

TECHNICAL REPORT

Reference:	Land at Pyramid Park – Invasive Non-Native Species Treatment Specification Technical Note (TEP ref: 10760.001)
Version:	1.0
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Land at Pyramid Park – Invasive Non-Native Species (INNS) Treatment Specification Technical Note

1. Purpose of the Technical Note

This INNS Treatment Specification Technical Note has been produced by The Environment Partnership (TEP) Limited on behalf of Campbell Reith to provide suitable information to procure a contractor to undertake the recommended treatment of INNS at Land at Pyramid Park, Town Fields, Bury (hereby referred to as ‘the Site’).

The Technical Note will include:

- An introduction to the Site;
- The planning and development context;
- Legislative context;
- A summary of site survey findings;
- Pre-commencement advice including suitable biosecurity measures;
- Specific treatment methods;
- Statutory disposal requirements; and
- Recommended monitoring and warranties.

The following appendices are included in this Technical Note:

- Appendix A contains a Summary of Applicable Legislation;
- Appendix B contains the GB Non-native Species Secretariat (NNSS) ID Sheets;
- Appendix C contains Useful Links; and
- Appendix D contains a Warning Signage Template.

The Technical Note should be read in conjunction with the INNS Location Plan (TEP ref: G10760.001) included as Drawing 1.

2. Site Location

The Site is located south of Bury town centre (approx. central grid reference: SD 80511 10312) and is bound by Bury College to the north, residential development at Town Fields Close to the east and railway lines to the south and west of the Site. The Site is intersected by the B6216 (Market Street).

3. Site Description

The Site currently comprises of semi-improved neutral grassland, dense continuous scrub, semi-natural broadleaved woodland, scattered trees and shrubs as well as a small area of hardstanding as identified in the Preliminary Ecological Assessment (PEA) (TEP ref: 9302.02.001).

4. Invasive Species Legislative Context

INNS are defined as those which are either listed on Part II Schedule 9 of the Wildlife and Countryside Act (1981) as amended, Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019 and listed as an Invasive Alien Species of Union concern under Regulation (EU) 1143/2014.

Under both the Wildlife and Countryside Act (1981) and the Invasive Alien Species (Enforcement and Permitting) Order 2019, it is a criminal offence to allow plants referenced to grow in the wild (including via moving contaminated soil or plant cuttings). Liability may also extend in situations where a landowner has knowingly permitted the spread of INNS on to neighbouring land.

This Technical Note has been prepared in accordance with legislation outlined above and in Appendix A and in line with the Property Care Association (PCA) publication - Practical Management of Invasive Non-Native Weeds in Britain and Ireland which responds to the DEFRA Great Britain Invasive Non-native Species Strategy and emphasises the short, medium and long term actions needed to manage most of the plants listed on Part II Schedule 9 of the Wildlife and Countryside Act and Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) (Amendment) Order.

5. Site Surveys and Ecological Constraints

5.1. INNS Site Visit

An updated INNS site visit was undertaken by TEP’s Landscape Manager Sorrel Bruce on 8th October 2024. The site visit identified the Japanese knotweed stands as per the Phase 1 habitat surveys in March 2022 and October 2023 (see Figure 1) as well as one cotoneaster plant (see Figure 2).



Figure 2: Japanese knotweed stands (approx. central grid reference: SD 80576 10289 w3w ///muddy.square.quite).



Figure 2: Cotoneaster plant (approx. central grid reference: SD 80579 10294 or w3w ///mock.hosts.noises).

Locations of the Japanese knotweed stands, and the cotoneaster plant can be found on the INNS Location Plan (TEP ref: G10760.001) included as Drawing 1.

6. Treatment Methodology

6.1. Pre-commencement Activities

Site Walkover

Before the commencement of any earth works, the appointed contractor should attend Site with Campbell Reith, to identify and confirm the location of the Japanese knotweed and cotoneaster. All occurrences of INNS are detailed on the INNS Location Plan (TEP ref: G10760.001) included as Drawing 1. Any variation should be recorded on the INNS Location Plan by the appointed contractor for reference and be submitted to Campbell Reith. Particular attention should be paid to the Site boundaries and adjoining land.

Risk Assessment Method Statement (RAMS)

Any works carried out by the appointed contractor will be accompanied by a RAMS detailing appropriate biosecurity measures to be observed for the duration of the works, outlining the scope of the works undertaken, and any ongoing monitoring/works required. These should be made available to Campbell Reith for review prior to works commencing.

Prevention of Spread and Biosecurity

Temporary exclusion zone fencing (orange mesh or similar) should be erected around the cotoneaster plant and around the Japanese knotweed (at no less than 7m laterally from the stand). The exclusion zones will be clearly demarcated with warning signage (example template attached in Appendix D). Once all works are complete the orange mesh should be removed by the appointed contractor.

