



THE
NATIONAL
TRUST



Replacement Visitors' Centre
at the Giant's Causeway

Environmental Statement
Non Technical Summary
Volume III

ARUP

Non Technical Summary

Introduction

The Giant's Causeway is Northern Ireland's premier tourist attraction. Currently, the site is served by temporary visitor facilities, which are unsuitable to deliver a world-class visitor experience commensurate with the Giant's Causeway's status as a World Heritage Site (WHS). The Replacement Visitors' Centre is designed to redress this.

This document is a non-technical summary of the Environmental Statement (ES) that accompanies the National Trust's planning application for the development. The ES, prepared in accordance with the Planning (Environmental Impact Assessment) Regulations 1999 (SI 1999 No. 73), documents the predicted effects of the development, taking into account measures proposed to avoid, reduce and wherever possible, remedy significant adverse effects and measures to enhance the beneficial effects of the scheme.

The Site

The development site is located at the Giant's Causeway (IGR C947 447) on the Causeway Coast, Bushmills, Co. Antrim. The Giant's Causeway is located within an area which has a number of international and national conservation designations, including the North Antrim Special Area of Conservation (SAC), Giant's Causeway and Causeway Coast World Heritage Site (WHS), Causeway Coast Area of Outstanding Natural Beauty (AONB), Giant's Causeway and Dunseverick Area of Special Scientific Interest (ASSI) and the Giant's Causeway National Nature Reserve (NNR).

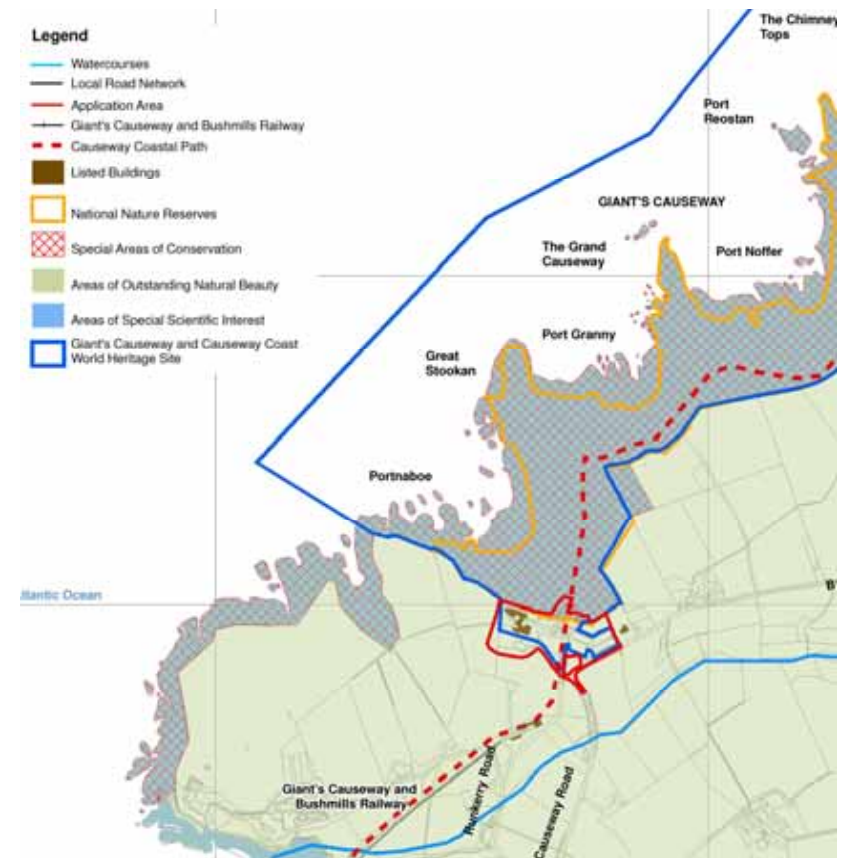
Need for the Scheme

The UK ratified the Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972 in 1984. By ratifying the Convention, each country recognises its duty to ensure the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage sites of outstanding universal value situated on its territory.

