



Invasive Weed Management Plan

**Hollins Strategic Land LLP
Langley Lane
Birch
Middleton
OL10 2QJ**

Date	02-06-2023
Project	Langley Lane
Client	Hollins Strategic Land LLP
Inspected by	D Nightingale
Authorised by	D Nightingale
Project reference	NIG/DN20156
Revision	B



LIMITATIONS

Nightingale Environmental Ltd has prepared this report with reasonable skill, care and diligence and taking account of the contract terms and conditions and manpower and resources devoted to it in agreement with the client. Nightingale Environmental Ltd disclaims any responsibility to the client and others in respect of any matters outside the scope of the above.

This report has been prepared based on the information received during the timescale available and all potential contamination; constraints or liabilities associated with the site may not necessarily have been revealed. The report is only valid when it is used in its entirety.

The survey was carried out following non-intrusive measures and should be seen as a visual inspection only. The survey results are therefore limited to showing invasive weed species visible at the time of the survey

This report is confidential to the client and Nightingale Environmental Ltd accepts no responsibility to third parties to whom the report, or any part thereof, is made known. Any such party using any information contained within the report does so at their own risk.

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1. INTRODUCTION

- 1.1 Daniel Nightingale of Nightingale Environmental Ltd has been involved in vegetation management and weed control for over 20 years, including 18 years specialising in the control and eradication of invasive weed species as identified in the Wildlife and Countryside Act 1981 (as amended).
- 1.2 As a member of the BASIS professional register along with IOSH, NPTC, CSCS and SMSTS qualifications and as a Property Care Association Certified Surveyor Japanese Knotweed (CSJK) he is ideally placed to provide clients with information and advice as to how best to deal with vegetation management and weed control issues on land within their ownership.
- 1.3 In May 2023 Nightingale Environmental Ltd were commissioned by Hollins Strategic Land LLP to undertake an inspection of the proposed development site at Langley Lane Birch OL10 2QJ. The purpose of the inspection was to identify any invasive or problematic weed species that may be present within the boundary of the site or the immediate surrounding area, report the findings and propose a solution to any infestations found to be present. The inspection was undertaken on 30th May 2023
- 1.4 The main species being inspected for at this time is Japanese Knotweed and Himalayan Balsam
- 1.5 This management plan provides background information relating to the main invasive plant species and sets options for control and eradication. Any contractors providing costings for works based on these findings do so at their own risk

