

SOLAR PARK, BARRY

ECOLOGICAL MANAGEMENT PLAN

JANUARY 2015

Prepared for:

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PROJECT:	SOLAR PARK, BARRY
TITLE:	ECOLOGICAL MANAGEMENT PLAN

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PREPARED BY:

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SOLAR PARK, BARRY
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1.0 INTRODUCTION

Associated British Ports (ABP) intends to construct a photovoltaic array of up to 10MW at their site in Barry Dock under planning permission No. 2014/01089/FUL.

The Planning Permission contains conditions that are to be discharged prior to commencement of the works.

Condition 9 of the Planning Permission states: -

“An Ecological Management Plan (EMP) shall be submitted to and approved in writing by the local planning authority prior to the commencement of any works within the site (including site clearance and re-profiling of any land forms). The content of the EMP shall include, but not exclusively limited to the following: -

DESIGN:

- a) Details of site fencing (including any details for continued future access by medium sized mammals;*
- b) A lighting strategy for the site (for the benefit of light sensitive species);*
- c) Details of the type of enhancements of habitat for reptiles;*
- d) Plans showing the retained habitat for the Lauxaniid fly;*
- e) Details of the re-creation/enhancement of Open Mosaic Habitat;*
- f) Details of any other enhancement on the site for bio diversity.*

MANAGEMENT:

- a) Future management of the site for the benefit of all species.*

MONITORING:

- a) Any proposals to monitor the OMH or the reptile / invertebrate species.*

The EMP shall be implemented in accordance with the approved details and all features shall be retained in that manner thereafter”.

This document is provided to discharge condition 9 of Planning Permission 294/01089/FUL and may be used to produce method statements following award of the contracts and prior to commencement of the works.

1.1 Site Description

The site is located within the boundary of the existing ABP Barry Dock land which is secured from public access.

The site is located approximately 2 km west of Sully and 2 km east of Barry and the western third of the site is occupied by an inert aggregate recycling facility that has been active for around 17 years. The facility accepted aggregates and inert soils and recovered the aggregates for re sale. The residual materials are deposited on the site to a thickness of around 6m. The grid reference for the approximate centre of the site is ST 12886, 67161.

The central section of the site has been disused for many years and has become overgrown with scrub vegetation.

The eastern third of the site is occupied by a former coal yard.

The southern boundary of the site is formed by the coast and the River Cadoxton, to the south west the site is bounded by a section of Barry Dock and the working port facility forms the northern site boundary.

Drawing 234-02-10.d01 included in Appendix A shows the site location and the Planning Line Boundary.

1.2 Proposed Works Description

Site works will comprise two main operations: -

- Earthworks to create the development platform;
- Photovoltaic array construction.

Within the earthworks contract, a gently sloping development platform is to be created sloping downwards from west to east.

In order to achieve this, inert soils from the western end of the site will be moved down towards the center of the site. Some filling is also required over the former coal yard in order to raise the development level above the minimum anticipated flood level of 8.1m AOD.

The initial soil movement contract is scheduled to last around 10 weeks.

In addition habitat creation works, including creation of bunds and habitat links will take approximately 3 weeks.

2.0 ECOLOGICAL MANAGEMENT PLAN

The following sections describe the measures that are proposed to discharge condition No.9 of planning permission 2014/01089/FUL and are in accordance with the recommendations of the ecological reports that were provided to support the planning application.

2.1 Ecological Report Recommendations

During the planning process, ecological surveys including reptile, invertebrate and mosaic habitat were conducted. Each of these reports identified a number of recommendations for the development site.

Recommendations were made for the enhancement habitats along with appropriate mitigation in areas where removal was required. The key recommendations are summarised below: -

- Land along the south-eastern and south-western site boundaries will be retained and protected from the impacts of the development, and will be enhanced for the benefit of slow worms. This area will be used as a receptor site for the release of translocated slow worms;
- Reptile exclusion fencing will be installed along the boundary of the receptor site to prevent slow worms from entering the development footprint from the receptor site;
- A management plan should be compiled that will enhance the biodiversity of the mitigation area, to include rotational management practices and planned disturbance events to maintain early successional stages;
- In order to comply with planning policy regarding species of conservation concern, habitat replacement is recommended, to be combined with recommendations made for reptiles and priority habitat replacement. Replacement habitat should include a mosaic of habitats including grasslands with scrubby areas and tall-ruderal margins combined with areas of bare ground. Creation of the habitat should be undertaken using recycled aggregate materials and materials taken from the development site to ensure the transfer of the seed bank;
- It is recommended that early successional habitat is created on the site to compensate for the loss of Open Mosaic Habitat. This can be achieved by using recycled aggregate material, seeding with appropriate species, and maintaining through planned frequent disturbance;
- In addition to the above, ecological enhancements should be considered to comply with national and local planning policy. Enhancements could include undertaking a phased site clearance plan, providing topographical variation and areas with swathes of common rest harrow.