The Giant's Causeway was declared a World Heritage Site in 1986 and the original visitor facilities were completed in 1986 at the time of nomination. A fire in 2000 destroyed those facilities and temporary visitor facilities have been in place ever since. The site is an international icon for Northern Ireland

attracting visitors from all over the world. However first impressions are currently poor and this, together with the pressures being exerted by visitors on the internationally protected natural environment, is starting to have a detrimental impact on both the physical setting and environment, and the overall visitor experience.

In view of the above, the National Trust has sought a permanent solution to cater for the future needs of visitors to the Giant's Causeway whilst ensuring the long-term conservation and protection of the internationally renowned geological, historical and nature conservation interests of the Causeway Coast.



Description of Development

An international competition was held in 2005 to deliver a solution for the future Visitors' Centre at Giant's Causeway. The competition was promoted by the Department of Enterprise, Trade and Investment (DETI) in liaison with key stakeholders including the Department of Finance and Personnel, the Northern Ireland Tourist Board, the Department of the Environment, Moyle District Council and the National Trust.

The winning design was by Heneghan Peng Architects and it has been developed into the current proposals which include:

- demolition of the existing facilities and replacement with a Visitors' Centre sunk into the landscape below the crest of a coastal ridge;
- reconfiguration of the car park at the existing visitor facilities, together with some reshaping of the car park around the Causeway Hotel;
- upgrading of the road to the Visitors' Centre via the existing access junction off the B146 Causeway Road; and
- modification of the entry from the building to the access way to the Causeway Stones.

Construction is scheduled to commence in the Winter of 2009 for completion by Spring 2011, subject to the attainment of necessary consents.

During construction of the Replacement Visitors' Centre, temporary facilities would be provided at the Causeway Hotel.



Sketch of proposals

Planning Context

The replacement Visitors' Centre is critically important to the Northern Ireland economy as a key visitor attraction which has been designed to ensure consistency with the broad range of planning policy and guidance which are material to the decision on this application. The proposed development is consistent with RDS guidance in that it represents a high quality sustainable visitor experience that conserves the key assets of the natural and built environment. The proposed development provides for an imaginative, innovative design solution which responds to the site and its setting. At a local level the proposed development is compliant with the policies set out within the North East Area Plan 2002 (NEAP) and draft Northern Area Plan 2016 (dNAP). The proposals seek to redevelop the existing temporary visitors' centre in a sensitive manner that would deliver a high class facility that would not detract visually or environmentally from the Giant's Causeway or the surrounding area. The design respects the sensitive location of the site within the AONB designation through its integration into the existing landscape. The delivery of the world class visitor experience is fundamental to the overall vision for the Giant's Causeway WHS Management Plan."Environmental Impact Assessment.

Consultations

Consultations have been undertaken throughout the development of the proposals with statutory bodies and stakeholder groups including: Environment and Heritage Service, Rivers Agency, Roads Service, Moyle District Council, the Council for Nature Conservation in the Countryside, Geological Survey Northern Ireland, the Northern Ireland Tourist Board and local groups.

These consultations have helped to identify sensitive environmental features, assess the proposals, define the scope of the Environmental Impact Assessment (EIA) and highlight significant environmental issues.

In parallel, pre application discussions have been undertaken with Planning Service, with the intent of informing and facilitating the decision making process. This has included agreement on the scope of the EIA.

A series of public information events will take place during Summer 2008.

Key Findings

The key findings of the environmental impact assessment, conducted by a team of specialists, are presented below.

Nature Conservation & Biodiversity

The area, subject to a number of designations listed above, has a rich biodiversity, consisting of internationally and nationally protected species and habitats. The vegetated sea cliffs, fixed and shifting dunes, Atlantic salt meadows, species rich mat-grass and drift lines variously support such important species as the narrow-mouthed whorl snail and a rich variety of invertebrates and breeding and overwintering birds.

The development site includes approximately 243m² of maritime and unimproved grassland within the North Antrim SAC. However, none of the vegetation surveyed there was botanically diverse or of particular intrinsic importance – much of it being rank grassland with encroaching bramble and scrub. Modifications and earthworks in this area would give rise to disturbance and/or loss, although the grasslands would be re-instated. The loss of these areas is not regarded as significant or compromising to the integrity of the SAC.

