

Wrexham AFSRC: Habitat Management Plan

(Revision A)

1. Introduction

1.1 Background

The Welsh Ambulance Service Trust (WAST) proposes to develop a combined Ambulance and Fire Service Resource Centre (AFSRC) on a site ('the site') at Croesnewydd Road, Wrexham. The site is situated at National Grid Reference (NGR) SJ3194 5037 on the western side of Wrexham town centre. It is bounded to the north by Wrexham Maelor Hospital (specifically the hospital car park on the disused railway); to the west by the Croesnewydd Road; and to the south by the River Gwenfro. This site is a component of the wider 'Western Gateway' development, part of ongoing development within Wrexham Technology Park.

BAM Construction Ltd, assisted by Nightingale Associates and AMEC Environment & Infrastructure UK Ltd (AMEC), prepared the planning application for the proposed development on behalf of WAST. AMEC completed an Ecological Assessment of the proposed development in 2012. This Assessment is detailed in a separate report (AMEC 2012¹), supported by plans and includes details of the site and proposed development and describes the approach to and results and conclusions of the Ecological Assessment. The Ecological Assessment was updated/validated by walkover survey in October 2013 (AMEC 2013²). The proposed development has now been recommended for planning consent (Application No: P/2013/0805; 6th May 2014³). Enabling works will shortly commence on-site.

1.2 Planning Condition 36: Habitat Management

Planning Condition 36 states: *"Within 3 months of commencement of development, a management plan for the ecological features and tree and shrub planting within the ecological corridor as detailed on approved plan ref: AR ARC 00 PL 100 012 Rev T, shall be submitted to and approved in writing by the Local Planning Authority. The ecological corridor and planting shall thereafter be managed in strict accordance with details hereby approved."*

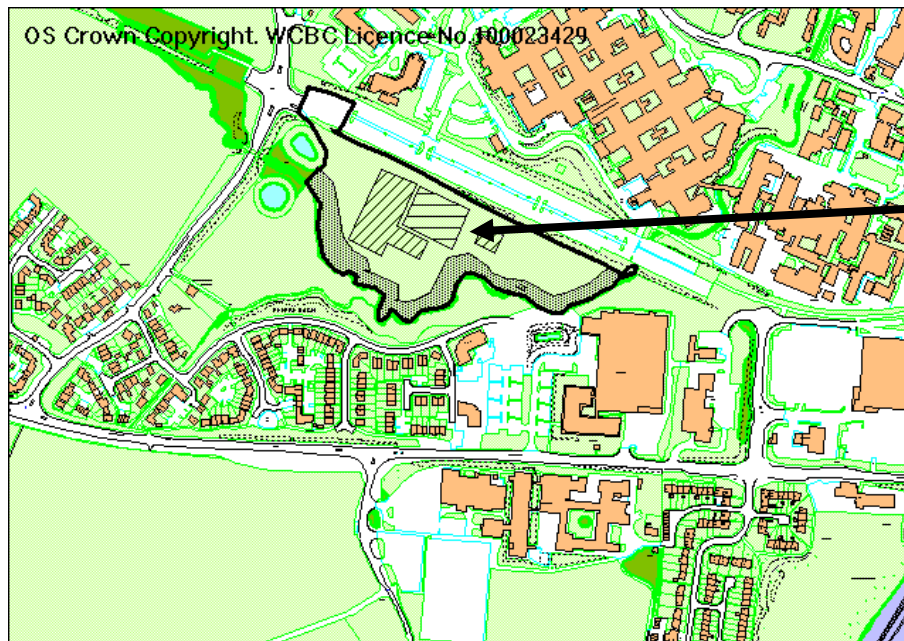
The approximate extent of the 'Ecological Corridor' is shown below. The more detailed masterplan (*plan ref: AR ARC 00 PL 100 012 Rev T*) of the completed development, showing

¹ AMEC (2012). *Wrexham ARC Ecological Assessment*. Technical Report Prepared for BAM Construction Ltd

² AMEC (2013). *Wrexham AFSRC – Ecological Assessment (Update 2013)*

³ Application No: P/2013/0805: Report of the Head of Community Wellbeing and Development– 6 May 2014

the ecological/riparian corridor is included in Appendix A, although the specific planting detail is to be refined. Full details of the Habitats and species recorded within the site are included in the Ecological Assessment report (AMEC 2012).



Riparian corridor (15m wide) extending along the River Gwenfro, at the edge of the AFSRC Site - to be retained and enclosed within otter fencing.

