



NIGHTINGALE
environmental LIMITED

Invasive Weed Management Plan

**Westchurch
Radcliffe Moor Rd
Little lever
Radcliffe
BL2 6QG**

Date	25-08-2023
Project	Radcliffe Moor Rd
Client	Westchurch
Inspected by	D Nightingale
Authorised by	D Nightingale
Project reference	NIG/DN20178
Revision	A



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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 August 2023 Nightingale Environmental Ltd were commissioned by Westchurch Ltd to undertake an inspection of the proposed development site at Radcliffe Moor Rd. 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 31st August 2023
- 1.4 The main species being inspected for at this time is Japanese Knotweed (JK) and Himalayan Balsam (HB)
- 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

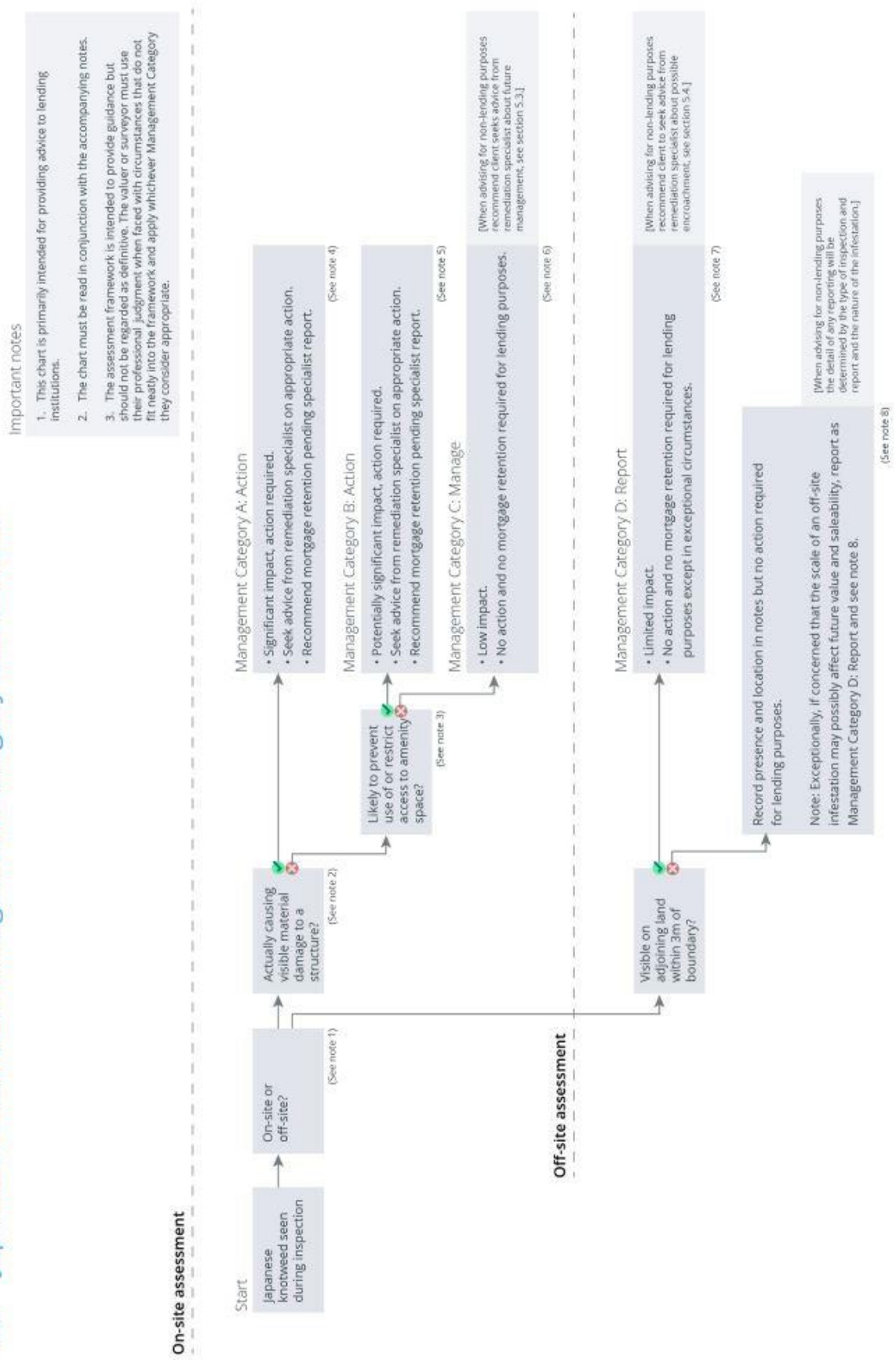
2. SITE AND FINDINGS

- 2.1 The site consists of an area of former agricultural grass land with associated areas of hedgerow, scrub and trees located off Radcliffe Moor Rd BL2 6QG
- 2.2 Surrounding areas comprise of Radcliffe Moor Rd to the east, Bury New Rd and vehicle sales pitch to the north further agricultural land to the west and ponds and wetland area to the south
- 2.3 The site was inspected on the 31st August 2023 within the expected 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 areas of Japanese Knotweed were identified along the north western boundary of the site (see site plan 8.0)
- 2.6 During the inspection sporadic areas of Himalayan balsam were identified along the northern and western boundaries of the site (see site plan 8.0)

Species	Description	RICS Management Category (Japanese Knotweed) and proposed management
Japanese Knotweed (JK)	Well established Japanese Knotweed was identified in the north western corner of the site on an embankment to the rear of a vehicle sale pitch and garage. JK growth appears to be well outside of the proposed development footprint	On-going herbicide treatment programme throughout the development period RICS Risk Category D
