephen Street car park, Rathquarter Td, Sligo into a pedestrianised cultural plaza. The proposed works include the following:

1. Hard landscaping consisting of granite paving and granite benches;

2. Soft landscaping consisting of formal reinforced grass lawns, play area, and the planting of low shrub beds;
3. Removal and replanting of trees;
4. The provision of a fixed canopy to provide a permanently covered space (final details of which to be subject to architectural competition);
5. The provision of a retractable canopy to provide occasional covered space at the western corner of the site;
6. Interpretative signage;
7. All associated site development works.

The proposed works is indicated in Figure 1 below.

Figure 1: Proposed development



Construction Methodology:

The design of the project has taken into account that all necessary measures and best practice will be put in place to avoid any impacts to the Natura 2000 sites occurring.

Construction aspects will include:

1. Deliver, spread, level and compact stone fill to site (screened, free from invasive species and geologically compatible)
2. Construct concrete base for structure.
3. Construct Block/Stone/Slate structure.
4. Ensure maintenance of existing drainage patterns.
5. Construct natural stone paving

The construction phase will be approximately 52 weeks and construction will be in accordance with low impact principles, appropriate Health and Safety standards and in compliance with Sligo Co. Co. Safety Management System. Machinery used will be low impact; a dumper, digger and roller. A site compound will be required, with materials securely stored on-site and no waste arisings will occur.

4 SCREENING ASSESSMENT

This stage of the process identifies any likely significant effects upon European Sites from the proposed project, either alone or in combination with other projects or plans.

Identification of Relevant Natura 2000 Sites

In accordance with guidance from the *Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities* (2010), all designated sites within a distance of 15km from the proposed project site were identified to assess for potential impacts. A standard source-receptor-pathway conceptual model was used to identify 'relevant' European sites (i.e. those which could be potentially affected).

For significant effects to arise, there must be a risk enabled by having a:

- Source(s) – e.g. sediment run-off from construction works at proposed project site
- Receptor(s) – e.g. qualifying habitats and/or species of European Sites
- Pathway(s) – e.g. a watercourse connecting proposed project site to a European site

The identification of a pathway does not automatically mean that significant effects will arise. The likelihood for significant effects will depend upon the characteristics of the source (e.g. duration of construction works), the characteristics of the pathway (e.g. water quality status of watercourse receiving run-off from construction) and the characteristics of the receptor (e.g. the sensitivities of the European site and its qualifying interests).

Twelve Natura 2000 sites within an area extending 15km around the proposed project have been considered for potential impacts following the guidance published by DoEHLG (2009). These SACs, and SPAs are displayed in Figure 2 below. It has been evaluated that a wider radius was not required in the absence of pathways identified by which sites outside of this radius could potentially be affected. These sites, their conservation interests and the potential for interactions leading to significant adverse effects arising from the proposed project are identified for each site and are exhibited in Table 1.

Figure 2: Natura 2000 sites within 15km of the proposed site

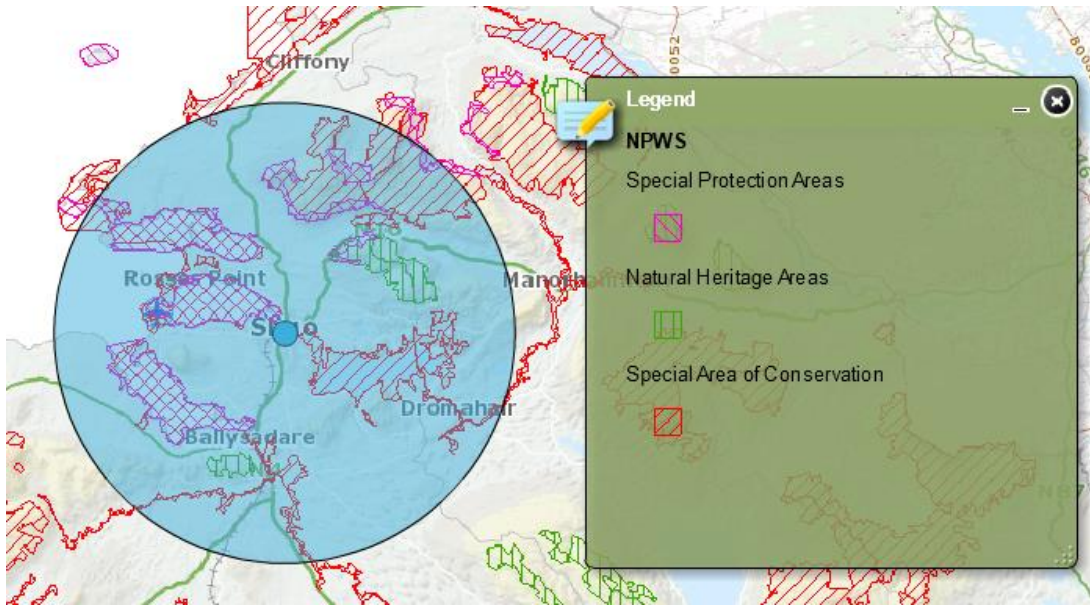


Table 1: Designated Natura 2000 sites which are located within a 15km radius of the proposed site. The qualifying interests and the potential for impacts affecting these individual features are identified