The appointed contractor should set out a designated cleaning area in appropriate locations within the exclusion zones or as close as is practicable to the exclusion zones. The designated cleaning area must be within an area of hardstanding or on a root protection membrane that can contain and collect the material washed off.

All equipment, machinery and PPE used within the exclusion zone must be cleaned within the designated cleaning area, particular attention should be paid to footwear, tyre treads/tracks, wheel arches and any other areas that might retain rhizomes or seeds. Material following cleaning must be contained, collected and disposed of along with other contaminated material.

Traffic Management and Road Sweeping

If separate to the remediation works, the appointed contractor shall include a cost for traffic management if large vehicles are due to block any road for a period of time during the operations. Vehicles shall not cause obstruction to other users of roads within or adjacent to the Site.

All adjoining roads will remain clear of mud and debris which has potential to cause hazard to moving vehicles.

6.2. Treatment

The appointed contractor must:

- Operate within the conditions in ‘treatment and disposal of INNS plants:RPS178’4;
- Have appropriate qualifications and licences for applying and carrying herbicide; and
- Have the relevant waste carrier’s licence.

Japanese Knotweed Treatment

Japanese knotweed propagates from rhizomes, rhizome fragments, crown fragments and stem fragments. Disrupting the rhizome structure of Japanese knotweed by disturbing the plant and/or soil should be avoided as it is likely to result in substantial regrowth.

The location, current spread of Japanese knotweed and estimated 7m excavation area is shown on the INNS Location Plan (TEP ref: G10760.001) included as Drawing 1.

The appointed contractor will stem inject with a Glyphosate based herbicide directly into the stem of the plant below the bottom nodule approximately two weeks before excavating in order for it to take effect and ensure that remaining material has minimal chance of survival (undertaking the injections in a methodical and systematic process). This will be undertaken between March and October when the stems are in active growth, this period may extend into November if early autumn weather conditions are mild.

The appointed contractor will then excavate Japanese knotweed. The below ground material (rhizome) will be ‘chased’ and dug out using excavation buckets and if required hand dug. This could extend to a depth of 3 metres and up to 7 linear metres laterally from the main stand.

It is understood that the Japanese knotweed rhizomes potentially spread underneath the B6216 bridge, however the presence of hardstanding features under the bridge may inhibit growth. If rhizomes are found to track underneath the bridge, these should be removed by hand. If rhizomes are found to track further underneath the bridge, the methodology will have to be re-visited alongside a heritage and structural engineer specialist.

A suitably qualified person will ensure that all rhizomes are removed in their entirety, and it is recommended that inspections take place after every bucket load of material to check for the presence of rhizomes.

The appointed contractor will avoid excess waste and ensure the excavated Japanese knotweed does not contaminate surplus soil that is currently free from infestation.

It is preferable to excavate the material and load directly onto trucks for immediate disposal. If this is not possible, storage in a sealed container or skip on Site is a suitable alternative until transportation can be arranged.

A suitably qualified person will observe the loading of excavated material onto trucks and will ensure that these loads are sealed before leaving the Site. Signed receipts will be obtained from all carriers of controlled waste that leave the Site and these will be given to the Campbell Reith.

Trucks carrying controlled waste will be filled to a maximum of 20cm from the top and the void will be sealed with a well-secured membrane. It is vital that the material is contained to prevent any material being lost during transportation. The appointed contractor should cost for Japanese knotweed treatment and disposal on the basis of Controlled Waste.

The controlled waste will be transported off-site by a licensed waste carrier and disposed of only at a permitted waste disposal facility (approved landfill sites) in accordance with the Environmental Protection (Duty of Care) Regulations 1991 and The Waste Management Licensing Regulations 1994.

Cotoneaster Treatment

A small Cotoneaster plant is located directly adjacent to the bridge. The appointed contractor will hand dig the cotoneaster plant. The removed plant will be bagged and removed from Site as contaminated waste.

Reporting

On completion of the works an Excavation Report should be provided to Campbell Reith. This Excavation Report shall include all waste transfer notices associated with the delivery of the works. The final format of the excavation report shall be subject to approval of Campbell Reith.

Monitoring

The appointed contractor should provide an annual cost for inspection and reporting.

Following the issue of practical completion, if feasible, the excavation areas shall be subject to inspection every 6 months for a period of two full growing seasons. A report shall be submitted within 14 days of each inspection to Campbell Reith.

If regrowth is found over this period excavation will be undertaken as per the treatment specification above.

Warranties

Appointed contractor should provide a 10 year Company Backed Warranty to Campbell Reith for the excavation Works. The Company backed Warranty shall be transferable to future land owners.

Furthermore, the appointed contractor will be required to provide a 10 year Insurance Backed Guarantee, whereby in the unlikely event that the appointed contractor is unable to honour obligations of its Company Warranty, the Insurance Backed Guarantee is present to meet these obligations.