In addition to the above, there would be loss of grassland habitats outside the SAC during earthworks for the building and modifications to the car park and access road. Run off from construction areas during periods of rainfall, if uncontrolled, could affect features of the SAC south of the site. On completion, visitors could damage the grassland through footfall and deposition of litter; no other long term impacts are anticipated.

It is proposed that better quality grassland be translocated to enhance the re-instated habitat within the SAC. Landscaping proposals would also create new maritime grassland communities around the site. During construction, the site would be fenced to protect the SAC and, inter alia, suitable sediment control measures would be employed to capture surface run-off.

On completion of the Replacement Visitors' Centre valuable grassland habitats would be protected from trampling and litter by fencing and site management, delivered through ongoing management of the site.



Photomontage of the proposals

Landscape Character and Visual Amenity

The key characteristic of on this section of the Causeway Coast is the high, elevated and open plateau, rising gently up towards the coast to dramatic, rugged basalt cliffs that drop steeply towards the Atlantic Ocean. It is unquestionably a spectacular landscape and the plateau to the south, where the Replacement Visitors' Centre is located, is an integral part.

The site occupies an open and exposed south facing slope rising northwards towards the steep cliffs. The surroundings comprise a rural landscape of heath or grassland fields separated by fragmented, windswept hedgerows and earthbanks. Next to the site are three listed buildings; the Nook to the south off the Causeway Road, the Causeway Hotel to the west and the Causeway School Museum to the east.

The existing facilities are a medley of building styles, materials and temporary wooden portacabins that present a poor quality, disjointed complex accompanied by a tarmac car park and 'spillover' parking spaces on grasscrete between the existing visitor facilities and the Causeway Hotel.

The lack of vegetation on this plateau allows open views towards the complex which detracts from the attractiveness of the wider view and general landscape quality.

The design of the replacement visitors' centre, sunk into the ground with a green roof merging into the slope, is predicated on landscape integration. Accordingly the assessment finds that it would deliver substantial benefits by

enhancing the localised quality of the landscape and the visual experience for visitors on completion.

In order to achieve the improvements, there would inevitably be temporary visual intrusion during the decommissioning and construction process.

Archaeology and Cultural Heritage

The Giant's Causeway and Causeway Coast WHS designation is based on its exemplar representation of major stages of the earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features and because it contains superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance.

The wider area also consists of a number of heritage features including listed buildings, sites of archaeological interest, scheduled ancient monuments, a conservation area and a maritime shipwreck. The Giant's Causeway is well known for its stories or myths about how the stones were formed, relating back to the time of Fionn McCool.

Three listed buildings are located within, or adjacent to the site, but would not be directly affected by the proposals. Similarly no known archaeology or scheduled monuments would be affected.

Construction impacts associated with the Replacement Visitors' Centre would temporarily affect the settings of some designated heritage features and the overall Causeway WHS experience, primarily through visual intrusion due to equipment and temporary structures and amenity impacts - dust, noise, vibration and general disturbance.

On completion the proposals would deliver benefits to the WHS due to the replacement of substandard visitor facilities unsympathetic to the historic landscape and improvements in the interpretation of and access to the WHS. The Giant's Causeway Replacement Visitors' Centre would subsequently play its part in promoting the cultural value of the area as a whole and the quality and richness of the heritage experience.



Photograph of the stones

Geology and Soils

The physical, geological and geomorphological landscape is the primary reason for the global significance of the WHS. The underlying solid geology, for which the Giant's Causeway is renowned, the hexagonal basaltic columns, was formed following the northward extension of the Atlantic Ocean during the Tertiary Period some 60 million years ago, marked in northeast Ireland by extensive volcanic activity. The remnants of this volcanic episode are preserved as the basalts of the Antrim Plateau.

Accordingly, the site of the replacement visitors' centre building would be expected to be underlain by basalts at depth. Glacial materials, deposited between 25,000 and 17,000 years ago, cover the solid geology. In addition the site has a veneer of "made ground" up to about 1.5m thick resulting from previous construction operations. There is evidence of land slippage to the north. One or more perched water tables have been found within the shallow materials beneath the site but investigations have revealed no contamination of groundwater or soils.