NATURA 2000 SITE [SITE CODE]	DISTANCE FROM PROPOSED PROJECT (M/KM)	QUALIFYING INTEREST [HABITAT CODE]	POTENTIAL FOR IMPACTS IDENTIFIED	INCLUDE / EXCLUDE FROM FURTHER ASSESSMENT
Lough Gill SAC (001976)	Immediately adjacent	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation [3150] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0] <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355]	Potential for disturbance related impacts relating to construction and operational use of project: Decrease in water quality/Increased pollution Siltation Disturbance to species Indirect impacts to habitats of qualifying interest Recreation/amenity use Introduction of alien invasive species	Include in further assessment
Cummeen Strand/ Drumcliff Bay SAC (00627)	0.1 KM	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Petrifying springs with tufa formation (Cratoneurion) [7220] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Phoca vitulina</i> (Harbour Seal) [1365]	Potential for disturbance related impacts relating to construction and operational use of project: Decrease in water quality/Increased pollution Indirect impacts to habitats of qualifying interest Disturbance to species Introduction of alien invasive species	Include in further assessment

Cummeen Strand SPA	0.555 KM	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Redshank (<i>Tringa totanus</i>) [A162] Wetland and Waterbirds [A999]	Potential for disturbance related impacts relating to construction and operational use of project: Indirect impacts to the habitats of the bird species of conservation interests Water quality/pollution	Include in further assessment
Drumcliff Bay SPA (004013)	5.343 KM	Sanderling (<i>Calidris alba</i>) [A144] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Wetland and Waterbirds [A999]	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment
Sligo Leitrim Uplands SPA	5.652 KM	Peregrine (<i>Falco peregrinus</i>) [A103] Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346]	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment
Ballysadare Bay SAC [000622]	5.85 KM	Estuaries [1130], Tidal Mudflats and Sandflats [1140] Embryonic Shifting Dunes [2110], Marram Dunes (White Dunes) [2120] Fixed Dunes (Grey Dunes)* [2130] Humid Dune Slacks [2190] Narrow-mouthed Whorl Snail (<i>Vertigo angustior</i>) [1014] Common (Harbour) Seal (<i>Phoca vitulina</i>) [1365]	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment
Ballysadare Bay SPA [0014129]	5.858 KM	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Dunlin (<i>Calidris alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Redshank (<i>Tringa totanus</i>) [A162] Wetland and Waterbirds [A999]	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment
Union Wood SAC (00638)	6.589 KM	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment

Unshin River SAC [001898]	6.873 KM	<p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355]</p>	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment
Benbuben Gleniff and Glenade Complex SAC (000623)	7.353 KM	<p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] <i>Hydrophilous</i> tall herb fringe communities of plains and of the montane to alpine levels [6430] Transition mires and quaking bogs [7140] Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] Alkaline fens [7230] Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110] Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>) [8120] Calcareous rocky slopes with chasmophytic vegetation [8210] <i>Vertigo geyeri</i> (Geyer's Whorl Snail) [1013] <i>Lutra lutra</i> (Otter) [1355]</p>	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment

Ballintemple and Ballygiligan SPA (004234)	8.663 KM	Barnacle Goose (<i>Branta leucopsis</i>) [A045]	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment
Steedagh Point Dunes SAC (001680)	14.215 KM	Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014]	There are no potential pathways for impacts identified with regard to the proposed project.	Exclude from further assessment

Conservation Objectives

For appropriate assessment, regard must be given to potential impacts arising from the proposed project on the conservation objectives for all Natura 2000 sites within the impact zone of the project as identified in Table 1.

A Natura 2000 site's conservation objectives are defined by NPWS and are, "*intended to ensure that the relevant Annex I habitats and Annex II species present on a site are maintained in a favourable condition*" (DEHLG, 2010). The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. Favourable conservation status of a habitat can be described as being achieved when: "*its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable*". Favourable conservation status of a species can be described as being achieved when: "*population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.*"

For the purposes of this assessment, information on the conservation objectives for these sites have been gained from existing information available on www.npws.ie and NPWS generic Conservation Objectives for Natura 2000 Sites where no management plan is yet available. These are available online at www.npws.ie.

Other Plans or Projects

In accordance with the EU guidance document on Appropriate Assessment, "Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites", other plans and projects in the area must be considered in addition to the site for the proposed project at the screening stage. This is required in order to identify any possible cumulative or in combination impacts of the proposed project with other plans or developments on the relevant Natura 2000 sites. Existing plans and projects which have been examined include:

Sligo and Environs Development Plan 2010-2016 (incorporated into the County Development Plan (2017-2023))

The Urban Design Strategy outlined in detail in this Plan has an objective to develop suitably landscaped urban squares at five locations which will be interconnected via a network of pedestrian linkages (O-OS-26, O-CC-SS-1). One of the proposed squares includes 'Stephen Square'; a new urban square on the existing Stephen Street car park site which would be

capable of accommodating a variety of open air activities, such as an outdoor market for the sale of arts, crafts, antiques and specialist food items, including locally-produced organic fruit and vegetables on the weekends (O-RP-3). This market could also provide an outlet for local artists and organic farmers, building on Sligo's reputation for culture and fine food produce. Stephen Square would also serve as a transition space, with a niche market between the main retail area and the emerging Greenfort cultural precinct located to the north-east, between The Mall and Connaughton Road. It is also an objective of the Council to retain, where possible, the existing mature trees on the riverbank adjacent to the existing car park site (O-CC-SS-2).