Appendix A – Applicable Legislation

Legislation	Obligation
Legislation relating to specific INNS	
Wildlife and Countryside Act (1981)	It is an offence to establish, or otherwise cause species listed on Part II Schedule 9 of the Act to grow in the wild (including via moving contaminated soil or plant cuttings). Liability may also extend in situations where a landowner has knowingly permitted the spread of invasive non-native species on to neighbouring land.
Invasive Species (Enforcement and Permitting) Order 2019	The Order imposes criminal penalties for the most serious breaches of the Regulations and for ancillary offences such as making false statements, attempts to commit offences and obstruction. Where criminal sanctions are not appropriate, civil sanctions allow a proportionate response to minor breaches such as monetary penalties, compliance, restoration and stop notices, enforcement and third-party undertakings. The Order gives an enforcement officer the power to enter premises without a warrant where there are grounds for suspicion that INNS are being kept on those premises.
EU Regulation (1143/2014) on Invasive Alien (Non-Native) Species	Under the EU Regulation (1143/2014) it is an offence to import, transport, sell, grow, cultivate or release into the environment a plant listed as a 'species of concern'. Penalties for this offence can include a fine or two year custodial sentence. Additionally, there is a duty of care to ensure that responsibilities with respect to species identified as a 'species of concern' under the published European Commission Implementing Regulation 2017/1263 are understood, and also sets out a clear framework for dealing with these species in a coordinated manner across the continent.
Legislation relating to Health and Safety	
Management of Health and Safety at Work Regulations 1999	The landowner will be responsible for ensuring that risk assessments are undertaken for the Site this Regulation.
The Health and Safety at Work Act (1974)	All operations carried out on the Site must only be undertaken by trained personnel, using methods and equipment approved by the Health and Safety Executive (HSE).
Reporting of Injuries, Disease and Dangerous Occurrences Regulations (RIDDOR) 2013	The landowner is responsible for ensuring that accidents and incidents which occur on the Site are report to the relevant enforcing authority.
Construction (Design and Management) (CDM) Regulations (2015)	The Regulations are the main regulations for managing the health, safety and welfare of construction projects. The Regulations ensure work is planned for on a Site so that the risks involved are managed from start to finish, and ensure that the right people are in place at the right stage of a construction project.

Legislation	Obligation
Legislation relating to Chemicals and Waste	
The Environmental Protection Act 1990	The Act provides structure and provision for the control of pollution arising from certain industrial and other processes. It brings together a system of pollution prevention and control and the disposal of waste to land, water and air.
The Environmental Protection (Duty of Care) Regulations 1991	The Environmental Protection Act 1990 imposes a duty of care on any person who imports, produces, carries, keeps, treats or disposes of controlled waste or, as a broker, has control of such waste. The duty requires such persons to ensure that there is no unauthorised or harmful deposit, treatment or disposal of the waste, to prevent the escape of the waste from their control or that of any other person, and on the transfer of the waste to ensure that the transfer is only to an authorised person or to a person for authorised transport purposes and that a written description of the waste is also transferred.
Waste Management Licensing Regulations 1994	The Regulations place a responsibility (Duty of Care) on the organisations involved in the treatment to ensure that controlled waste is produced, stored, transported or disposed of without harming the environment.
Controlled Waste (England and Wales) Regulations 2012	The Controlled Waste Regulations (England and Wales) 2012 states that household, industrial and commercial waste are classed as controlled waste and are subject to the Environmental Protection Act 1990.
Hazardous Waste (England and Wales) (Amendment) Regulations 2012 (updated April 2016)	The regulations ensure safe management of hazardous waste and provide cradle-to-grave documentation for the movement of hazardous waste. These regulations apply to anyone who produces, handles or manages hazardous waste from business or industry or acts as a waste broker in this respect.
The Control of Substances Hazardous to Health (COSHH) Regulations 2002	The COSHH Regulations require employers to control substances which are hazardous to health.
The Control of Pesticides Regulations 1986	The Regulations relate to the control of pesticide and aim to protect humans and safeguard the environment from pesticides. Only approved products may be sold, supplied, stored, advertised or used.
The Control of Pesticides (Amendment) Regulations 1997	The Control of Pesticides Regulations (COPR) is one of the laws that controls biocides in Great Britain (GB) and Northern Ireland (NI) to make sure that when they are used properly, they do not harm people, pets or the wider environment.
Legislation relating to protected species	

Legislation	Obligation
The Natural Environment and Rural Communities Act 2006	Section 40 of the NERC Act places a duty to conserve biodiversity on public authorities in England. It requires local authorities and government departments to have regard to the purposes of conserving biodiversity in a manner that is consistent with the exercise of their normal functions such as policy and decision-making. 'Conserving biodiversity' may include enhancing, restoring or protecting a population or a habitat.
Protection of Badgers Act 1992	It is a criminal offence, except where permitted by the Act, for a person to wilfully kill, injure or take or to attempt to kill, injure or take a badger.
The Conservation of Habitats and Species Regulations (As amended) 2017	The Habitat Regulations for England and Wales assign a greater level of protection to a variety of native species of animals and plants listed. The 2017 Regulations have been amended by the 2019 EU Exit Regulations.