Himalayan Balsam (HB)	Himalayan Balsam was noted to be present predominantly along the northern and western boundaries of the site along existing hedgerow	On-going monitoring to be undertaken throughout development prior to hand over to Client

- 2.7 Areas of Field Horse Tail were noted to be present within the site. Whilst this plant is not classed as invasive under Schedule 9 it is intrusive and problematic. Actions may need to be considered for the management of these areas as part of development works.
- 2.8 It is proposed that the site be developed for sports pitches and associated buildings and car parking. The development is expected to be undertaken over a number of years allowing for seed based invasive species within this area to be managed and controlled throughout the development period prior to hand over of the site to client
- 2.9 Invasive weed species were noted to be present beyond the site boundary on adjacent land. The adjacent landowner should be informed of the infestation so that appropriate actions can be taken to help prevent re-infestation of the site.
- 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)

- 1.1 Identifying invasive and problematic plants on a site early lets developers assess and cost options for destroying, disposing of and managing them.
- 2.1 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.

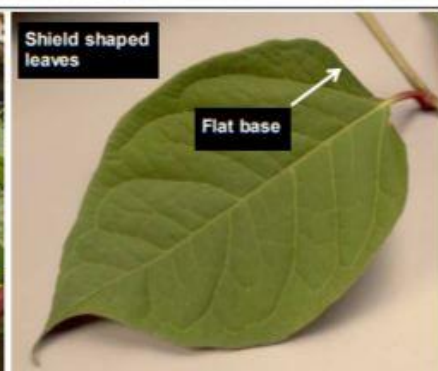
Introduced in the early 19th century as an ornamental plant. Now common and widespread across the UK. Spreads rapidly in the wild by natural means and as a result of spread by humans. Spread is solely by vegetative means, either fragments of rhizome or stem. Does not produce seed in the UK. Negative 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