Under river banks urban design policies within this plan, it is the policy of the Council to facilitate appropriate development that addresses the waterfront and encourages its public enjoyment along Rockwood Parade, JFK Parade and Kempton Promenade and in the environs of the existing Stephen Street Car-park (P-CC-RB-2).

Key objectives directly related to inland waterways include an objective to consult with prescribed bodies prior to undertaking, approving or authorising any works or development that may impact on rivers, streams and watercourses (O-NH-12) and to require that runoff from a developed area does not result in deterioration of downstream watercourses or habitats, and that pollution generated by a development is treated within the development area prior to discharge to local watercourses (O-NH-13).

In addition, a series of objectives and policies are outlined in the plan to ensure the protection of Natural Heritage and specifically Natura 2000 sites, their integrity and qualifying interests. Thus this Appropriate Assessment is carried out at project phase in compliance with these plans objectives and policies.

Sligo County Development Plan 2017-2023

A number of objectives and policies are outlined in the plan to protect and maintain the favourable conservation status and conservation value of all natural heritage sites and to promote the maintenance and, as appropriate, achievement of 'favourable conservation status' of habitats and species in association with the NPWS. Development that might be detrimental to scenic and heritage assets, in Natural Heritage Areas and along designated Scenic Routes will be strictly controlled. It is an objective of Sligo Co Co. to identify and protect local areas of high nature conservation value and support the management of landscape features which are of major importance for wild fauna and flora in accordance with Article 10 of the Habitats Directive (O-DSNC-1). It is the policy of Sligo Co Co. to take full account of the precautionary principle where uncertainty exists regarding the potential impact of a proposed development on the natural heritage resource (P-NH-4).

It is the policy of Sligo Co Co. to promote the development of tourism in a sustainable manner and encourage the provision of a comprehensive range of tourism facilities, subject to location, siting and design criteria, the protection of environmentally sensitive areas and other planning considerations (P-TOU-1) and to support the growth of cultural tourism in the County and its potential for niche tourism products by facilitating the development of cultural events, infrastructure and activities (P-TOU-9). It is a policy to protect and enhance public open spaces and established recreational green areas (P-OR-1) and to support the provision of a variety of accessible, multifunctional, high-quality open spaces and facilities for active and passive recreation, which meet the needs of residents and visitors to County Sligo, which are fit for purpose and economically and environmentally sustainable (P-OR-2).

The potential impact of both plans on the proposed project is deemed to be positive. These plans contain numerous measures which will directly and/or indirectly contribute to the conservation of Natura 2000 sites. These will assist in the implementation of the requirements of the Habitats Directive and will ensure that the proposed project will not have a significant impact on Natura 2000 sites.

5 FINDINGS OF THE SCREENING FOR AA

The purpose of this section of the screening for appropriate assessment is to examine the possibility that the proposed project, either individually or in combination with other plans and projects, may result in significant negative effects on the Conservation Objectives and the integrity of the Natura 2000 Sites identified in Table 1, which are potentially affected by the proposed project. These include:

Lough Gill SAC 001976

Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC 000627

Cummeen Strand SPA 004035

Direct, indirect and cumulative impacts arising from the proposed project are identified with regard to potential impacts affecting the designated Natura 2000 site as follows:

disturbance / fragmentation of Annex I habitats;

disturbance to Annex II species;

impacts affecting the structure and function of the designated site;

hydrological changes / water quality impacts.

Table 2: Assessment Criteria – Screening Matrix

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 Sites

The proposed redevelopment of Stephen Street Car Park will include the removal of the existing car parking spaces and their replacement with a pedestrianised public plaza consisting of the following elements;

- Hard landscaping (granite paving and granite benches)
- Soft landscaping (formal reinforced grass lawns, play area, and the planting of low shrub beds)
- Removal and replanting of trees.
- A fixed canopy (final details of which to be subject to architectural competition).
- A retractable canopy to provide occasional covered space at the western corner of the site.
- Interpretative signage.
- Disposal of existing surface water through existing surface water network
- All associated site development works

The works are to be conducted immediately adjacent to Lough Gill SAC boundary and in close proximity to Cummeen Strand/ Drumcliff Bay SAC (0.1km) and Cummeen Strand SPA (0.555km) as shown in Figures 3 and 4.