The development involves earthwork re-profiling to enable the Replacement Visitors' Centre to emerge from the existing slope, with accessways marked by

retaining walls. Hence impacts on the geology and soils resource would predominantly occur during the construction phase.

The design and construction of the Replacement Visitors' Centre is devised to avoid causing unacceptable impacts that could reduce the stability and/or re-activate the dormant landslip to the north of the site. Measures to improve the stability of the dormant landslip and help secure the access to the stones would be incorporated into the scheme.

Topsoil resources would be protected and preserved for re-use on site. Erosion-protection would be afforded by early installation and maintenance of a positive site drainage system. Excavated 'made ground' which is suitable for filling or landscaping purposes would be re-used within the development where practicable.

Water Environment

The development site does not contain any watercourses. The nearest watercourse, the Glen Burn, flows in an east west direction approximately 100m from the site. Surface water runs off in a north-westerly direction and there is no history of flooding at the site. Mains water is supplied to the site by NI Water and there is no groundwater abstraction.

During construction, contamination of the nearby watercourse and local drainage channels could occur by silts, sediment and other pollutants. The risk of such impacts would be minimised through appropriate site management controls, minimisation of dust and mud generation and appropriate hoarding/fencing and specific pollution control measures as necessary, for example cut-off drainage channels. Prior to commencement, all construction/pollution control measures would be detailed and documented in the Construction Environmental Management Plan (CEMP).

The design includes a sustainable drainage system (SuDS) and a green roof to minimise surface water run-off. Water-proof construction would be used for structures beneath the water table. Water quality is not expected to be adversely affected.

Water to the facility would continue to be provided by mains supply from the existing utility network. The Replacement Visitors' Centre is designed to minimise the consumption of water and discharge to the local sewer system, for

example all sanitary fittings are intended to have low water consumption, such that no additional capacity for supply or wastewater is required.

Noise and Vibration

Noise may arise from:

- demolition and construction works on and around the site;
- road traffic noise from changes in traffic flow or composition on existing roads and from movements within the site;
- plant and machinery associated with the new buildings; and
- on and off-site car parking.

A prediction exercise found that noise levels during the construction phase, whilst clearly audible, would be well below the 75dBLAeq guidance limit used by Moyle District Council. Some noise would be experienced from construction vehicles on the road network. 'Best Practicable Means' would be employed to avoid excessive noise levels and control measures would be documented in the CEMP. Vibration effects from construction are considered negligible; however as a precaution some monitoring could be undertaken prior to construction.

The increase in visitors to the site once the Replacement Visitors' Centre is fully operational would give rise to more traffic on local roads, however, the predicted change in related traffic noise, approximately 1dB, would not be discernible. Similarly, building services plant noise would be limited, such that the overall operational effects of the development on local noise conditions are regarded as negligible.

Air Quality

The main source of air pollution in the study area is from road traffic, mainly Nitrogen Dioxide and Particulate Matter. However, background air quality pollutant concentrations are well within the EU air quality limit values.

Changes to pollutant levels, as a result of traffic changes in the area when the new visitor facility is in operation, were predicted at selected locations for 2008 and 2011, the intended year of opening. The forecast concentrations indicate that the effect of the development proposals on local air quality would be negligible.

Dust may arise during the duration of demolition and construction activities but would be controlled through good working practices, documented within the CEMP, to ensure that any adverse effects on local air quality are minimised or avoided.

Socio-economic Effects

The socio-economic impact assessment anticipates varying degrees of effects between the three phases of development.

The decommissioning phase is expected to have negligible effects on the identified receptors. During construction it is expected that minor adverse effects would be experienced in relation to the image and perception of the site, and on tourism revenue due to a fall in visitor numbers. These effects would, however, be accompanied by minor beneficial impacts to local employment (direct, and to a lesser extent indirect and induced), and on the local economy due to the creation of construction jobs and the significant construction spend in the area.