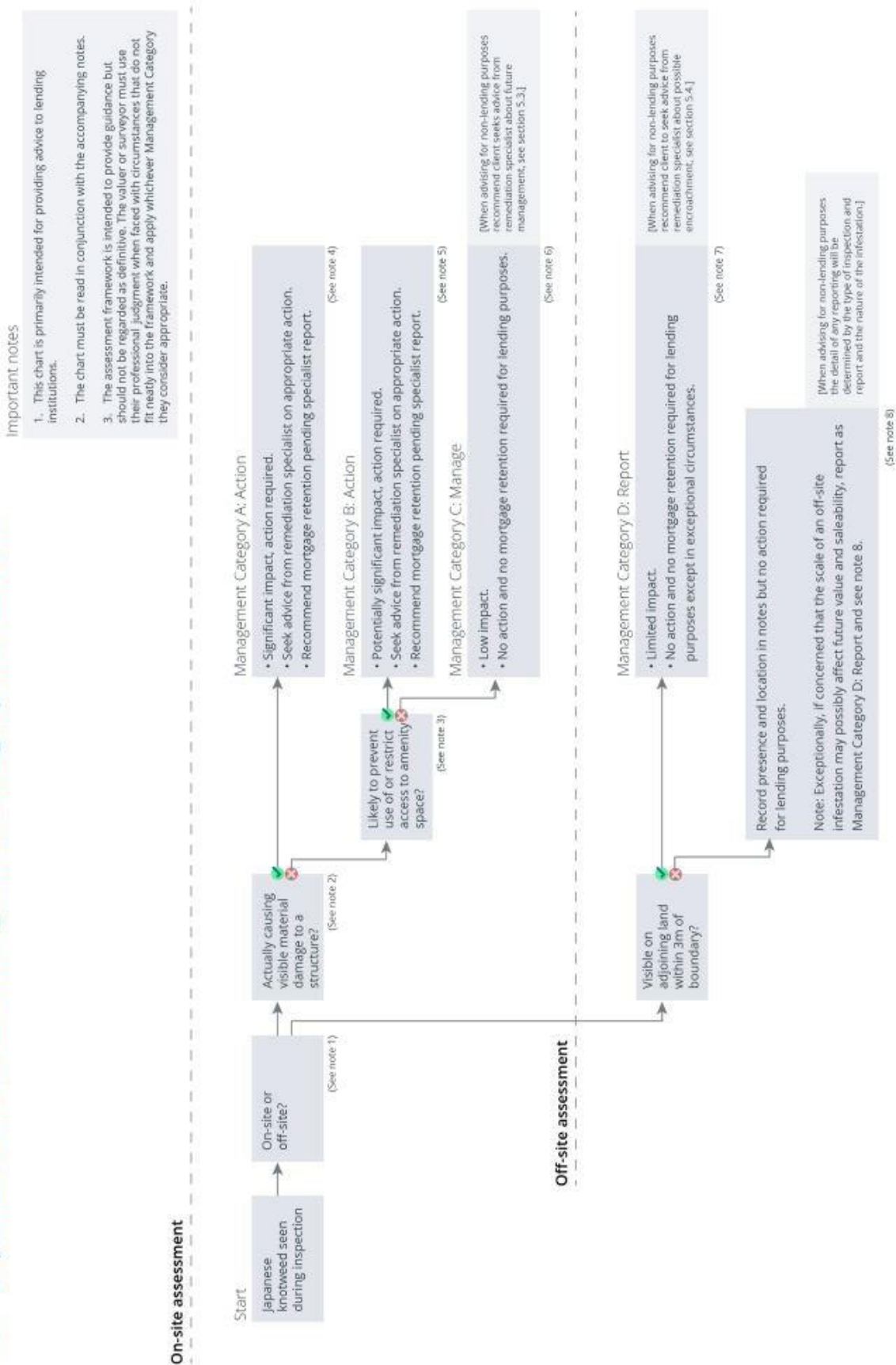
2. SITE AND FINDINGS

- 2.1 The site consists of an almost rectangular area of improved grassland with associated areas of planted woodland, hedgerows around the peripheries and Whittle Brook running through the southern end of the site
- 2.2 Surrounding areas comprise of existing residential properties to the east and west, Langley Lane to the north and Edgar Wood Academy to the south
- 2.3 The site was inspected on the 30th May 2023 within the early growing season
- 2.4 Continued monitoring of the site should be undertaken throughout the treatment period with any further areas identified being marked on site with appropriate control and treatment measures being implemented
- 2.5 During the inspection one area of Japanese Knotweed was identified within the site
- 2.6 During the inspection areas Himalayan Balsam were identified within the site
- 2.7

Species	Description	RICS Management Category (Japanese Knotweed) and proposed management
Japanese Knotweed (JK)	Visible Japanese Knotweed has been identified within a section of planted woodland to the north of the site. Approx OS SD85205 07721 The JK would look to be within retained planting and green corridor around the site and not present within any proposed plots though this would be subject to confirmation. Some treatment would appear to have been undertaken to the JK though at the time of the survey no information was available to confirm this	Herbicide treatment programme to commence prior to development On-going monitoring to be undertaken throughout development RICS Management category D following works
Himalayan Balsam	Himalayan Balsam was identified along Whittle Brook at the southern end of the site. Approx OX SD 85188 07601 The areas of HB appear to be outside of the development footprint within a retained green corridor	Herbicide treatment programme to be commence prior to development On-going monitoring to be undertaken throughout development Handover to ManCo on completion for further monitoring

- 2.8 Further monitoring of the site should be undertaken throughout any development period with any additional areas of invasive species being identified and dealt with accordingly.
- 2.9 It is worthy of note at this point that in knotweed infested areas the root/rhizome system has the potential to grow 7 metres outwards from the visible plant and in excess of 3 metres deep and if the spoils are dispersed on site, re - infestation is likely to occur.
- 2.10 Please note: If materials are removed from site this must be done in accordance with current waste regulations by a licensed carrier to an appropriate licensed receiving facility.