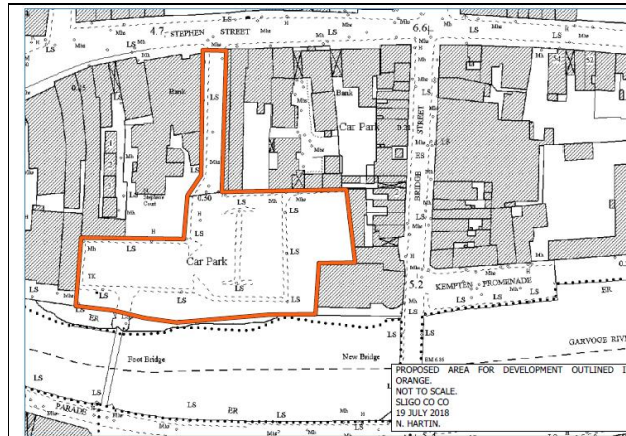


Figure 3 - Location of proposed project boundary.

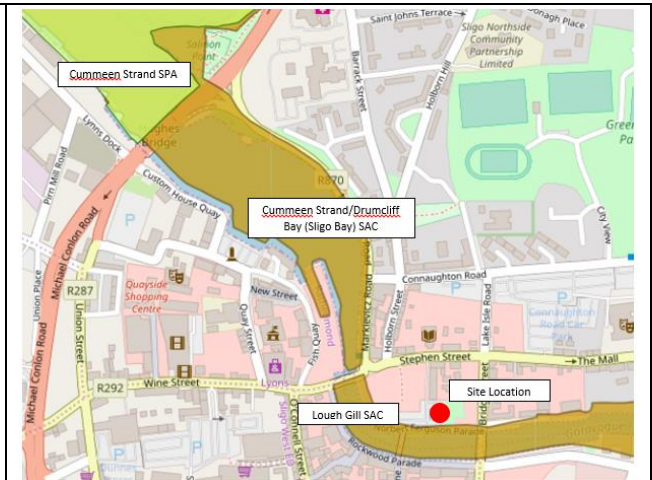


Figure 4 - Site location in relation to Lough Gill SAC boundary.

<p>Describe any likely direct, indirect or secondary impacts of the project on the Natura 2000 Sites</p> <p>Size and scale; Land-take; Distance from Natura 2000 Site or key features of the Site; Resource requirements; Emissions; Excavation requirements; Transportation requirements; Duration of construction, operation etc Other.</p>	<p>The construction phase will be ~ 52 weeks. Construction will be in accordance with low impact principles, appropriate construction methodology, standard operating procedures, Health and Safety standards and in compliance with Sligo Co. Co. Safety Management System. A site compound will be required with materials securely stored on-site. A construction method statement is included in APPENDIX II.</p> <p>There will be no direct land take of Annex I habitats for which these Natura 2000 sites are designated. However, it must be considered that there is some potential for indirect impact on Annex I habitats for which these Natura sites are designated.</p> <p>During the construction and operation phases, the main potential impact will be the disturbance to Annex II species for which these Natura 2000 sites are designated and other key species due to the increase in noise levels and presence of machinery (Dumper, Digger, Rollers) and humans. Species within and adjacent to the proposed project site will be subject to certain levels of disturbance during construction and operation.</p> <p>There is a potential risk of indirect impacts to these species due to adverse water quality impacts to the adjacent Garavogue River, such as ingress of silt, construction run-off or spillage of petrochemicals from the operation of plant machinery and work activities of personnel during the construction stage. Pollution during operation can be scoped out of this assessment due to the absence of likely significant effects resulting from design measures mitigation.</p> <p>There is also an indirect impact risk due to noise or human presence during the construction and operational phases. With the proposed removal of trees along the eastern boundary of the site there is a risk of impact to bats and birds.</p>
<p>Describe any likely changes to the site arising as a result of the following:</p> <p>Reduction of habitat area; Disturbance of key species; Habitat or species fragmentation; Reduction in species density; Changes in key indicators of conservation value; Climate change</p>	<p>Reduction of habitat area: With strict adherence to construction methods and standard operating procedures and considering the site is already in operation as an existing carpark and no such qualifying Annex I habitats for which the adjacent Lough Gill SAC is designated exists along this stretch of river it is not expected that there will be loss of or reduction in Annex I habitats resulting from the construction or operation of the proposed project.</p> <p>Disturbance of key species / Reduction in species density: There could be indirect disturbance to birds and bats. Foraging loss in trees within the site and along the river corridor is possible. A bat survey carried out on the 5th/6th September 2018 revealed that there was Soprano Pipistrelle bat activity around the green areas of the carpark, particularly along the wall and trees beside the river. The Soprano Pipistrelle foraged around the single mature fruiting pear tree and up over the 'The Building Block' building to the east of the site. It is planned to remove this area of trees and replace with native species. The Bat Survey Report in APPENDIX III recommends this pear tree remains untouched with enough ground undisturbed to sustain it. Leisler's bat and Daubenton's bat are also found to forage along the river corridor. In an effort to fulfil obligations to protect</p>

these bat species, as much green space as possible should be kept/enhanced adjacent to the river with plantation of native species and sensitive downward pointing low energy lighting. Therefore, with strict adherence to the construction method statement (See APPENDIX II), the conditions outlined in consultee responses (See APPENDIX I), the Bat Survey mitigation measures (See APPENDIX III) and standard operating procedures it is not envisaged there will be any significant loss of potential feeding areas for birds or bats.

