Sully Sports and Social Club Redevelopment

Wetland bird survey (WEBS)

St Modwen Developments Ltd.

May 2015

Notice

This document and its contents have been prepared and are intended solely for St Modwen Developments Ltd.'s information and use in relation to Sully Sports and Social Club Redevelopment.

Atkins Ltd. assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This report has been prepared by an environmental specialist and does not purport to provide legal advice. The reader may wish to take separate legal advice.

This document has 11 pages including the cover.

Document history

Job number: 5133321			**Document ref: 20140705**			
Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	Final for issue	DM	PW	JB	CS	April 2015

Client signoff

Client	St Modwen Developments Ltd.
Project	Sully Sports and Social Club Redevelopment
Document title	Sully Sports and Social Club Redevelopment
Job no.	5133321
Copy no.	
Document reference	20140705

Table of contents

1. Introduction

1.1. Terms of reference

Atkins Limited was instructed by St. Modwen Developments Ltd. to undertake wetland bird surveys during the winter of 2014/2015 at the Sully Sports and Social Club, Wales (from here on referred to as 'the site'). St Modwen Developments Ltd. is looking to redevelop the site to comprise a mixed use of housing and a rearrangement of existing leisure facilities.

The site is approximately 500 m from Sully Island Site of Special Scientific Interest (SSSI) which forms part of the Severn Estuary Special Protection Area (SPA) and Severn Estuary Wetland of International Importance (Ramsar site). Desk study data suggests Sully Island is used as a high tide roost site by overwintering waterbirds. Overwintering waterbirds birds can be subject to disturbance impacts from activities such as construction.

An Ecological Impact Assessment[1] prepared for the site in 2014 concluded *'there will be no direct impacts on Sully Island SSSI and site lay-out and design mean that indirect impacts can also be ruled out'*. However given the uncertainties surrounding the layout of the development and the potential requirements of the LPA, the client asked Atkins to undertake baseline bird survey work during winter 2014/2015, in order to inform a possible assessment of impact, if required.

1.2. The site

The site is located on the south east fringe of the village of Sully, situated between Penarth and Barry in The Vale of Glamorgan. The northern boundary is the B4267 (South Road) and the southern boundary is the coast of the Bristol Channel / Severn Estuary. To the west it is bounded by housing off Clevedon Avenue and to the east by Beach Road and a caravan park. Beyond the site, the majority of land immediately to the west and north-west is residential; to the east and north east there is more open countryside; to the south is the intertidal habitat of the coast. The site largely comprises sports pitches with associated buildings including the Sully Social Club building and indoor sports facilities.

1.3. Scope of works

Atkins were asked to undertake wetland bird surveys to establish which species of wetland birds are using the area during winter, in what numbers they are present, and to establish which areas they are using. The survey area incorporated:

- The site;
- Adjacent foreshore of the Severn Estuary; and,
- Sully Island (only north shore was visible to survey).

The principal aims of the surveys are:

- to identify high tide roost sites within or adjacent to the site, which potentially could be affected by the redevelopment (qualifying species of an SPA/Ramsar site can use land outside of the SPA/Ramsar site boundary);
- to identify the range, numbers and distribution of waterbirds using the site and adjacent habitats; and
- to identify the key winter months when each qualifying species was present within the estuary.

Information from the wetland bird surveys will be used to inform an ecological impact assessment for the site. The information may also be used to inform a Habitats Regulations Assessment (HRA) of potential effects on the Severn Estuary SPA/Ramsar site, if this is required.

[1] Atkins (2014). Sully SSC Redevelopment: Ecological Impact Assessment DRAFT

1.4. Relevant legislation

Sully Island SSSI forms part of the Severn Estuary SPA/Ramsar site. A Habitats Regulations Assessment (HRA) under Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) may be required in respect of potential impacts on the Severn Estuary SPA/Ramsar site. Works with potential to impact upon the Severn Estuary SSSI may require Section 28 Assent from Natural England (under s.28 of the Wildlife & Countryside Act 1981, as amended).

The following are qualifying species of the Severn Estuary SPA/Ramsar:

- Bewick's swan,
- greater white-fronted goose,
- shelduck,
- gadwall,
- pintail,
- teal,
- curlew,
- redshank, and
- dunlin.

2. Methodology

Bird counts were undertaken by Atkins broadly following the WeBS Core Count methodology[2]. This was to obtain details of the numbers and distribution of waterbirds within the survey area at high tide, and to identify the location and importance of high tide roosts potentially within or adjacent to the site.