4.5 Japanese knotweed Management Category assessment



3. INVASIVE AND PROBLEMATIC PLANTS

3.1 Identifying invasive and problematic plants (extracted from Netregs website)

- 3.1.1 Identifying invasive and problematic plants on a site early lets developers assess and cost options for destroying, disposing of and managing them.
- 3.1.2 Managing land infested by invasive and problematic plants in a timely and appropriate way can avoid:
 - excessive cost
 - potential prosecution and compensation claims
 - physical damage to buildings and hard surfaces
 - harm to the environment

3.2 Identifying Invasive Species



www.nonnativespecies.org

Produced by Olaf Booy, Max Wade and Vicky White of RPS

Japanese Knotweed

Species Description

Scientific name: *Fallopia japonica*

AKA: Japanese Bamboo, Pysen saethwr (Welsh), *Polygonum cuspidatum*, *Reynoutria japonica*

Native to: Japan, Taiwan, northern China

Habitat: Common in urban areas, particularly on waste land, railways, road sides and river banks

Tall herbaceous perennial with bamboo like stems. Often grows into dense thickets. Characteristic leaves and stems, persistence of last year's dead canes and distinctive rhizome (underground root-like stems) enables year round identification.

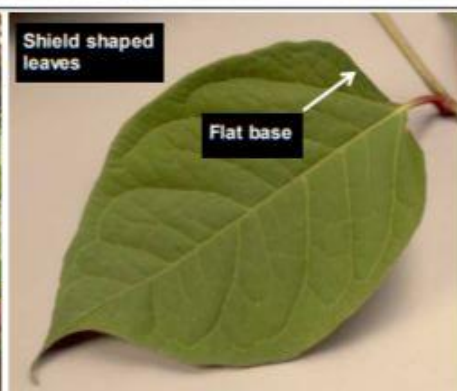
Introduced in the early 19th century as an ornamental plant. Now common and widespread across the UK. Spreads rapidly in the wild by natural means and as a result of spread by humans. Spread is solely by vegetative means, either fragments of rhizome or stem. Does not produce seed in the UK. Negative impacts include outcompeting native flora, contributing to river bank erosion and increasing the likelihood of flooding. Can also cause significant delays and cost to development as well as structural damage (it can grow through asphalt and some other surfaces).

Japanese Knotweed is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England, Wales and Scotland. As such it is an offence to plant or otherwise cause Japanese knotweed to grow in the wild. Under the Environmental Protection Act 1990, Japanese Knotweed is classified as controlled waste.

For details of legislation go to www.nonnativespecies.org/legislation.