Once the Replacement Visitors' Centre is operational, visitor numbers are expected to increase, which would generate additional spend in the area, which would benefit the local economy and create jobs in associated tourist service sectors. Direct employment would also be created as a result of the development. The image and perception of the Site as a world-class visitor attraction that embraces the principles of the World Heritage Site designation would be significantly enhanced.

The benefits associated with the proposals include securing the future of the key and growing tourist industry in the local area, which would support needed direct and indirect/induced employment. The scheme also addresses the need for improved appreciation and promotion of the significance and value of the WHS.



Photomontage of the proposals

Traffic & Transport

The Causeway Coastal Path and National Cycle Network Route 93 provide cyclist and pedestrian route to the Causeway. Public bus services operate from Coleraine, Ballycastle and Bushmills. Vehicular access to the visitor centre is along the A2 and B146 from Bushmills or Ballycastle. There is currently coach (13) and car parking provision (201) at the existing visitor facilities. However, there is no dedicated provision for cycle parking.

Construction traffic would access the site from the B146 via the existing access as this would be maintained to retain access to the WHS during the construction and decommissioning phase. During construction there would be disruption to on site car parking.

It is expected that the proportion of visitors arriving on foot would remain relatively small and not significantly change from the existing situation. However, there would be improved pedestrian access around the site. Parking spaces for cyclists would be provided onsite (within Car Park 1) with improved signage and information along the existing cycle routes. Public transport provision would remain the same; however it is expected with the addition of a park and ride facility from Bushmills, that the increase in public transport use would be beneficial. Parking provision onsite would increase. Parking at Bushmills would be used along with additional offsite parking at Innisfree Farm; therefore the total parking provision would be 401 spaces for visitors to the site. A management system for coaches is proposed, with the emphasis on a pre-booking system for coach parking. Overall, the effect of traffic to the site and on the local road network is predicted to be negligible.

Energy and Waste

The visitor building is “earth sheltered” with a significant exposed thermal mass and enhanced insulation from the grass roof. It has been designed to an energy efficient low carbon specification with optimisation of natural light penetration. The facility would utilise thermal storage and passive heat exchange. Its design incorporates ground coupled heating and cooling systems and low energy mechanical ventilation.

The development would generate demolition wastes and the earthworks would give rise to excavated sub-soils. As much of this material as practicable would be used as site backfill but inevitably a quantity of waste material would enter the regional waste management cycle.

When the visitor facility is up and running, operational waste streams would include paper, plastics, packaging, glass and food waste. Waste management would focus on minimisation and recycling, with the audit and monitoring of waste streams and energy usage being integral to the management of the site.

The energy and waste requirements of the Replacement Visitor Centre are not expected to generate the need for off-site infrastructure developments.

Conclusions

During construction, there would be disruption and disturbance at the site due to the nature of the works. However, overall the replacement proposals are expected to deliver substantial benefits by:

- removing the present visually intrusive development and replacing it with a carefully crafted building, designed to integrate with the landscape and respect its environmental sensitivities;
- enhancing the visitor experience and the presentation of the WHS as a whole; and
- improving visitor management and encouraging access to and appreciation of all the resources of the wider landscape.

Obtaining Copies of the Environmental Statement

Copies of the Replacement Visitors’ Centre at the Giant’s’ Causeway Environmental Statement Volumes I, II and the Non Technical Summary

(Volume III) can be obtained, either as a hard copy or on CD. Requests should be made in writing to the following address:

Turley Associates,
29-31 Montgomery Street,
Belfast,
BT1 4NX.

The following charges are made to reflect reproduction costs:

Hard copy of the Environmental Statement (inclusive of p&p): £250

A CD of the full ES (inclusive of p&p): £10

Copies of the Non-Technical Summary of the ES are available free of charge from the above address.

Viewing the Environmental Statement

The complete ES would be deposited for public inspection during normal opening hours at the following locations:

Moyle District Council, Sheskburn House, Mary St, Ballycastle, BT54 6QH.

Belfast Central Library, Royal Avenue, Belfast, BT1 1EA

The ES can also be viewed and downloaded from the National Trust Website at www.nationaltrust.org.uk/giantscauseway