2.2 Proposed Measures to be implemented

Fencing

Fencing around Zone 1 and Zone 2 of the development will comprise 2.9m high green nylon covered welded mesh. During the earthworks and construction, Heras fencing will also be utilised. Fencing locations for Zone 1 and Zone 2 have been shown in red on drawing 234-02-10.d04 which has been included in Appendix A

Lighting

No additional lighting is proposed.

Reptile Habitat Enhancement

A reptile survey undertaken prior to making the planning application identified slow worms within the development area. Following consultation with the Vale of Glamorgan County Ecologist, a reptile translocation site along the south-eastern and south-western site boundaries was agreed. Herptile fencing was erected along the translocation site boundary to prevent slow worms from re-entering the site. Translocation of the slow worms took place during September/October 2014.

Following completion of the translocation works, a destructive search of the area was conducted as agreed with the county ecologist. No further captures were made.

The reptile translocation site is shown in drawing 234-02-10.d02 included in Appendix A.

Retained habitat for the Lauxaniid fly

An Invertebrate Survey completed prior to submission of the planning application identified 1 Lauxaniid Fly. Following consultation with the county ecologist, it was agreed that a 10m wide strip of land would be retained along the eastern boundary of the site. This area includes primary habitat where the fly was identified.

Drawing 234-02-10.d03 included in Appendix A shows the area that was agreed with the County Ecologist to be retained.

Re-creation/enhancement of Open Mosaic Habitat

An open Mosaic Habitat Mitigation Strategy was submitted with the planning application. Existing bunds are present to the south eastern corner of the development. However, in addition to these the mitigation strategy proposed to construct bunds along the north western boundary of the development where none are currently present.

The bunds will contain small voids that will create habitat for slow worms.

The existing and constructed bunds along the eastern boundary will then be seeded or covered with suitable material to create new open mosaic habitat.

The constructed bund will be adjacent to the 10m strip of retained land which will further enhance the ecological value of this area of the development.

Drawing 234-02-10.d05 has been included in Appendix A showing the areas in which Open Mosaic Habitat creation has been proposed.

Management

In accordance with condition 10 of the planning permission, a landscaping scheme for the development will be created and agreed with the Local Authority. This scheme is likely to include ongoing monitoring and aftercare of landscaped areas and areas of habitat created.

Implementation of the landscaping scheme as agreed with the Local Authority will ensure that the site is managed to the required standard.

Monitoring of Open Mosaic Habitat and Reptiles

Disturbance of open mosaic habitat will be undertaken at a frequency agreed with the county ecologist. This could include ecological surveys and implementation of the recommendations of the surveys. A summary of any relevant works completed will be provided to the county ecologist.

It is anticipated that Invertebrate and Reptile surveys in the areas of open mosaic habitat and the Reptile Translocation area will be conducted to review population numbers within the site and surrounding area. The frequency of monitoring and intervention will be agreed with the county ecologist.

APPENDIX A

Drawings



Notes:

A1

— Red line Boundary

Job: 234-02-10

Title: Red Line Boundary

Date: January 2015
Scale: NTS
Drawn by: DS
Checked by: AP


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Drawing No: 234-02-10.001

Revision No: Date:

- Primary Translocation Site
- Secondary Translocation Site to be used until Herpette Fence is erected at Primary Translocation Site



Job: 234-02-10

Title: Translocation Sites

Date: September 2014
Scale: NTS
Drawn by: DS
Checked by: SW



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Drawing No: 234-02-10.002

Revision No: Date:

Proposed Retained
Habitat Area
Approximately
10m wide x 150m long



Job: 234-02-10

Title: Area of Retained Habitat

Date: October 2014
Scale: NTS
Drawn by: DS
Checked by: AP

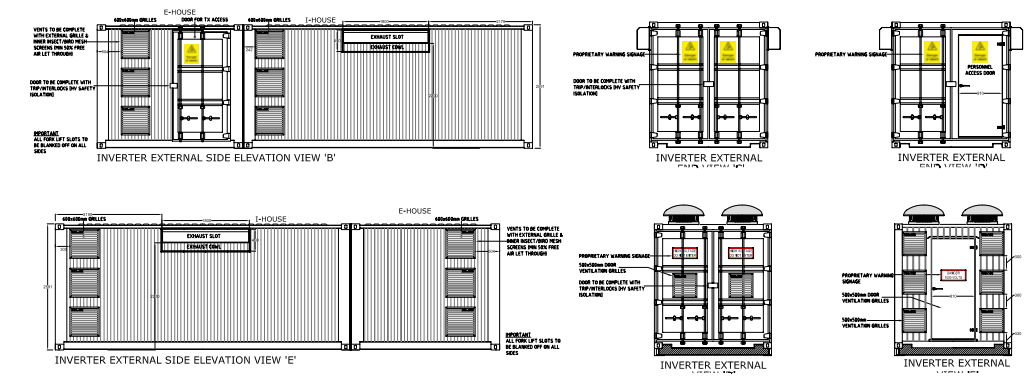
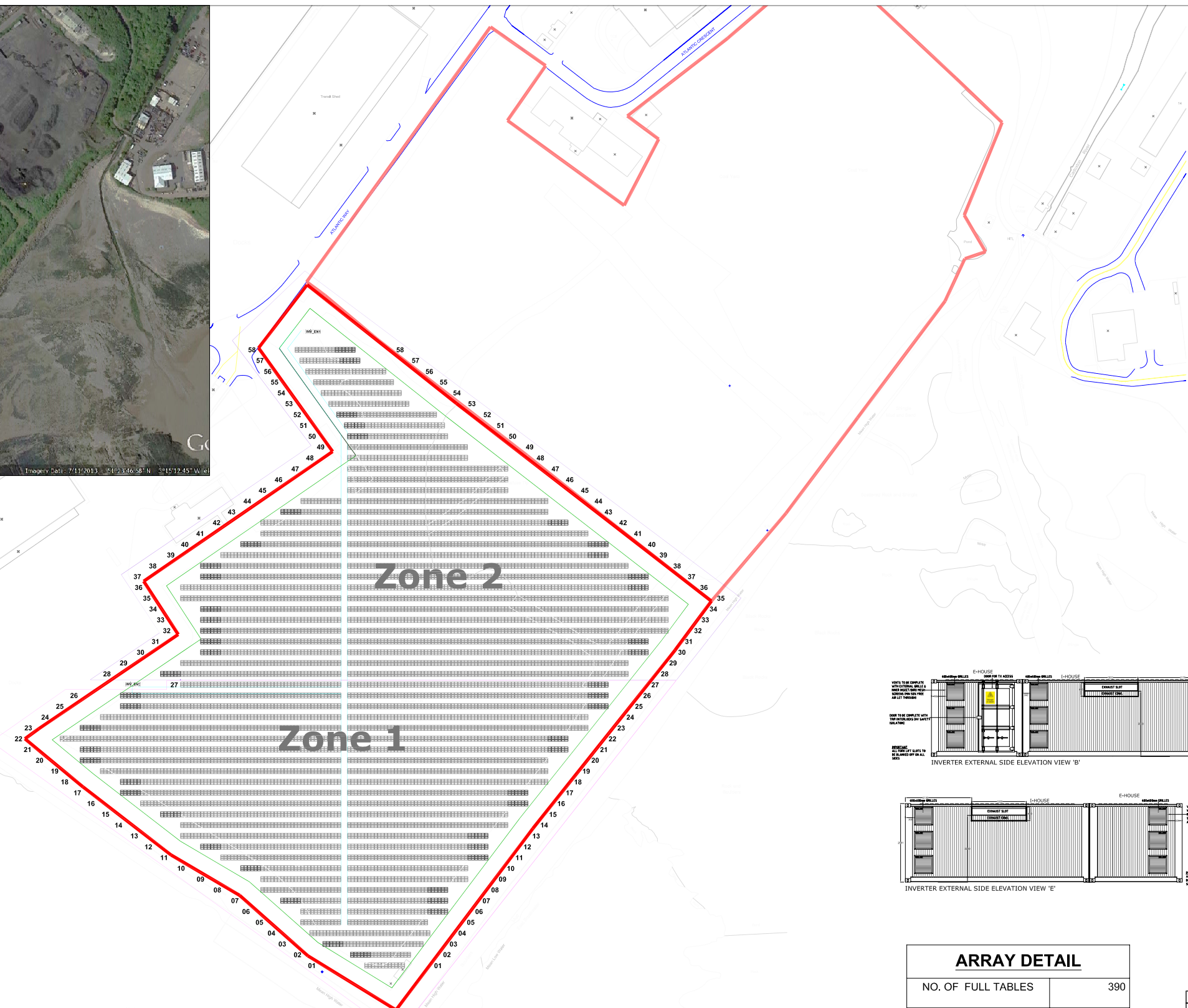