Surveys were undertaken monthly between December 2014 and March 2015. Surveys were timed to coincide with the highest spring tides, and were undertaken on the following dates in each month:

- 24th December 2014
- 23rd January 2015
- 23rd February 2015
- 24th March 2015

Surveys involved walking through the development site, scanning open areas with binoculars and spotting scope for waterbirds. The adjacent Severn Estuary foreshore was surveyed from within the site. Sully Island was surveyed from a public car park adjacent to the site.

All waterbirds[3] seen or heard were recorded on a map, indicating the species, number of birds and their location.

2.1. Survey Limitations

Numbers of waterbirds overwintering at a site may vary from year to year depending upon climatic variation and migration patterns.

Large aggregations of birds such as those at high tide roosts can be difficult to count accurately due to the large distances between the observer and birds often involved, and the dense nature of flocking birds. As such, counts included within this report should be taken as estimates.

Surveys at the site were not commissioned until December 2014, and no surveys were undertaken during the months of October and November. However, it is considered that the peak winter season was covered and therefore if high tide roosts are present within or adjacent to the site, the surveys between December - March will have identified these.

Bird surveys are limited by factors which affect the presence of birds such as the time of year, migration patterns and behaviour and therefore the survey of the site may not have produced a complete list of birds. However the vast majority of waterbirds using the site will have been recorded and the results of the surveys are considered sufficiently detailed to allow an assessment of the overwintering waterbird population and their roosting location preferences.

[2] Gilbert, G., Gibbons, D.W. and Evans, J. (1998) Bird monitoring methods: A manual of techniques for key UK species. RSPB: Sandy
[3] Ducks, geese, swans, cormorants, herons, crakes and rails, waders and kingfishers.

3. Results

Five species of waterbird have been recorded during wetland bird surveys undertaken at the site: shelduck, oystercatcher, curlew, turnstone and dunlin. Three of these are qualifying species of the Severn Estuary SPA/Ramsar site: dunlin, curlew, and shelduck. A summary of maximum monthly counts for each species can be found in Table 1 below. A summary plan showing locations of waterbirds recorded is provided in Appendix A.

Other species recorded during the wetland bird surveys include: herring gull, lesser black-backed gull, black-headed gull and Mediterranean gull.

Table 1. Monthly maximum counts of waterbirds. Figures are a sum of species totals from all parts of the survey area.

Species	Dec-14	Jan-15	Feb-15	Mar-15
Shelduck		2	4	8
Curlew	29	24	24	
Oystercatcher	114	124	93	56
Turnstone	6		15	
Dunlin			3	

Up to eight shelduck were recorded roosting on the north shore of Sully Island during the surveys. Shelduck will feed on mudflats within the Severn Estuary when they exposed at low tide. They will roost in areas such as Sully Island at high tide.

The lower half of the site is used by curlew for foraging at high tide. A flock of up to 24 curlew was recorded foraging on the sports fields during each visit between December 2014 and February 2015. The flock was associating with a large flock of mixed gulls which also used the site to roost and forage at high tide. Curlew will forage over a range of habitats. At low tide they will forage over intertidal habitats including mad and sand flats and rocky areas. This species will also readily forage on terrestrial habitats such as amenity grassland and farmland.

Large flocks of oystercatcher (maximum count of 121 in January 2015) have been recorded roosting on Sully Island at high tide. Up to three oystercatcher have been recorded foraging alongside the curlew on site. This species will forage on intertidal habitats at low tide, moving to high tide roosts such as Sully Island when feeding areas become unavailable.

Small numbers of turnstone (maximum of 15) and dunlin (maximum of two) were recorded roosting on the north shore of Sully Island. On one occasion these were seen to fly over to the Severn Estuary foreshore adjacent to the site, where they roosted briefly on the rocky shore.

4. Preliminary impact assessment

Potential impacts to overwintering waterbirds from the redevelopment of Sully SSC will come from:

1. Loss of foraging and roosting habitat within the site. Approximately 50% of the existing amenity grassland area will be lost to the development.
2. Visual and acoustic disturbance to birds using the foreshore and Sully Island during construction and operation.

Loss of grassland within the site will principally affect curlew which currently forage at the site at high tide. Curlew are an adaptable species and will use a range of intertidal and farmland habitats to forage. Extensive areas of farmland are present east of the site which will be suitable for this species to forage. In addition, given 50% of the site will remain as sports fields post development, long term significant effects on the curlew population (a qualifying feature of the Severn Estuary SPA/Ramsar site) are unlikely.

Construction work during the redevelopment has the potential to disturb overwintering waterbirds within the site, on the foreshore of the Severn Estuary adjacent to the site, and on Sully Island.

The area has high amenity use from dog walkers, runners, tourists, and sportspersons resulting in high existing background levels of disturbance within the site and along the foreshore of the Severn Estuary. Given the background levels of disturbance from the amenities in this area, construction disturbance to birds is unlikely to pose a significant impact on roosting or foraging birds on the site or foreshore of the Severn Estuary.