Additional Legislation

Legislation covering the management, handling and disposal of invasive non-native species include the following:

- EU Directive on the conservation of natural habitats and of wild fauna and flora;
- EU Water Framework Directive;
- The Water Resources Act 1991;
- The Highways Act 1980;
- The Town and Country Planning Act 1990 (as amended);
- The Landfill (England and Wales) Regulations 2007;
- The Hazardous Waste Regulations 2005; and
- The Environmental Permitting Regulations 2010 (as amended).

Appendix B – GB Non-native Species Secretariat (NNSS) ID Sheets

Cotoneaster

Species Description

Scientific name: *Cotoneaster* species

AKA: Cotoneasterau (Welsh)

Native to: Majority of species originate from east Asia

Habitat: Rough ground

A large group of small trees and prostrate shrubs that can be either evergreen or deciduous. They are becoming increasingly naturalised due to birds which eat the small red berries and spread the seed. There is one native species, wild Cotoneaster (*Cotoneaster cambricus*) which occurs as a few individuals in North Wales. This ID sheet includes those introduced species which are relatively common. Where they become established they can become dominant to the exclusion of native species.

Himalayan cotoneaster (*Cotoneaster simonsii*) is an erect deciduous shrub 3-4 metres high with 1.5-2.5 cm long leaves; small-leaved cotoneaster (*Cotoneaster microphyllou*) is an evergreen low-growing shrub with very small leaves (0.5-0.8cm long) and tree cotoneaster (*Cotoneaster frigidus*) is a deciduous or semi-evergreen shrub or small tree with leaves between 6-15 cm long and flowers in dense clusters. All these species have leaves which are shiny and hairless on the upper surface and slightly hairy on the lower surface. Cotoneaster species do not have thorns.

Wall cotoneaster (*Cotoneaster horizontalis*) is the most widely recorded species and is distinctive in having stems that spread horizontally in flattened herring-bone like branches and bears single flowers. Unlike the other cotoneasters mentioned, the underside of leaves of this species are relatively hairless.

Cotoneasters have been in cultivation in GB since 1824 and there are over 100 species now widely cultivated in the UK. Other species could also become naturalised.

Cotoneaster species are 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 cause these species to grow in the wild.

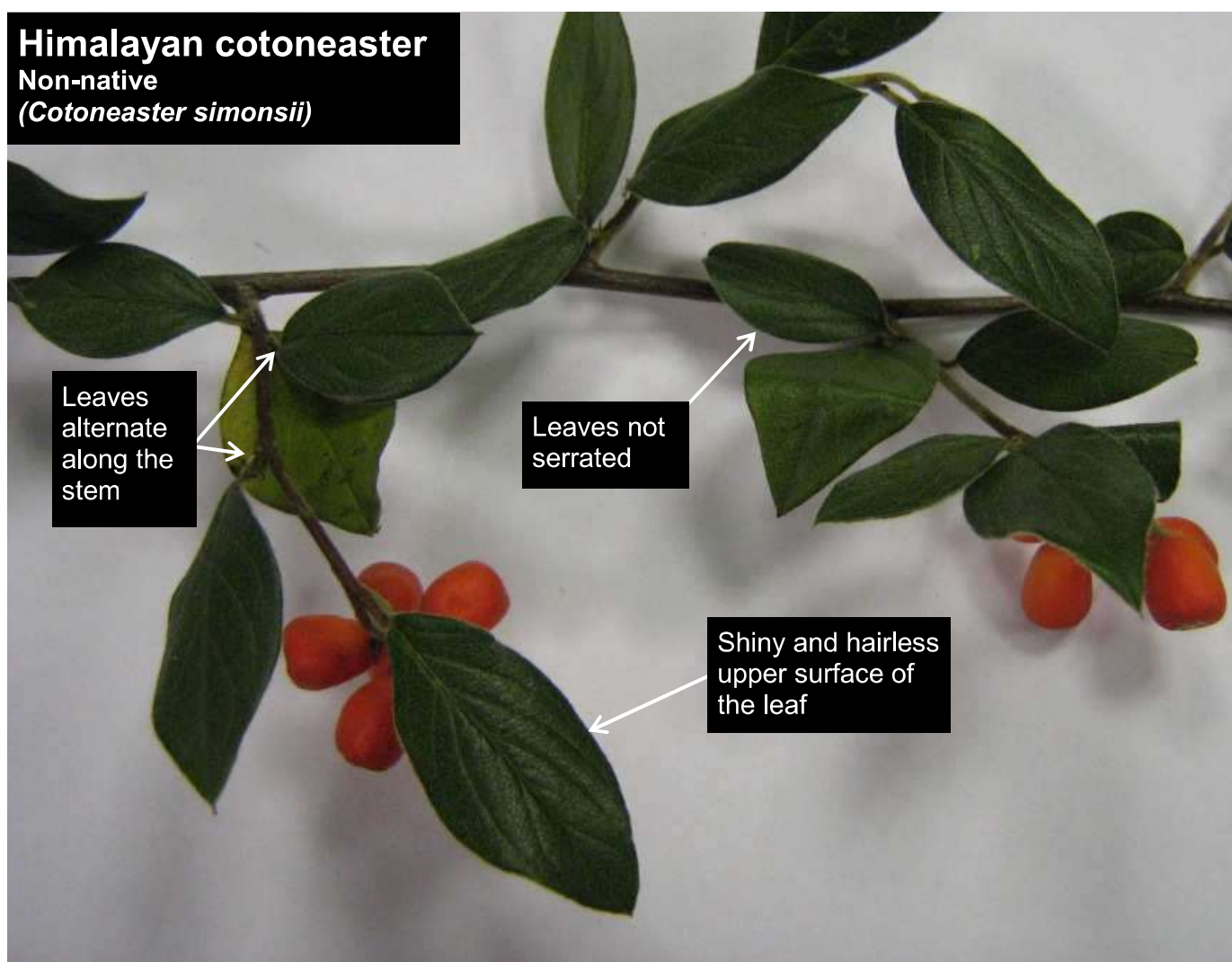
For details of legislation go to www.nonnativespecies.org/legislation.