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Drawing No: 234-02-10.003

Revision No: Date:



Key Symbol	
	SITE SECURITY FENCE
	NET PV AREA 10m FROM SITE FENCE
	TRENCH POSITION
	36 X MODULE TABLE
	18 X MODULE TABLE
	INVERTER ENCLOSURE
	TATA TP300 300wp PV MODULE



ARRAY DETAIL	
NO. OF FULL TABLES	390
NO. OF HALF TABLES	48
NO. OF MODULES PER FULL TABLE	36
NO. OF MODULES PER HALF TABLE	18
TOTAL NO. OF PV MODULES	14,904
TOTAL PV ARRAY	4.4712 MWp

REV	DESCRIPTION	DATE	BY	APPROVED
L	E & I House Detail Added	05.01.15	NW	SK

Provisional Issue

CLIENT

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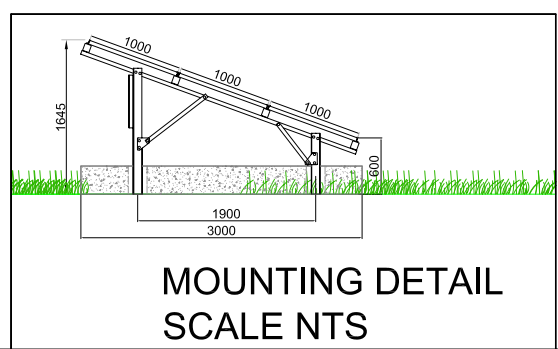
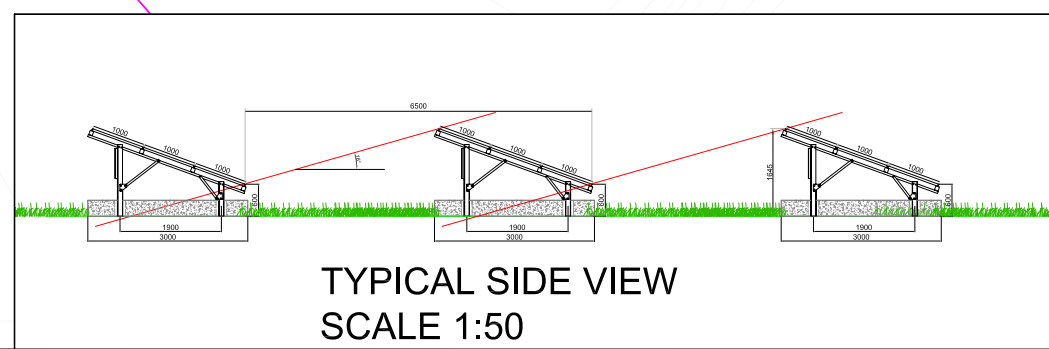


JOB TITLE
208097-ABP Barry Solar Field

DRAWING TITLE
GROUND MOUNTED PV LAYOUT

CLIENT -		CONTRACTOR -	
SCALE VARIOUS @ A0	DRAWN NW	DRAWING NO. 234-02-10.d04	REV. L
JOB No. 208097	DATE 19.11.13		

AREA CALCULATIONS	
PARAMETERS	AREA (m ²)
MODULE	1.984
FULL TABLE	74.2836
HALF TABLE	35.712
TOTAL ARRAY	30,687.6336



ARRAY PLAN VIEW SCALE 1:1000

TYPICAL SIDE VIEW SCALE 1:50

MOUNTING DETAIL SCALE NTS



- Application site
- Existing bunds and scrub retained. (approximate extent shown)
- Proposed bunds sown with grassland mix using locally occurring species

Panels mounted on surface formed by aggregate spread from the existing inert waste recycling area.

234-02-10.d05

Open Mosaic Habitat