It is proposed to remove and subsequently replace trees to the east of the site and retain those along the river corridor. As suggested, retaining the Pear tree located to the east of the site is recommended. The timing of the tree felling and removal of the adjacent Sycamore trees will be chosen to avoid the breeding season of birds and bats. In addition, it will avoid the hibernation period of bats. This means that all tree felling will occur between late August and early November. Other mature trees will be fenced off to avoid damage during construction.

Lough Gill SAC is selected for the following species listed on Annex II of the Habitats Directive – White-clawed Crayfish, Sea Lamprey, Brook Lamprey, River Lamprey, Atlantic Salmon and Otter. Cummeen Strand/ Drumcliff Bay SAC is designated for Narrow-mouthed Whorl Snail, Sea Lamprey, River Lamprey and Harbour Seal. The proposed site is adjacent to the Garvogue River which provides spawning habitat for salmonids downstream of the site and lamprey and salmonids upstream of the site. The Garvogue is also the migratory route for salmon, sea trout, lamprey and eel into Lough Gill and the Bonet River system. With cognisance of timings and in strict adherence to IFI conditions as outlined in their consultee responses (See APPENDIX I) there will be no direct discharge of pollutants into the environment during the works and water quality will not be affected. Therefore, it is envisaged that there is little potential for disturbance to these qualifying features in the short term during the construction phase or in the long term during operations.

It is unlikely that there will be a significant direct loss of species density of otter within Lough Gill SAC as a result of the proposed project. The urbanisation of catchments reduces the likelihood that otters will occur, along with the reduced diversity of the river bank. However, otter has been spotted here in the past, so it is likely that this is a resting site for otter, which is used occasionally to eat fish and to rest. The discreet and isolated character of the construction phase, combined with no riparian or in-stream works negates the potential for direct or indirect effects on this qualifying interest. The site is already an existing busy car park/thoroughfare so during operation the disturbance impacts on otter is unlikely to be significant. With strict adherence to construction methods and standard operating procedures it is envisaged that there is little potential for disturbance to this qualifying interest in the short term during the construction phase or in the long term during operations as wildlife becomes accustomed to the operational phase of the project.

It is important to note that this site is an existing well-established and a heavily utilised carpark and pedestrian thoroughfare. Therefore, impacts are likely to be negligible in the short-term and negligible in the long-term as wildlife becomes accustomed to the operational phase of the project.

	<p>Habitat or species fragmentation: The footprint of the proposed project occurs adjacent to and in close proximity to European Sites. However, it is not envisaged that the project will result in direct habitat or species fragmentations.</p> <p>Changes in key indicators of conservation value: A key indicator for Lough Gill SAC would be water quality. Considering the site is currently a heavily utilised carpark and pedestrian thoroughfare and with strict adherence to design measures, mitigation inherent in the operational surface water treatment system and compliance with the conditions outlined by the Sligo County Council Heritage Officer (See APPENDIX I), it is expected that the proposed arrangement relating to outflows associated with the development will actually improve the water quality of surface water coming off the site.</p> <p>Climate change: Greenhouse gas emissions as a result of the project will be insignificant. In fact, the proposed project replaces the current use as a car park. Therefore, the project will in fact result in a reduction in air quality pollutant and greenhouse gas emissions.</p>
<p>Likely impacts on the Natura 2000 sites as a whole</p> <p>Interference with the Key Relationships that Define the Structure of the Natura 2000 Site;</p> <p>Interference with Key Relationships that Define the Function of the Natura 2000 Site</p>	<p>Good water quality and silt free river substrates are key to ensuring the favourable conservation status of the qualifying features of the adjoining Lough Gill SAC. Potential indirect impacts on water quality and high water quality dependant species such as Otter, Salmon and Lamprey will be avoided by incorporating appropriate and adequate Sustainable Urban Drainage Systems as a design feature of the project. With strict adherence to design measures, construction methodology and standard operating procedures deterioration in water quality resulting from the project and potential disturbance to wildlife is not envisaged. Hence, there will be no significant impact on the structure or function of Natura 2000 sites from the proposed project.</p>

6 CONCLUSIONS

To determine the potential impacts, if any, of the proposed development of Stephen Street Cultural Plaza on nearby Natura 2000 sites, a screening process for Appropriate Assessment was undertaken. The proposed site is immediately adjacent to and in close proximity to three Natura 2000 sites; Lough Gill SAC, Cummeen Strand/Drumcliff Bay SAC and Cummeen Strand SPA.

The AA screening process considered potential impacts which may arise during the construction and operational phases of the proposed project. This assessment comprised an evaluation of the pathways for effects on the qualifying interests of designated European Sites, with reference to the location, size, scale, and duration (construction and operation) associated with the proposal. It is considered that the proposed project does not include any element that has the potential to significantly alter the favourable conservation objectives associated with the species and habitats, or, interfere with the key relationships that define the structure or function, either alone or in combination with other impacts, of the Natura 2000 sites considered in this document. This is provided that strict adherence to appropriate construction methods, standard operating procedures, Sligo County Council's safety management system and cognisance of the consultee response conditions and the bat survey report are undertaken.