Himalayan cotoneaster (*Cotoneaster simonsii*)

Key ID Features

Himalayan cotoneaster
Non-native
(*Cotoneaster simonsii*)

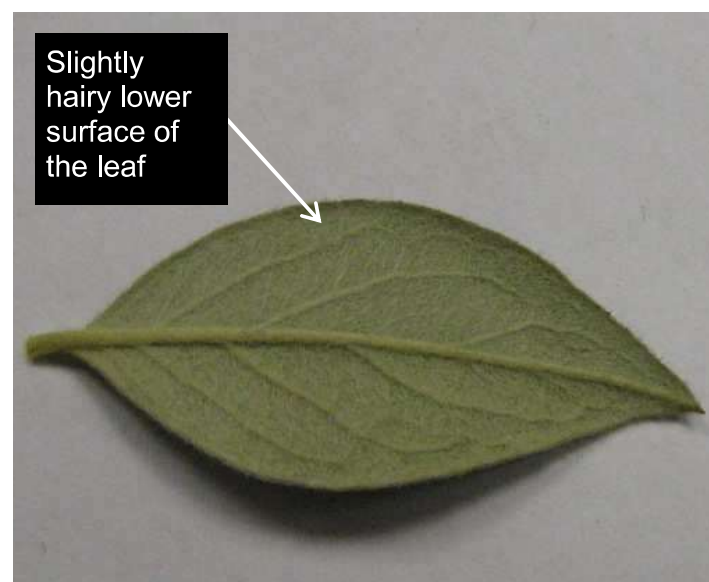


Leaves alternate along the stem

Leaves not serrated

Shiny and hairless upper surface of the leaf

Slightly hairy lower surface of the leaf



Red/orange fruits in clusters

Identification throughout the year

Evergreen species such as the small-leaved cotoneaster can be identified throughout the year by its leaves. Deciduous species can be identified by the presence of the red berries which can remain throughout winter and, in the case of wall cotoneaster, by the distinctive herringbone-shaped branches.



Similar Species

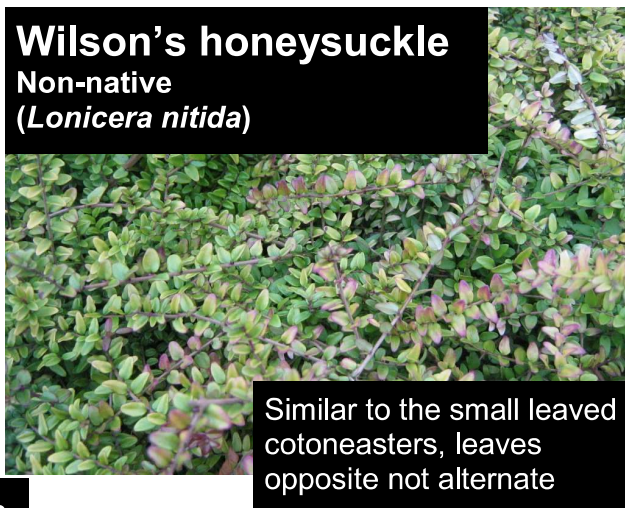
Firethorn
Non-native
(*Pyracantha coccinea*)



A shrub with small serrated leaves that alternate along the stem, which has long thorns



Wilson's honeysuckle
Non-native
(*Lonicera nitida*)



Similar to the small leaved cotoneasters, leaves opposite not alternate

Aromatic wintergreens
Non-native
(*Gaultheria* species)



An evergreen shrub with alternate leaves and bell shaped flowers, unlike the five petalled flowers of cotoneasters

Other similar species which may be confused with cotoneaster include:

Escallonia (*Escallonia macrantha*) - an evergreen shrub which has alternate serrated leaves and numerous pinkish-red flowers, no thorns;

Barberry (*Berberis vulgaris*) - a thorny shrub with small serrated leaves, yellow flowers and red lozenge-shaped berries; and

Sea buckthorn (*Hippophae rhamnoides*) - a thorny densely branched shrub with alternate long thin leaves with bright orange berries on female plants.