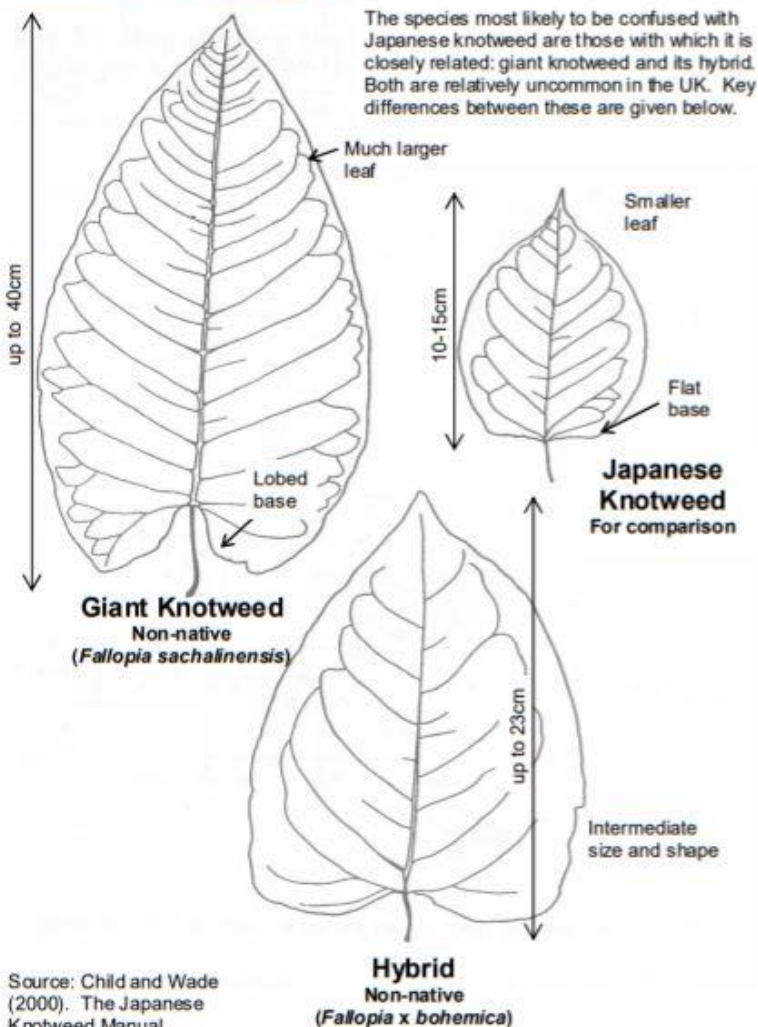
Key ID Features



Identification throughout the year



Similar Species



Distribution

Widespread and common across the UK. Notably extensive infestations are found in the south-west of England, south Wales and Greater London, however similarly extensive populations can also be found elsewhere.

Source: NBN Gateway. Check website for current distribution



References and further reading:

- Blamey, M, Fitter, R and Fitter, A (2003) "The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora." A & C Black
- Child, L E and Wade, P M (2000) "The Japanese Knotweed Manual". Packard
- Environment Agency (2006) "The Japanese Knotweed Code of Practice". Environment Agency
- Preston, C D, Pearman, D A and Dines, T A (editors) (2002) "New Atlas of the British and Irish Flora". Oxford University Press
- Stace, C (1999) "Field Flora of the British Isles". Cambridge University Press

Photos from: Olaf Booy, Helen Parish, Max Wade, Vicky White

Himalayan Balsam

Species Description

Scientific name: *Impatiens glandulifera*

AKA: Policeman's Helmet, Indian Balsam, Jac y Neidiwr (Welsh)

Native to: West and central Himalayas

Habitat: Found mostly on river banks and in damp woodland, can grow in other damp habitat

A tall, attractive, annual herb with explosive seed heads. Although easy to identify as a mature plant with its pink-purple flowers, fleshy stem and characteristic leaves, the seedlings and last year's dead stems of this annual are more difficult to spot.

Introduced as a garden plant in the early 19th century and first recorded in the wild in 1855. Often favoured by the general public for its aesthetic appeal and is still deliberately planted on occasion. Now widespread in the UK, especially along urban rivers. Spreads solely by seeds, which are small and easily carried by wind or water.

Out-competes native species in ecologically sensitive areas, particularly river banks. Where it grows in dense stands along river banks it can impede flow at times of high rainfall, increasing the likelihood of flooding. Die back of extensive stands over winter can leave river banks bare and exposed to erosion.

Himalayan balsam is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England and Wales. As such, it is an offence to plant or otherwise allow this species to grow in the wild.

For details of legislation go to www.nonnativespecies.org/legislation.