It is concluded that there are no likely potential impacts, whether direct, indirect or cumulative/in-combination, which could give rise to adverse effects on the qualifying interests or the conservation objectives of the Lough Gill SAC, Cummeen Strand/Drumcliff Bay SAC and Cummeen Strand SPA and that the integrity of these sites will not be affected.

Consequently, this proposed development does not require an NIS or need to advance in the Appropriate Assessment process. However, a determination of the need for a Stage 2 'Appropriate Assessment and the preparation of a Natura Impact Statement will be decided upon by the Competent Authority, Sligo Co. Co.

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APPENDIX I
Consultee Responses

**Aisling Donegan, Senior Fisheries Environmental Officer, Inland Fisheries
Ireland– 3/9/2018, via email**

Olivia,

The proposed site is adjacent to the Garvogue River which provides spawning habitat for salmonids downstream of the site and lamprey and salmonids upstream of the site. The Garvogue is also the migratory route for salmon, sea trout, lamprey and eel into Lough Gill and the Bonet River system.

IFI does not object to the proposed development provided pollution control measures are put in place to prevent any discharge of silted waters, cement products, hydrocarbons or other materials into the Garvogue River, including via the surface water drainage network. Silt fences etc. will be required during construction. There appears to be an in-stream structure on the image provided details of this structure must be provided to IFI for comment prior to final design of the site. IFI request that river bank works are kept to a minimum and a buffer zone be maintained where possible. IFI favour the use of native plants in the design of the riparian area along the river.

I look forward to reviewing this proposed development once more detail is provided.

Siobhan Ryan, Sligo County Council Heritage Officer – 4/9/2018, via email

Dear Olivia,

You have confirmed that the proposed works do not involve riparian or in-stream works. The priority is to ensure no impact arises from the project on the adjoining Natura 2000 site.

Inclusion of an Construction Environmental Management Plan as part of the project design is required in terms of surface water, and the control of construction/plant materials during site preparation/construction and operation. All surface water should go to main drainage during and post construction. Consideration of petrol interceptors as vehicles may be permitted (temporarily) within the area in the future, if not already in place within the car parking areas.

In addition a bat survey should be undertaken (of the proposed development area and existing trees) and appended to the AA screening to meet the obligations for the strict protection of bat species as listed in Annex IV of the Habitats Directive, this should also include consideration of any future lighting proposals that may have the potential to affect bat species.

Regards

Siobhán

APPENDIX II
Construction Method Statement

Construction Method Statement
Stephen St. Cultural Plaza

Client Sligo County Council;	Name: Michael Carty	Address: Riverside Sligo	Tel: 087 2398209
			E-mail: mcarty@sligococo.ie
Project Name	Stephen St Cultural Plaza		
Description of the Task/Activity	The provision of hard and soft landscaping, access upgrade, and associated ground works		
Site Address/Location:	Stephen St Car Park Co. Sligo.	Start Date/Time:	ASAP
		Finish Date/Time	52 Weeks from Commencement
Personnel Involved	Name	Role/Trade	
	TBD	Civil Engineering Contractor	
	Sligo County Council Technical Staff	Supervision	
Site Supervisor:	Michael Carty (Civil Engineer)	Tel:	0872398209
Key Plant & Tools (Attach Certification)	Dumper, Digger, Roller		
Key Materials	Natural stone paving (geologically compatible) Block, Stone & Slate structure Concrete base for structure Raised Soil Mound Washed Stone fill (screened, free from invasive species and geologically compatible)		
Other Essential Equipment	(i.e. access platforms/winches/ladders, etc) Access platforms		
Items Attached:	Yes	No	
Sketches	<input type="checkbox"/>	<input type="checkbox"/>	
Certification of Plant etc.	<input type="checkbox"/>	<input type="checkbox"/>	
Programme of Work	<input type="checkbox"/>	<input type="checkbox"/>	
Risk Assessments	<input type="checkbox"/>	<input type="checkbox"/>	

Sequence of Operations:
(include sketches if required)

Best practice will be pursued in all cases

1. Deliver, spread, level and compact stone fill to site
2. Construct concrete base for structure
3. Construct Block/Stone/Slate structure.
4. Ensure maintenance of existing drainage patterns.
5. Construct natural stone paving
6. Construction will be in accordance with appropriate Health and Safety standards and Sligo County Council's safety management system.
7. No waste arisings occur.
8. A site compound will be required, with materials will be securely stored on-site
9. Construction will be in accordance with low impact principles.