Distribution

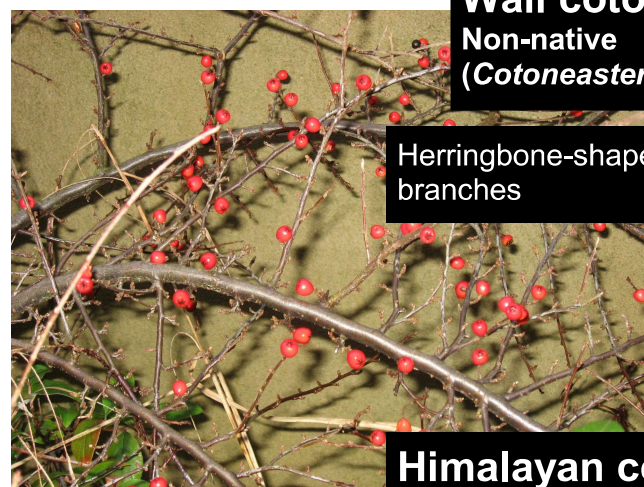
Cotoneaster species are widespread throughout Britain.

Source: NBN Gateway. Check website for current distribution.



Some other species of Cotoneaster

Wall cotoneaster
Non-native
(*Cotoneaster horizontalis*)



Herringbone-shaped branches



Himalayan cotoneaster
Non-native
(*Cotoneaster simonsii*)



Evergreen habit

Small-leaved cotoneaster
Non-native
(*Cotoneaster microphyllus*)

References and further reading:

Johnson, O and More, D (2004) "*Collins Tree Guide*". HarperCollins

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

Japanese Knotweed

Species Description

Scientific name: *Fallopia japonica*

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

Native to: Japan, Taiwan, northern China

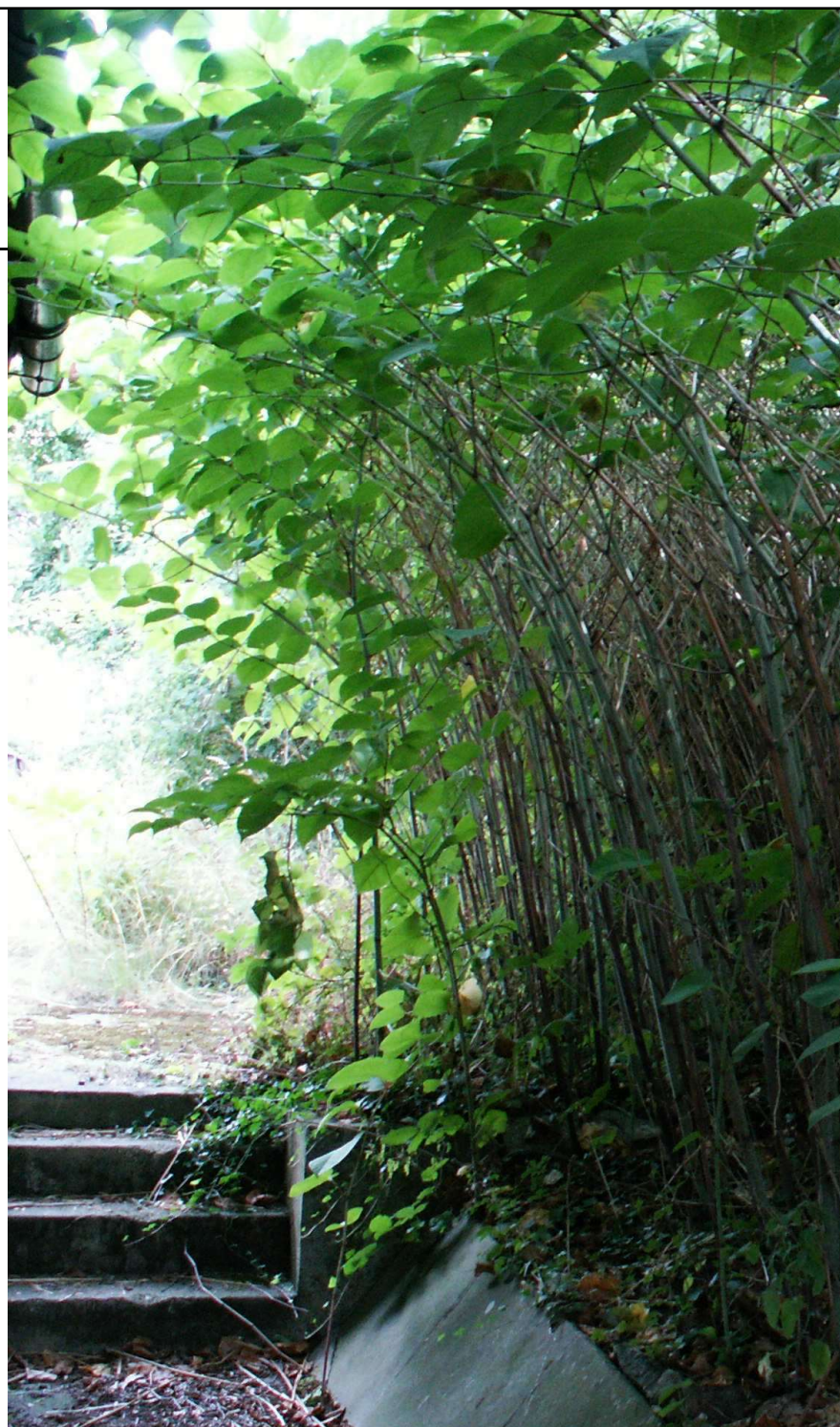
Habitat: Common in urban areas, particularly on waste land, railways, road sides and river banks