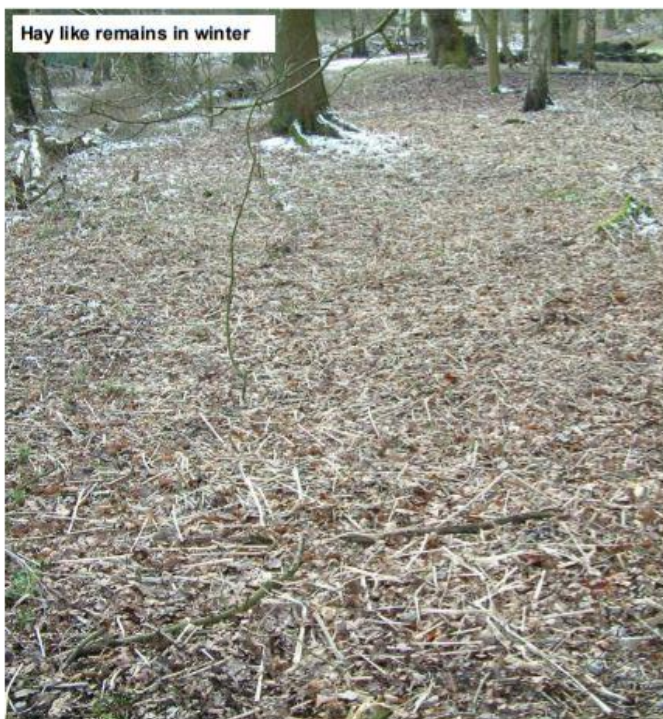


Key ID Features



Identification throughout the year

Can be identified at most times of the year: March-June by its seedlings, stem and leaf shape, from July to September by its stem, leaf shape and flowers. More difficult to identify over winter (October to February), look for hay like remains and distinctive root structure.



Similar Species

Orange Balsam
Non-Native
(*Impatiens capensis*)



Distribution

Widespread and common across the whole of the UK. Primarily on riverbanks and in other damp areas.

Source: NBN Gateway. Check website for current distribution



References and further reading:

Blamey, M, Fitter, R and Fitter, A (2003) "*The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora*". A & C Black

Preston, C D, Pearman, D A and Dines, T A (editors) (2002) "*New Atlas of the British and Irish Flora*". Oxford University Press

Stace, C (1999) "*Field Flora of the British Isles*". Cambridge University Press

4 CONTROL OF INVASIVE AND PROBLEMATIC PLANTS

4.1.1 Treating invasive and problematic plants with herbicide can be a very effective method of control. Though it should be noted that with invasive or problematic weed species it is expected that repeat applications would be required to either reduce the vigour of the infestation or as part of a treatment programme for an established seed base

4.1.2 Using herbicides

The person doing the spraying must hold a certificate of technical competence for herbicide use or work under the direct supervision of a certificate holder. The sprayer must also comply with the pesticide product label and meet all of its conditions.

5.0 BIO SECURITY AND ON SITE PRECAUTIONS

5.1 Warning signs or fencing shall be erected, including suitable buffer zone, to identify infestations to other site personnel. Additionally, other contractors working on site will be briefed to familiarise them with the appearance of the plant.

5.2 Unauthorised access disturbance or removal of contaminated material will be prevented.

5.3 Restrictions regarding access to the infested areas and any applicable restrictions regarding movement of plant and vehicles, shall be communicated to all on-site personnel.

5.4 Should access to the area be required during the treatment period, advice should be sought prior to entering.

5.5 Vehicles, equipment and footwear should be inspected and cleaned prior to exiting contaminated areas.

5.6 Where herbicide is to be utilised in the control and management of invasive weed species herbicide selection will be dependent on each area taking into consideration surrounding desirable vegetation and environmental considerations.

5.7 Where invasive or problematic weed species are identified on adjacent land, owners should be informed so that appropriate actions can be taken to prevent re-infestation.

5.8 Any imported material should be from a known source and be traceable to the point of origin. Imported material containing invasive weeds will invalidate any warranty offered

5.9 PLEASE NOTE: Task and site specific method/risk and COSHH assessments will need to be carried out for each specific task being undertaken.