Spring



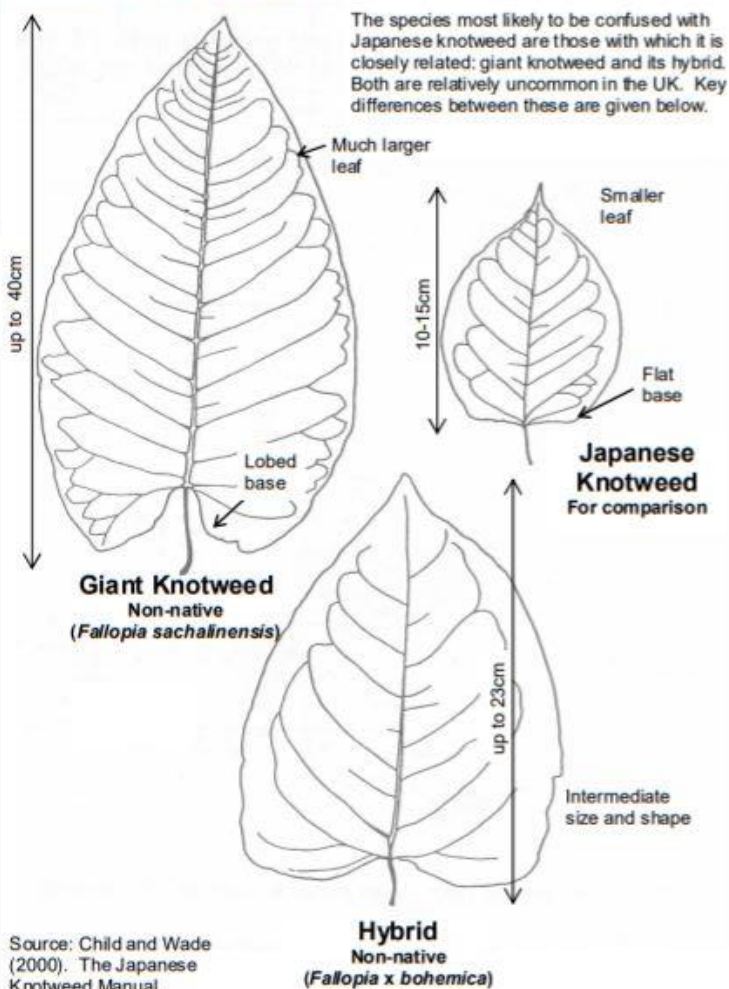
Summer



Winter



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



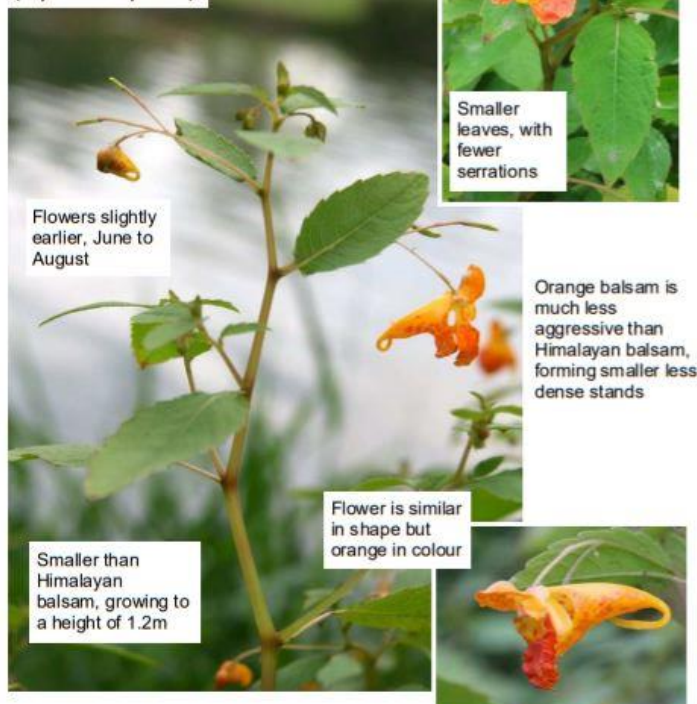
Identification throughout the year

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

Photos from: Olaf Booy, Mike Harris, Max Wade

4 CONTROL OF INVASIVE AND PROBLEMATIC PLANTS

- 4.1 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
- 4.2 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
- 4.3 Herbicide applications adjacent to or within a watercourse will be subject to Environment Agency approval Aquaherb01, and must be in place prior to treatments being undertaken

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 or warning signs should be marked out and erected around areas. 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 will be treated via 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 On-going monitoring of the site is to be undertaken throughout the development period prior to hand over to client

6.5 Estimated timescale of works

Site Name: Radcliffe Moor Rd	Client : Westchurch	Ref : NIG/DN20178 A
Location: Little Lever	Description of works	Undertaken by
September – October 2023	Initial herbicide applications to areas of JK within the site	NEL
April – October 2024	On-going monitoring of JK and HB within the site during development period	NEL
April – October 2025	On-going monitoring of JK and HB within the site during development period	NEL
April – October 2026	On-going monitoring of JK and HB within the site during development period	NEL
October 2026	Handover to client for on-going monitoring and treatment as required	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 client or individual properties within the development once construction is complete

7.0 SITE PHOTOS 31st August 2023



Pic 1 – Extensive JK along NW boundary of site to rear of vehicle sales pitch



Pic 2 – HB mixed in with scrub growth along northern boundary of site

8.0 EXTRACT FROM ERAP PH1 HABITAT REPORT INDICATING APPROX LOCATIONS OF INVASIVE SPECIES



9.0 WORKS UNDERTAKEN AND CONCLUSIONS

[illegible]

10.0 HEALTH AND SAFETY

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

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

10.3 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).

10.4 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

10.5 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)

11.0 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