APPENDIX III
Bat Survey Report

Bat Survey
Stephen St. Carpark
Sligo Town
Co. Sligo
2018



Ecological Services

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Bat Licence No: [DER/BAT 2017-74 / C95/2018](#)

Introduction

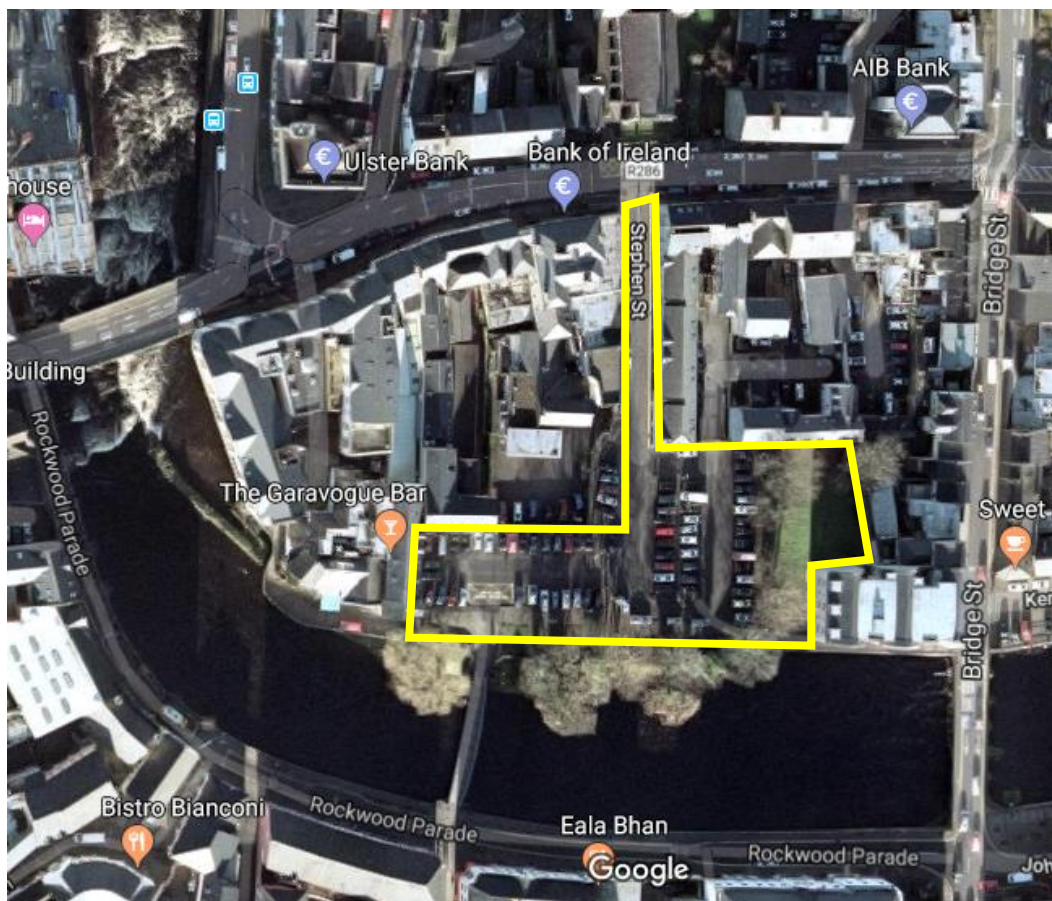
Stephen St. Carpark in Sligo Town, Co Sligo, Fig 1, has been proposed for redevelopment. It is proposed to include the removal of the existing car parking spaces and their replacement with a pedestrianised public plaza. The development proposes features such as hard landscaping consisting of granite paving and granite benches. Soft landscaping would consist of formal lawns, a play area, reinforced grass and the planting of low shrub beds.

There would also be the provision of a fixed canopy to provide a permanently covered space and a retractable canopy to provide occasional covered space at the western corner of the site. The site would also be provided with interpretative signage.

To date no lighting plan has been made.

Fig 1: Stephen St. Carpark Sligo Town, Co Sligo – Aerial view with outline

Grid reference 69214 36008



Due to this proposed development a bat survey was requested by Sligo County council in conjunction with Envest Environmental LTD.

In Ireland all bat species are protected under national and EU legislation. The number of species of bats recorded to date is eleven, with nine of these confirmed breeding. To date I have recorded eight species in County Sligo. All bats in Ireland are insectivores and the females gather during the summer months in maternity colonies or roosts, to give birth to a single pup each. In winter, bats gather for hibernation, often in a separate location from the maternity roost, in places such as caves or souterrains.

With Sligo town set on the banks of the river Garavogue and its proximity to the SAC of Lough Gill (Site code 001976), many bat species use features of the town for roosting, foraging and commuting. Four out of the nine species have been recorded within the town and at least three of these use the Stephen St. carpark area for foraging, commuting and sometimes roosting.

Methods

A dusk bat survey was carried out on the 05.09.2018 using bat detectors – Echo Meter touch and heterodyne models. A dawn survey was also carried out on the morning of 07.09.2018 to observe if any bats came to roost at any of the buildings surrounding the carpark.

The dusk survey work was carried out in light breezy, damp - wet, weather conditions, with 100% cloud cover. Temperature at dusk was 15 °C.

The dawn survey work was carried out in dry, calm conditions with patchy cloud. Temperature was 12 °C.

Surveying in September is late in the bat activity season and cannot guarantee to represent peak activity or presence of bats which would occur in the summer months.