1.3 Purpose of this Document

This document has been prepared for submission to and approval by Wrexham County Borough Council in order to discharge Planning Condition 36. It sets out the habitat management that will be implemented mainly within the riparian/ecological corridor, but including other habitats within the AFSRC site.

The management plan will be implemented by the occupants of the completed development. The overarching aim of the Habitat Management Plan is to at least maintain, and where possible enhance, the nature conservation value of the developed site. It focuses on a number of ecological receptors, the status of which is summarised in the Ecological Assessment report (AMEC 2012):

- **Otters:** the reach of the River Gwenfro that borders the site is part of an otter (*Lutra lutra*) territory. Otters are a species of Principal Importance for the Conservation of Biological Diversity in Wales and are a UK BAP species. Otters and their habitats are also afforded comprehensive legal protection (Appendix B). Levels of otter activity vary within the reach, although no confirmed holts or couches have been identified and it likely that this part of the Gwenfro is used mainly for dispersal and foraging;

- **Bats:** all bat species and their roosts are legally protected (Appendix B) and some species are of Principal Importance for the Conservation of Biological Diversity in Wales. The site does not support a notable bat assemblage and there are no known bat roosts within the site, however bats are known to forage within the site;
- **Himalayan Balsam:** it is illegal to cause the spread of this non-native, invasive species, which has been recorded within the site and is associated mainly with the riparian corridor, although there are other areas within the site. It has been treated within the site using pesticide and further treatment of limited re-growth is to be undertaken pre-construction; and
- **River Gwenfro:** the river Gwenfro borders the site and as well as otters is known to support a range of aquatic and riparian species, including brown/sea trout (*Salmo trutta*) and Atlantic salmon (*Salmo salar*), which are species of Principal Importance for the Conservation of Biological Diversity in Wales. Rivers are Habitats of Principal Importance for the Conservation of Biological Diversity. The Water Framework Directive (2000/60/EC) places a legal requirement on EU member states to ensure that watercourses/waterbodies achieve at least good ecological status by 2015 and that there is no deterioration in ecological status.

2. Habitat Management Plan

2.1 Objectives and Management Requirements

Limited habitat management intervention is required at the AFSRC site because the semi-natural habitats that will be retained are largely restricted to the 15m wide riparian corridor, which will be fenced-off, retained and enhanced with additional planting, and allowed to mature. Therefore the management is largely focused on maintaining the integrity of this ecological/riparian corridor. The objectives of habitat management within the AFSRC site are:

- **Objective 1 (River Gwenfro):** the site edge (bordering the River Gwenfro) is a 15m wide, continuous semi-natural riparian corridor, comprising connected woodland and scrub that provides bank side cover for riparian species and also allows light to penetrate the canopy and reach the river bed in places.

Management Requirements: planting of native trees of local provenance to enhance/bolster the riparian corridor, replace failed planting and fill gaps in existing woodland/scrub, improving its connectivity. Otherwise allow the riparian corridor to mature, with selective thinning of the canopy only to allow light to reach the river bed in parts of the reach.

- **Objective 2 (Otters):** otters continue to use the River Gwenfro within the site

Management Requirements: maintain robust, intact otter exclusion fence extending along the edge of the riparian corridor and manage the riparian corridor as above.

- **Objective 3 (Bats):** site incorporates bat roost habitat

Management Requirements: Install bat boxes (no roost habitat will be lost to the proposed development and so there is no defined requirement for a specific number of bat boxes, however approximately 9 bat boxes in clusters of three is planned to enhance the riparian corridor) on trees within secluded parts of the riparian corridor, at approximately 4m to 5m height and with different orientations within each cluster. Maintain/repair damaged bat boxes.

- **Objective 4 (Himalayan Balsam):** Himalayan balsam eradicated from the site

Management Requirements: Treat any remaining Himalayan balsam within the site using suitable herbicide in spring; or manual removal and composting before mid-June each year.

- **Objective 5 (Grassland):** Maintain grassland/plant diversity within the site

Management Requirements: Annual cut of any wildflower/grassland or rank grassland, including at site edges to maintain sward diversity.

2.2 Schedule of Habitat Management and Monitoring

Habitat management is required at the site primarily to enhance and maintain the nature conservation value and integrity of the riparian corridor. The schedule of management activities is summarised in Table 2.1 below.

It is anticipated that Year 1 of management plan implementation will be the first year that the developed site is occupied. Up to that point the riparian corridor will be protected during the construction phase in accordance with the Site Environmental Management Plan.