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.

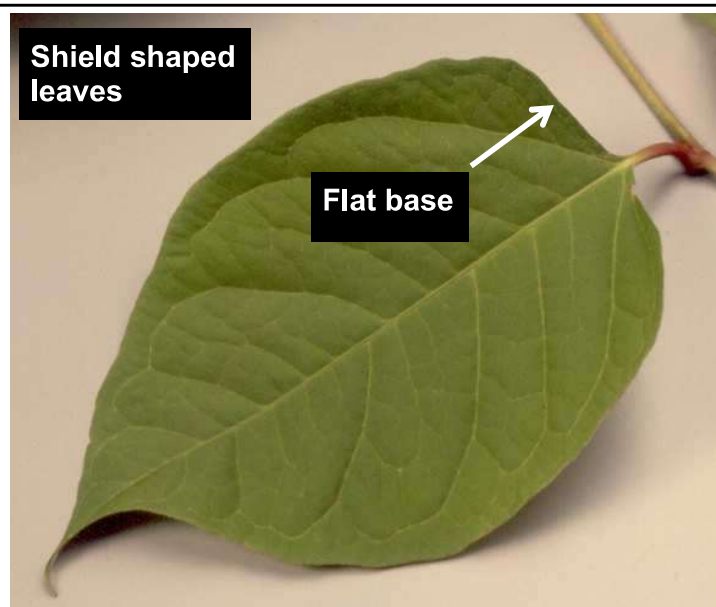
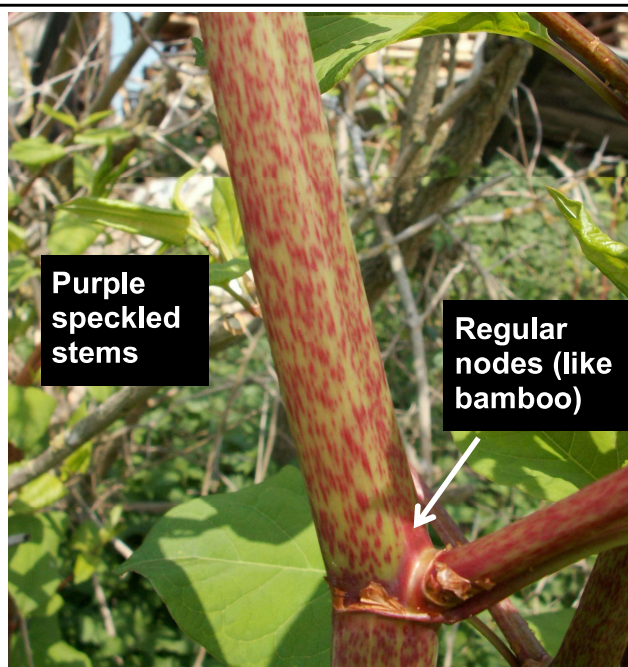
Introduced in the early 19th century as an ornamental plant. Now common and widespread across the UK. Spreads rapidly in the wild by natural means and as a result of spread by humans. Spread is solely by vegetative means, either fragments of rhizome or stem. Does not produce seed in the UK. Negative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



