

# **ENVIRONMENTAL IMPACT ASSESSMENT K65 SKI JUMP**

## **NON TECHNICAL SUMMARY**

### **1.0 INTRODUCTION**

#### **The Application**

The application is for permission to erect a structure to form a ski jump on the Wilderness Tip at Gresford, Wrexham. The application site is within a larger site which has an existing planning permission for a Ski Centre incorporating a dry ski slope, 3 ski jumps, a toboggan run, ski lodge, holiday chalets and ancillary buildings and infrastructure. The consented application incorporated a ski jump (the largest of the 3 jumps) referred to in the application as a K60 jump. This application is to replace the original "K60" with a K65 ski jump to International Ski Federation (FIS) standards.

This application ref P2008/0804 was submitted in July 2008 but has been delayed awaiting this Environmental Impact Assessment (EIA).

The main concerns are the visual impact of the proposed development and the likely impact on wildlife.

This Environmental Impact Assessment sets out to address these specific concerns (as amplified by background papers and subsequent discussion with the Authorities).

## **2.00 THE APPLICATION SITE AND PROPOSED DEVELOPMENT**

### **Location**

The site is located 300m West of the A483 (T) Wrexham to Chester trunk road (OS grid reference SJ336575). The site is bounded by the Wrexham Chester railway line to the East, the River Alyn to the North and West. Vehicular access to the site is from Blue Bell Lane via a single-track road with passing spaces (refer to drawing 1:009 site location plan).

### **Topography**

The Southern section of the site is a plateau of elevation 70-80 AOD with a prominent central “ski slope” mound rising to 106m AOD. The plateau is banked on all sides with steep slopes down to the River Alyn to the West and to Pont y Capel to the North. The plateau banks are heavily treed down to the river and bare down to Pont Y Capel Lane where earthworks to form the ski jumps have removed vegetation. The plateau and mound are generally unvegetated, but some small trees have started to establish.

The Northern area of the site is lower lying relatively gently sloping in the East and steeply sloping towards the river in the West, it is generally covered with small trees with larger trees adjacent to the river. A small area of grassland exists adjacent to the Trunk Road on the Eastern part of this land.

### **History**

After the early 40's the site was employed as a colliery spoil tip and continued in that use until the closure of Gresford Colliery.

A National Coal Board Plan from 1971 shows the whole of the site to be ravished by waste from mining activities. The plateau with its steep edge slopes was in place, the central mound was established and this was flanked to the South and West by numerous slurry pits.

After 1993 Wrexham Maelor Borough Council reclaimed the site with a grant obtained from the Welsh Development Agency. The remodelling of the land was specifically designed to accommodate a dry ski slope, quad bike track and toboggan run. The scheme has the distinction of being the only spoil heap known to have been made higher as a result of reclamation! (Please note that the current scheme does not include a quad bike track).

## **The Proposed Development**

The proposed development is for the erection of a ski jump to FIS 'K65' standards.

The profile of the in-run and landing hill are predetermined by FIS design standards, such that the lengths and heights in relation to the start of the out-run are fixed. In the case of the Wilderness Tip the difference in ground level between the start of the out-run and the start of the in-run is such that a 51m high structure is required. When other facilities are added the total height of the tower will be 58.5m

The proposals are illustrated by the application drawings in Appendix **2.1** of the full statement.

1:021	K65 ski jump plan.
1:022B	K65 ski jump elevation.
1:023B	K65 ski jump elevation.
1:024	Coaches stand.
3:054	K65 longitudinal section.
3:055A	K65 layout plan.

And by 3 dimensional architectural model illustrations enclosed in this section.

The tower at the Southern end of the K65 ski jump provides access to the ski jump waiting area and the viewing platform above via a lift and stairs. The staircases and landings are open steel structures with balustrading. The lift shaft, ground floor and ski jumping waiting areas are to be clad with metal cladding, other than on one side of the lift shaft, which is glazed to form a scenic lift overlooking the jump.

The in-run is supported on a steel structure, which in turn is supported on a tubular steel frame. It was decided at the time of the original application that the tubular structure would be more elegant than a simple purely functional braced lattice frame. This theme was therefore continued with the K65 structure.

The K65 is a large structure and after discussions with Planning Officers, the Landscape Architect advised on amending the colour scheme so as to mitigate the impact of the structure. The proposal is now to have the structure coloured brown at the base, grey at the top and graduated in between. The elegant profile of the side of the jump is to be highlighted in pale turquoise. This is illustrated by the illustrations enclosed in this section.

## **Consideration of Alternatives**

Alternative sites for the ski centre were considered in the EIA accompanying the extant planning permission. The alternatives to be considered with this application relate to the size of jump.

There are no ski jumping facilities in the UK. Our Client's vision is to remedy this by providing formal ski jumping facilities, which will eventually lead to British representation in the Olympic Ski Jumping competitions.

The original application included what was referred to as a K60 jump. It was based on information provided by a manufacturer who provides materials for ski jumps. On entering the detailed design stage our Client appointed a Specialist Architect to develop the ski jump design. As you would expect, as there are no ski jumps in the UK, this involved getting assistance from abroad. We employed a Swedish Architect with close ties to the FIS.