Table 2.1 Schedule of Habitat Management

Task	Timing	Yr 1	Yr2	Yr 3	Yr 4	Yr 5
<u>MONITORING</u>						
Site Inspection (Ecologist) to record: condition (density/integrity etc) of riparian corridor (trees/scrub); integrity/functionality of otter fence; distribution of Himalayan balsam; signs of otter activity; condition of bat boxes; coarse woody debris likely to create a flood risk.	May	✓	✓	✓	✓	✓
Arboriculture inspection of condition of riparian woodland and tree planting within the site.	Annually (first 5 years)	✓	✓	✓	✓	✓

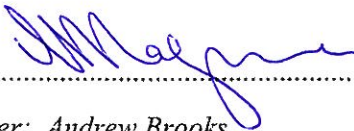
Task	Timing	Yr 1	Yr2	Yr 3	Yr 4	Yr 5
<u>HABITAT MANAGEMENT</u>						
As determined by site inspections (Ecology and arboriculture) - plant native trees of local provenance in order to bolster and improve connectivity of the riparian corridor and to replace failed planting; replace guards/stakes/ties on new planting; and similarly remove ties/stakes/guards from sufficiently mature saplings.	Spring	✓			✓	
Selectively thin the tree canopy to allow sunlight to reach the river bed in localised areas throughout 25% of the reach of the Gwenfro that borders the site. [NOTE: The Local Authority's Arboriculture Officer must be consulted prior to any tree work and no tree works should take place without the prior written consent of the Local Authority]. Create/maintain deadwood piles within the riparian corridor, but set back from the river.	August to October ⁴				✓	
Install clusters (3 x 3) of bat boxes within the riparian corridor at approx 4m to 5m height and with different orientations in each of the 3 clusters.	Any	✓				
Clean-out and repair bat boxes	September				✓	
Treat Himalayan balsam (manual removal & composting or appropriate herbicide)	May to mid-June	✓	✓		✓	
Repair otter proof fence	<i>(as required based on site inspection)</i>	✓		✓		✓
Biannual cut of wildflower grassland within the site to maintain sward diversity. Rake off cuttings to create compost heaps/habitats at site edges.	April & September	✓	✓	✓	✓	✓
Stake down coarse wood debris that is a potential flood risk close to the location where it was found.		✓		✓		✓
Collection and Removal of litter	<i>c. quarterly (or as deemed necessary by site occupants)</i>	✓	✓	✓	✓	✓

⁴ Avoids birds' breeding season as birds' nests and eggs, as well as the birds, are afforded legal protection (Appendix B)

2.3 Verification and Review

The output of the Ecologist's annual inspections will be a concise annual report, within input from the arboriculture expert as appropriate, submitted to the relevant site manager (site occupants). The Year 5 Report will also review the success of the management over the first 5 year period and will set out the management requirements over the subsequent 5 year period. This may alter the nature or level of management/maintenance required, but is more likely to reduce the level of intervention. The Year 5 report will be submitted to Wrexham County Borough Council's Ecologist for review and approval.

PI *Author: Glenn Richards*



Reviewer: Andrew Brooks



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APPENDIX A – SITE MASTERPLAN (PLANTING TO BE FURTHER REFINED)



- LEGEND**
- MACADAM ROAD SURFACE
 - MACADAM PAVEMENT SURFACE
 - NATURAL FINISHED CONCRETE SURFACE
 - 15m WIDE ECOLOGICAL CORRIDOR RETAINED
 - DETAILS OF PLANTING TBC
 - DESIGNATED PEDESTRIAN & CYCLE WAY (MACADAM PAVEMENT SURFACE)
 - EXISTING TREES RETAINED
 - BOLLARD LOCATIONS SUBJECT TO FURTHER DESIGN (20 No. TOTAL)
 - AREAS NOT COLOURED TO BE MADE GOOD AROUND SITE WORKS WHERE NECESSARY/ RETAINED IN EXISTING CONDITION