6.0 PROPOSED WORKS

- 6.1 Once possession of the site is taken all areas of infestation should be clearly marked and identified to site personnel.
- 6.2 A suitable exclusion zone should be marked out around areas of Japanese Knotweed. As a precautionary measure works within these areas will be managed under a separate risk assessment depending on the tasks to be undertaken.
- 6.3 Japanese Knotweed and Himalayan Balsam within the site will be subject to an application of herbicide to reduce the vigour and potential spread of the plant. It is expected that a glyphosate based product would be utilised
- 6.4 Treatment of HB along Whittle Brook would be subject to EA Aquaherb01 approval
- 6.5 Further monitoring and treatment of JK within the site is to be undertaken throughout the development period prior to implementation of a warranty
- 6.6 It should be noted that herbicide treatment of Japanese Knotweed should be classed as control only and that any future disturbance of treated areas may stimulate further growth
- 6.7 Further monitoring and treatment of HB within the site is to be undertaken throughout the development period prior to hand over to ManCo

Site Name: Langley Lane	Client : Hollins Strategic Land	Ref : NIG/DN20156 B
Location: Birch	Description of works	Undertaken by
April – October 2023	Control and management of identified areas of JK and HB	NEL
April – October 2024	On-going monitoring and treatment of JK and HB within site during development period	NEL
April – October 2025	On-going monitoring and treatment of JK and HB within site during development period	NEL
October 2025	Handover to ManCo. for further monitoring of HB and treatment as necessary Commencement of 10 year warranty period on area of JK	NEL

NB: Timescales are approximate and will align with the build out programme of the site, with handover of on-going maintenance and management to ManCo once construction is complete

7.0 SITE PHOTOS 30th May 2023



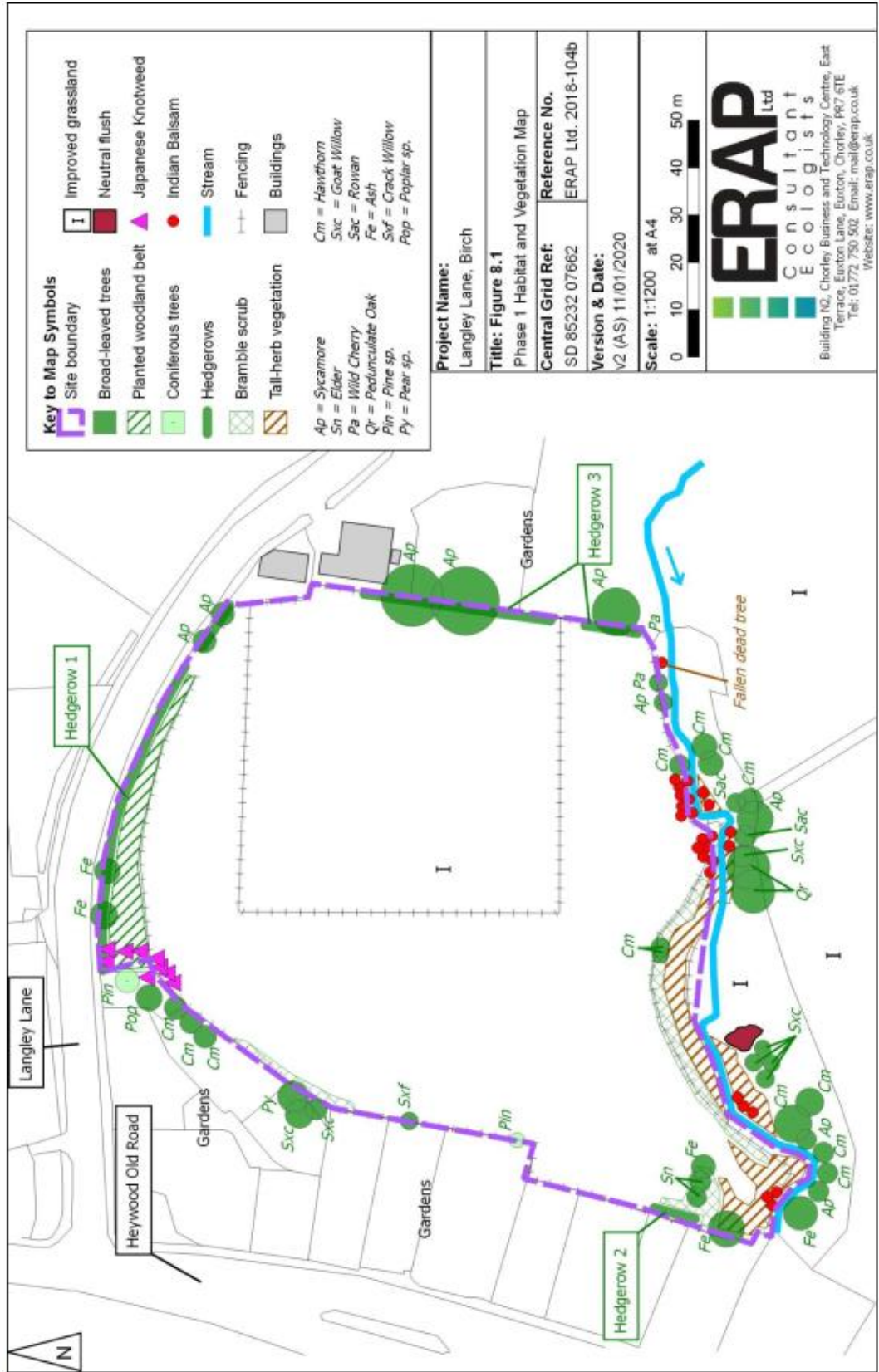
Pic 1 – JK area 1 within planted woodland belt