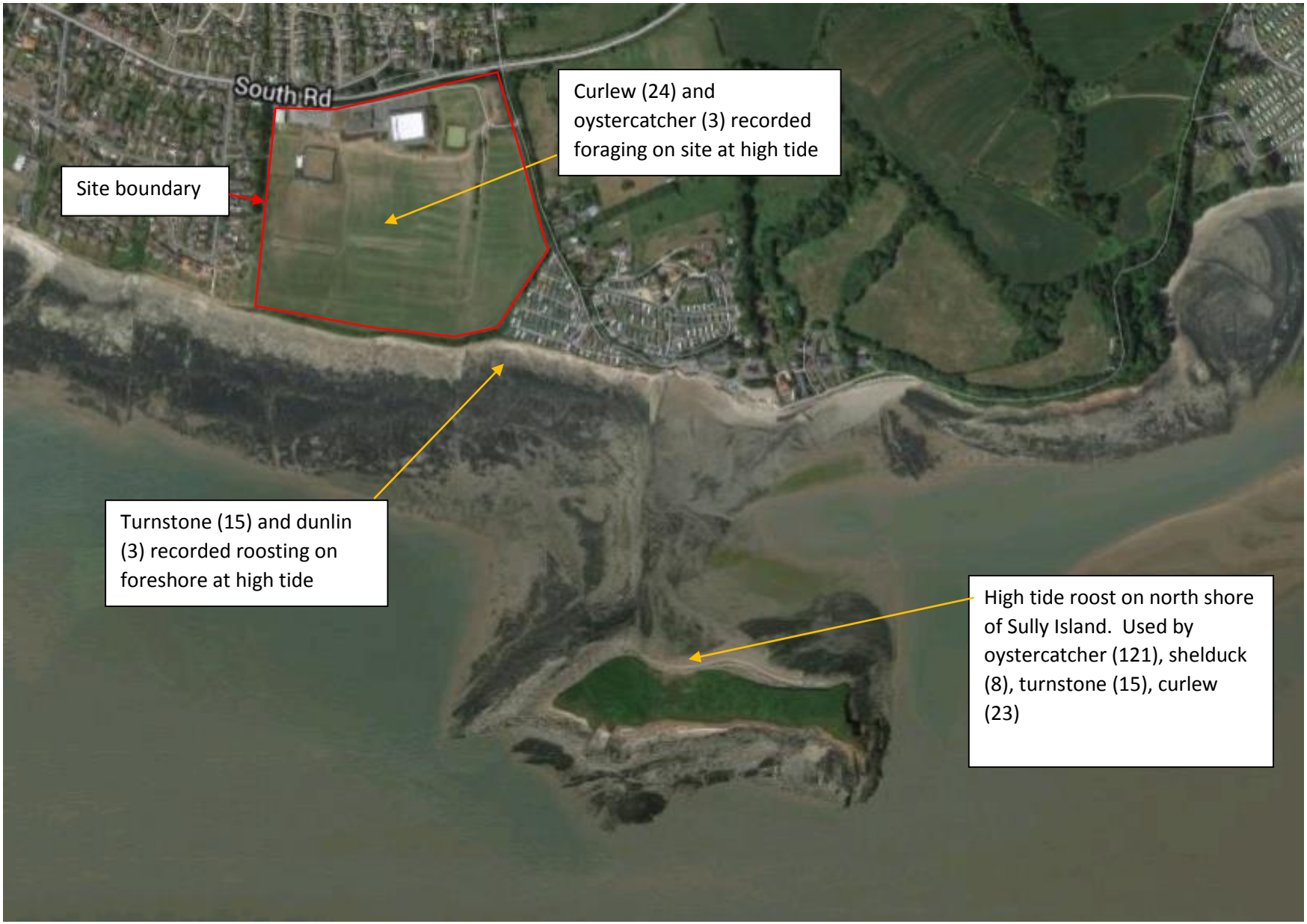
Sully Island is approximately 500 m from the site. Given the distance and the screening of the site from coastal scrub, visual and acoustic disturbance from construction and operation will be negligible.

Once operational, the scheme is unlikely to provide levels of disturbance to roosting waterbirds significantly above the existing background levels at the site. Impacts from operational disturbance are unlikely to be significant.

Appendices

Appendix A. Winter bird survey figure 2014/2015

Sully Island WEBS surveys 2014/2015 summary of results
Maximum counts of each species given in brackets.



Atkins
The Hub
500 Park Avenue
Aztec West
Bristol
BS32 4RZ