- VEHICLE AREAS**
- STAFF CAR PARKING:
85 STANDARD SPACES (4.8m x 2.4m)
- PLUS 2 ACCESSIBLE SPACES
(4.8m x 2.4m WITH 1.2m MARGIN TO TWO SIDES)
- PARKING AREA FOR 20 BICYCLES
- WASTE AMBULANCE VEHICLE PARKING:
45 SPACES (7.2m x 3.3m)
- WASTE AMBULANCE VEHICLE EXTERNAL CHARGING:
6 No. POINTS IN FRONT OF AMBULANCE GARAGE
39 No. POINTS TO AMBULANCE VEHICLE PARKING
- VEHICLE REFUELLING AREA:
10,000 ltr DIESEL TANK (ABOVE GROUND)
WITH INTEGRAL BUND (MIN 110% OF INNER TANK)
L3800mm x W1840mm x H2200mm
ONE FUEL DISPENSING PUMP WITH 4m HOSE
CONCRETE BASE TO EXTEND MIN 300mm BEYOND
MAXIMUM DIMENSIONS OF THE TANK TO BS 5410
BOLLARDS TO PREVENT VEHICLE IMPACT
SCREEN FENCE TO BE AGREED
- BUND BETWEEN REFUELLING AND WASH AREA
REFUELLING AREA TO BE AT LOWER LEVEL
TO PREVENT CROSS CONTAMINATION
- VEHICLE WASH AREA:
ONE WASH POINT WITH SCREEN, GRP HOUSING
AND BELOW GROUND WATER RECYCLING TANK
- NWFRS ROAD TRAFFIC COLLISION TRAINING AREA:
AREA PROVIDED FOR TRAINING INCLUDING MOCK UP
OF ARTICULATED LORRY REAR, MOTORWAY BARRIER,
REMOVABLE BOLLARDS AND CONCRETE RAMP
- WASTE FLEET SERVICE YARD AND SECURE COMPOUND:
VEHICLE DELIVERY BY RAMPED LOW LOADER TRUCK
- WORKS TO HOSPITAL CAR PARK:
REALIGNMENT OF KERBS AND ROAD LAYOUT TO
PROVIDE NEW VEHICULAR ACCESS AND EGRESS
REQUIRING LOSS OF APPROX 14 CAR PARKING BAYS
SUBJECT TO FURTHER DETAIL DESIGN

NOTES:

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LEGEND

- INDICATES LINE OF 15m WIDE ECOLOGICAL CORRIDOR FROM LINE OF RIVER BANK
- SITE BOUNDARY
- NEW CLOSE BOARDED TIMBER FENCE TO COMPOUND SEE DRAWING AR-XX-XX-DT-721-002
- SECTION OF NEW SECURITY FENCE TO INCLUDE OTTER PROOF MESH AND BASE SEE DRAWING AR-XX-XX-DT-721-001
- RIVER BANK TAKEN FROM SITE SURVEY AND PRECISE LINE TO BE USED WILL REQUIRE MARKING OUT ON SITE TO ESTABLISH ACTUAL ECOLOGICAL CORRIDOR LINE TO SATISFACTION OF ENVIRONMENT AGENCY AND PLANNING OFFICERS
- INDICATES MINIMUM 800mm DEEP x 1200mm WIDE (ACTUAL WIDTH TO MATCH PAVING IF WIDER) AREA OF COLOUR CONTRASTING 'BLISTER' TACTILE PAVING COMPLETE WITH DROP KERBS AND TRANSITION KERBS
- INDICATES COLOUR CONTRASTING HAZARD WARNING 'CORDUROY' TACTILE PAVING MINIMUM 800mm DEEP WHERE INDICATED
- INDICATES AMBULANCE VEHICLE CHARGING POINTS COMPRISING GALVANISED STEEL SQUARE HOLLOW SECTION GALLOWS BRACKETS WITH LUDLO MGRIPK ELECTRICAL CHARGING UNITS ON FLEXIBLE LEADS GALLOWS BRACKETS TO BE PIVOTABLE TO ALLOW CHARGING SOCKET CONNECTION TO EITHER SIDE OF AMBULANCE VEHICLE 39 No. GALLOWS BRACKETS AND CHARGING UNITS TOTAL