Pic 2 – HB along Whittle Brook

8.0 EXTRACT FROM ERAP Ph1 HABITAT REPORT IDENTIFYING JK AND HB AREAS

Figure 8.1: Phase 1 Habitat and Vegetation Map



9.0 HEALTH AND SAFETY

9.1 Nightingale Environmental Ltd operates by the below Health & Safety guidelines

9.2 Relevant health and safety legislation must be observed in the UK. The relevant regulations are outlined in *The UK Pesticide Guide* produced annually.

9.3 The legislation relevant to the use of herbicides is: -

- The *Control of Substances Hazardous to Health Regulations* (COSHH) 2001. All operatives must comply with the regulations and wear protective clothing and observe a strict code of hygiene of washing hands before drinking and eating.
- The *Control of Pesticides Regulations* 1986 under the *Food and Environment Protection Act* (FEPA) 1995.
- *Pesticides: Code of Practice* 1990 (Published by MAFF/HSE).

9.4 Health and Safety Guidelines

- All operatives must hold a Certificate of Competence for herbicide application (NPTC) or be under the direct supervision of qualified operative prior to commencing a spraying programme.
- All operatives must act responsibly in the storage and handling of the herbicide. The disposal of the herbicide and empty containers must be carried out by operatives in a responsible way.
- Any spillage must be guarded against and if occurring shall be dealt with and cleaned up. All operatives must carry a basic first aid kit.
- The area of work should be protected from the general public during the treatment and use of the herbicide.
- The use of herbicides should be carried out in compliance with the product label instructions.
- Advice on herbicide application should be sought for a BASIS registered advisor

9.5 Other legislation relevant to the control of non-native invasive weeds includes the following.

- *Town and Country Planning Act* 1990.
- *Highways Act* 1980.
- *Water Resources Act* 1991.
- *The Waste Management and Licensing Regulations* 1994.
- *The Landfill (England and Wales) Regulations* 2002.
- *The Control of Pesticides Regulations* 1986 (under the *Food and Environment Protection Act* 1985).
- *The Control of Substances Hazardous to Health Regulations* 2001 (COSHH)

10.0 REFERENCES

Renals, T. and Rene, P. (May 2001) *Code of Practice for the Management, Destruction and Disposal of Japanese knotweed, Version 1.*
The Environment Agency.

Available to download: www.environment-agency.gov.uk

Child, L. and Wade, M. (2000) *The Japanese knotweed Manual*
Packard Publishing Limited, Chichester.

Property Care Association
Management of Japanese Knotweed for Surveyors

JAPANESE KNOTWEED AND RESIDENTIAL PROPERTY RICS guidance note, UK 1st edition,
January 2022
Effective from 23 March 2022

Treatment and Disposal of invasive Non Native Plants RPS 178
Updated 9th April 2019

Web Sites

Non Native Species Secretariat
www.nonnativespecies.org

Nature Conservation
www.nationaltrust.org.uk

Japanese Knotweed Control Forum
www.ex.ac.uk/knotweed

Netregs
www.netregs.gov.uk