Results

From the dusk survey on the night of 05.09.2018, two species of bat were observed. Soprano pipistrelles (*Pipistrellus pygmaeus*) and Daubenton's bat (*Myotis daubentonii*). The latter was observed foraging above the river, on the sea side of the blue metal pedestrian bridge which crosses the Garavogue, beneath a large over hanging willow tree. This Daubenton's species is surveyed yearly, foraging in the darker sections of the Garavogue River.

The Soprano pipistrelles were numerous and foraged from approximately 20.30pm onwards in two main areas. One was the area running along the riverbank, beneath a line of mature sycamore trees, on both sides, see fig 2 & 3. This is on the southern side of the carpark and boundary of the proposed redevelopment. This area is sheltered from the elements and is relatively dark and free from the effects of street lighting. The current roost site for these bats is not known and while it used to be in a building flanking the north side of the carpark it has since moved on.



Fig 2: View of Sycamore trees in the southern side of the Stephen St. Carpark with red line highlighting a typical flightpath of a foraging Soprano Pipistrelle bat.



Fig 3: View from the East of Sycamore trees in the southern side of the Stephen St. carpark with the adjacent river Garavogue. Again the red line highlights a typical flightpath of a foraging Soprano Pipistrelle bat.

The second main area of observed foraging was the grassed area to the east of the carpark. See Fig 4. This grassed area contains a few mature sycamore trees toward the car parking area, and a pollarded sycamore toward the back wall in the corner. There is also a mature pear tree, standing alone in the grassy area and it was this tree that the Soprano pipistrelles mainly foraged around. It appeared to be a foraging regime that the bats first perform after emerging in the evening, before they moved on to the river or elsewhere to feed. At dawn the bats returned to this spot to forage and swarm for over 20 minutes before disappearing to their roost site. This roost could not be determined exactly in this short survey, but is likely to be in one of the buildings around the car park at which the bats were swarming.



Fig 4: Green area to the east of the carpark with sycamore trees and mature pear. This area was used extensively for foraging and dawn swarming.

No bat activity was detected on the western side of the car park or along the road north toward the county library. There are no trees or vegetation along this side of the carpark and hence no suitable habitat for bats to forage.

The largest of our bat species, the Leisler's bat, was not recorded on the night of the survey. However I have recorded it many times foraging along the river and adjacent buildings at Stephen St. carpark. This bat just weighs about 16g, the weight of a CD! This species has roost sites in buildings around Sligo town, and is known from the western part of the town. Leisler's bat may not have emerged due to the inclement weather on the night of the survey as it is a highflyer (up to approx. 70m) and would not have been able to take advantage of the shelter of the trees. Or it may at this stage in September have moved on to its hibernacula site for the winter.



Leisler's bat (*Nyctalus leisleri*)

Other wildlife noted using the general carpark area:

The otter, has been seen along the river bank here. This protected mammal is a qualifying interest for the Lough Gill SAC.

Starlings roost in the sycamore trees along the riverside at times.

Rooks, Jackdaws, Robin, Pied wagtail, blackbird and several gull species were all noted during the dawn survey.

Shaggy Ink cap mushroom (*Coprinus comatus*) was also noted growing in the grass near the pear tree.

Recommendations/Summary

The majority of the Stephen Street carpark consists of hardstanding material and does not have bat activity and therefore changes to these areas will have no major impact on the bat species of the area.

However the two areas mentioned in the results that did have bat activity by Soprano pipistrelles, i.e. the area with trees alongside the river and the green area to the east of the carpark are important foraging and commuting areas. Any redevelopment should be cognisant of new features which may negatively impact this species, especially removal of vegetation (most importantly trees) and inappropriate lighting.

With this in mind I highly recommend that the mature pear tree be left in place, with sufficient ground to sustain it and added to the list of heritage features that will enhance the new plaza, as opposed to its removal and replacement by some other tree. It will serve as a consistent feature which the bats will use to forage and navigate by. The ink-cap mushrooms indicate a good species diversity in the lawn and ideally this should be retained to maintain the biodiversity and hence support the protected bat species.

The sycamore tree line which is to remain along the river bank could be enhanced by understory planting of native species such as Hazel, Rowen or Spindle trees. These are small tree species and would be positive enhancement for wildlife along the river as well as aesthetically pleasing.

Any tree which needs to be removed should be replaced by another suitable tree to mitigate its loss from the area. However, an existing mature tree has significantly more wildlife value, and thus vital feeding value for the bats, than a new young tree, albeit of a native species.

The flora on the riverside of the bank should be surveyed and improved where possible with native species. This will enhance wildlife will also stabilise the bank of the river. There is an existing mature willow tree along the river which has significant wildlife and aesthetic value.

Lighting for the project should be given proper thought in relation to light pollution in the area. Most bat species are impacted on negatively, by artificial lighting. Sensor lighting, only lighting up an area when in use and downward pointing lighting, already in use in the carpark, see fig 6, are good options.

See link below for further solutions

www.light.ie/lighting-for-wildlife-and-bats/

Fig 6: Downward focused lighting



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