No.	Design Risk Register
T	14/04/14 ROAD LAYOUT MODIFIED AT ENTRANCE TO EXISTING HOSPITAL CAR PARK AND AREA TO BE ADOPTED SHOWN.
S	15/01/11 AMENDED TO WORK HIGHWAYS COMMENTS: SPLITTER ISLAND LOCATION AS-BUILT SHARED FOOTPATH/CYCLEWAY GIVE WAY FROM HOSPITAL CAR PARK REMOVED
R	11/11/13 OVERFLOW CAR PARK REMOVED.
Q	07/10/15 AMBULANCE CHARGING POINT ADDED. BLISTER PAVING LOCATIONS INDICATED.
P	01/10/15 NOTE TO FENCING AMENDED. FURTHER REVISION TO CURBS FOLLOWING VEHICLE TRACKING EXERCISE.
N	09/09/13 INTERNAL RADIUS OF ROAD CORNER INCREASED FROM 6m TO 8m FOLLOWING VEHICLE TRACKING CHECK
M	09/09/13 ROUNDABOUT REMOVED. FIRE TRAINING FACILITY MOVED TO FLOOD SAFE AREA. PARKING AREAS AMENDED TO REQUIREMENTS OF MEETING ON 7th AUGUST 2013
L	08/02/15 RAMPED ONE-WAY SYSTEM TO FIRE TRAINING FACILITY ADDED
K	24/01/15 VEHICLE REFUELLING AND WASH DOWN CHANGED TO FINISHED CONCRETE SURFACE FINISH
J	08/01/15 REVISIONS TO SITE PLAN, ROAD LAYOUT REVISED. AMBULANCE BAYS REMOVED FROM MAIN STAFF CAR PARK. VEHICLE REFUELLING ADDED BACK
H	07/09/12 REVISIONS TO SITE PLAN, ROAD LAYOUT REVISED AS CURRENT ARUP DRAWINGS. GRAPHICAL AMENDMENTS TO COLOUR CODING, ROAD, BOUNDARY LINE, HARDSTANDING AND STORAGE COMPOUND PARKING BAYS ALL AMENDED
G	17/08/12 REVISIONS TO SITE PLAN FOR PLANNING: GRAPHICAL AMENDMENTS TO COLOURS, ROAD, BOUNDARY LINE, HARDSTANDING AND STORAGE COMPOUND PARKING BAYS ALL AMENDED
F	11/07/12 REVISIONS TO SITE PLAN FOR PLANNING: MATERIALS CLARIFIED. REVISIONS INSTRUCTED BY MACE: TRANSITION PAVING ADDED, OIL STORE ADDED, HOSPITAL ENTRANCE REVISED, COVERED PARKING BAYS OMITTED. NOTES REVISED TO SUIT REVISIONS
E	26/06/12 REVISIONS TO SITE PLAN AS AGREED AT MEETING WITH WAST AND NWFRS 14/01/12 INCORPORATING ADDITIONAL WAST VEHICLE PARKING, 15m ECO CORRIDOR RELOCATED SECURE COMPOUND WITH STAFF PEDESTRIAN ACCESS, REDUCED REFUELLING AND WASH AREAS, MRB AND FLEET GARAGE REVISED DESIGN
D	22/06/12 SITE ENTRANCE REVISED AS ARUP DESKIN
C	19/06/12 VEHICLE WASH AND REFUELLING AREAS AMENDED AS INSTRUCTED BY BAM 19/06/12. NOTES UPDATED
B	01/05/12 PROJECT TITLE REVISED TO CLIENT REQUIREMENTS CONFIRMED 01.05.12 NO CHANGES TO SITE LAYOUT
A	30/04/12 REVISED AS AGREED 25.04.12. RELOCATION OF BUILDING AND ADJACENT DELIVERY BAYS/PARKING, SITE ENTRANCE RATIONALISED AND CYCLE ROUTE/PEDESTRIAN ROUTES REVISED, FIRE TRAINING AREA MOVED

Rev	Date	Revision Notes
Client/Constructor		Welsh Ambulance Services NHS Trust North Wales Fire and Rescue Services
BAM Construction Limited		

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Project:
**AMBULANCE AND FIRE SERVICES
RESOURCE CENTRE
WREXHAM**

Drawing Title:
PROPOSED SITE PLAN

Job No.	Date	Scale
09044	17/04/12	B/A0 1:500

Status:
PLANNING

Drawing No.	Rev
AR/ARC 00 PL 100 021	T

APPENDIX B – RELEVANT NATURE CONSERVATION LEGISLATION

OTTERS

Otters are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2010. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, inter alia, to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - to impair its ability to survive, breed, or rear or nurture their young;
 - to impair its ability to hibernate or migrate; and
 - to affect significantly the local distribution or abundance of that species.
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

BATS

- All British bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2010. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, inter alia, to:
- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - to impair its ability to survive, breed, or rear or nurture their young;
 - to impair its ability to hibernate or migrate;
 - to affect significantly the local distribution or abundance of that species.
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not); or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

BIRDS

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, inter alia, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; and
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls.

Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; and
- Intentionally or recklessly disturb the dependent young of any such bird.