Designs were worked up and it was concluded that the height of the tower that had planning approval would not be sufficient to accommodate a K60 to current FIS standards and a K55 ski jump would be the maximum that could be accommodated within the consented height.

Further research indicated that ski jumpers, who are on target to reach International standard, move on to jumps larger than a K55 after the age of 13. Therefore it was concluded that a larger jump would be required to achieve the objective of providing a UK facility to train ski jumpers until they were old enough to travel to the massive K90 and K120 jumps available in Europe, to complete their training.

Outline schemes were then prepared for FIS standard K60, K65 and K70 schemes and it was concluded that the K65 was the largest jump that could reasonably be accommodated on site.

### **3.00 Drainage**

Under the extant permission a drainage scheme for the site was submitted to and approved by Wrexham County Borough Council. A discharge consent to discharge 10 litres per second of surface water to the River Alyn was approved by the Environment Agency. The outfall to the river, the hydrobrake control structure, the balancing pond and part of the drainage network have been constructed.

Two concerns have been raised in connection with the current application and the drainage arrangements:

- (1) Will the existing drainage scheme and its balancing pond be large enough to handle the increased run-off from the enlarged jump? If not there is a concern that flooding of the system could result in possible pollution from the site entering the river.
- (2) There is concern that chemicals from the antifreeze in the watering systems could find their way into the river.

The drainage scheme has been checked for the increased surface water runoff for the larger slope, and it is concluded that the existing drainage system can accommodate and balance flows from the larger jump, with no increase in flow to the river or flooding on site. There are no chemicals to be added to the watering systems.

#### **4.00 Flood Lighting**

Concern has been expressed regarding the effect of floodlighting to the higher structure on bats. This chapter gives details of the consented floodlighting and the proposed floodlighting. The effect on bats is considered under the ecology chapter.

Whilst detailed lux contours were not produced for the previously consented scheme the 1-lux contour was submitted for approval that time.

It is concluded that the

- The location of the one-lux contour is very similar for the approved scheme and the two illumination levels considered for the current scheme including the higher K65.
- With the exception of the railway line to the East, the 1-lux contour is generally within the site boundary.
- Although the tower will be higher with the K65, the method of illumination i.e. inside the barriers of the in-run, will be less prominent than the approved scheme with floodlights located on posts 10m above the in-run level.
- The floodlights being unidirectional and adjustable are not prone to causing nightglow or spill from the lamps.

## **5.0 LANDSCAPE AND VISUAL ASSESSMENT**

A landscape and visual assessment of the proposed, substitute K65 ski jump at the Wilderness Tip site in Wrexham was undertaken in 2010. The existing site has extant planning permission for redevelopment as a ski complex. The proposed K65 ski jump will be some 20.6m higher than the consented K60 ski jump.

No landscape planning designations cover the site, although a Special Landscape Area applies to the wide study area.

The application site lies within CCW National Landscape Character Area 13: Deeside and Wrexham; and also, Regional Character Area 9b: River Alyn Valley as defined by the local authority. The existing spoil heap forms a local landscape feature.

The regeneration of the former Wilderness Tip as a new ski complex will represent benefit in terms of the landscape character of the site and local settlement pattern. There will be no landscape impact on the character of the AONB, or surrounding Special Landscape Areas.

There will be seven adverse impacts on views with a rural aspect, (i.e. few urban elements or detractors in the view) where the form of the proposed K65 ski jump will appear out of keeping with vertical scale and character of these views. This will be balanced by four beneficial changes in views with a more urban aspect, where the ski jump will be seen as a new landmark, which contributes to the urban context of Wrexham, and represents the regeneration of the Wilderness Tip.

There will be some adverse impacts on night-time views as a result of new lighting associated with the K65 ski jump.

The consented K60 ski jump would give rise to similar landscape and visual benefits in the context of the wider, consented ski complex.

## **6.0 Ecological Assessment**

Following the scoping consultation, the Local Authority has requested, up to date surveys to be undertaken in respect of the potential impact on the following species and sites and a summary of impact.

- **Great Crested Newt:** A report on the present status of the previously developed mitigation work and its findings, the conclusion of the report is that this species is not at threat by the proposals and that the favourable conservation status locally will be maintained.
- **Otter:** An assessment of the perceived increase of water run off into the River Alyn and its connectivity to the River Dee SAC and any local impact on the protected species Otter, the conclusion of the report was that the control of surface water run of from the site was as previously agreed and designed, and that the increase in size of the ski jump from a 'K60' to a 'K65' would not materially affect the approved water management design.
- **Bats:** An assessment of the flood lighting of the towers and its potential impact on any foraging bat species, the survey did identify use of the site by bats. The impacts of the flood lighting have been assessed and recommendations have been put forward to negate any potential impacts.

The approach of the report is to assess the potentially recorded impacts and to offer an alternative approach to negate any identified impacts to ensure that the favourable conservation status and the ecological functionality of the recorded species can be maintained.