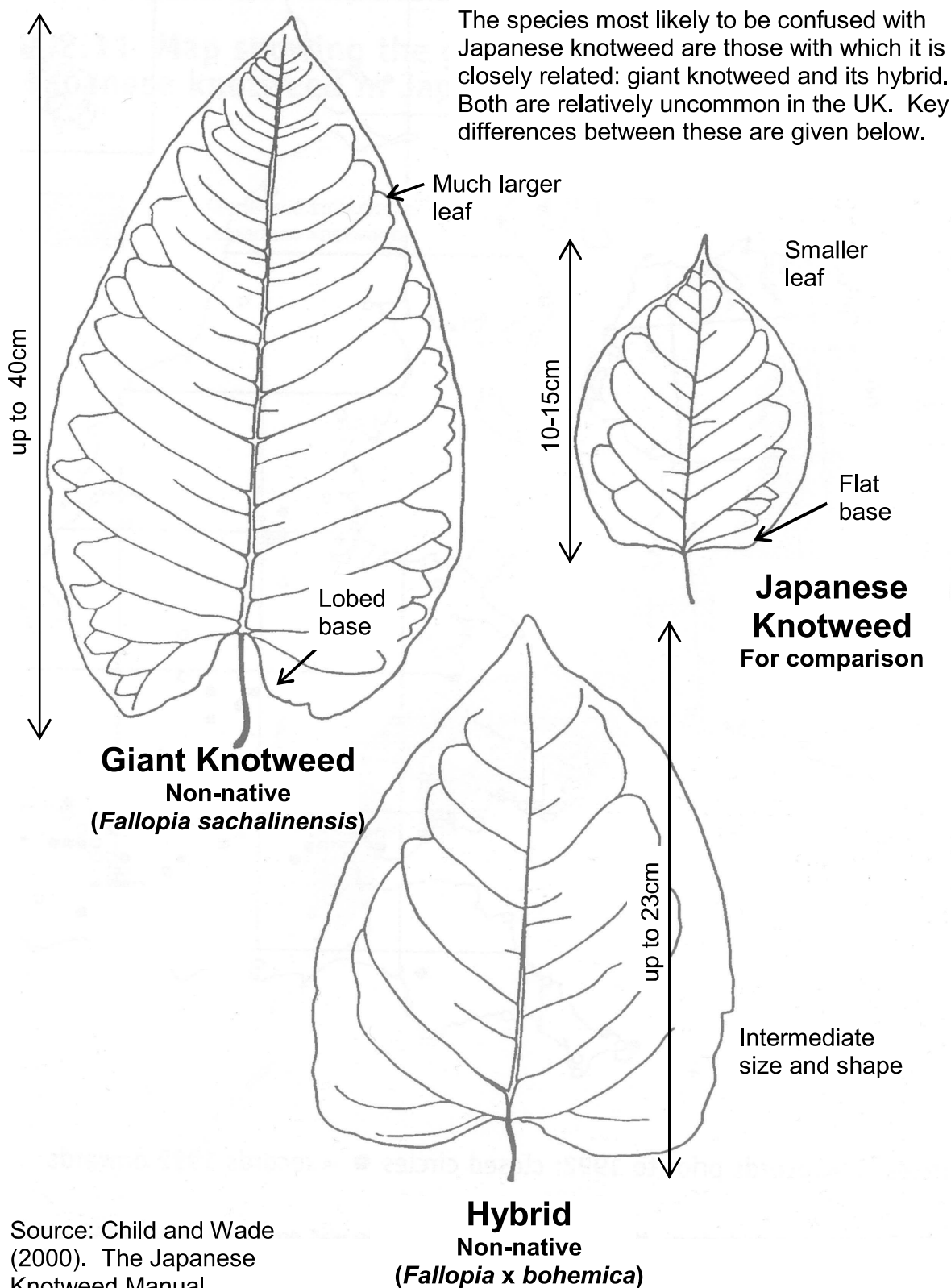
Summer



Winter



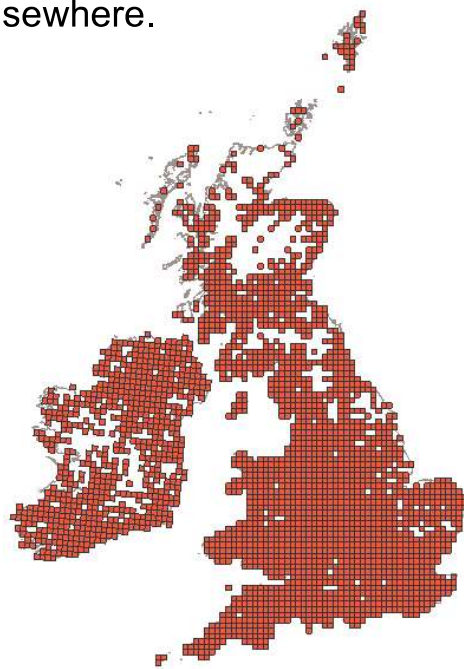
Similar Species



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

Appendix C – Useful Information & Links

Useful Links

Great Britain

[UK Centre for Ecology & Hydrology](#)

[Department for Environment, Food & Rural Affairs \(DEFRA\)](#)

[Environment Agency Guidance to stop invasive non-native plants from spreading](#)

[Joint Nature Conservation Committee - Invasive Non-Native Species](#)

[GB non-native species secretariat](#)

[The UK Biodiversity Action Plan](#)

[The Rivers Trust](#)

[Property Care Association](#)

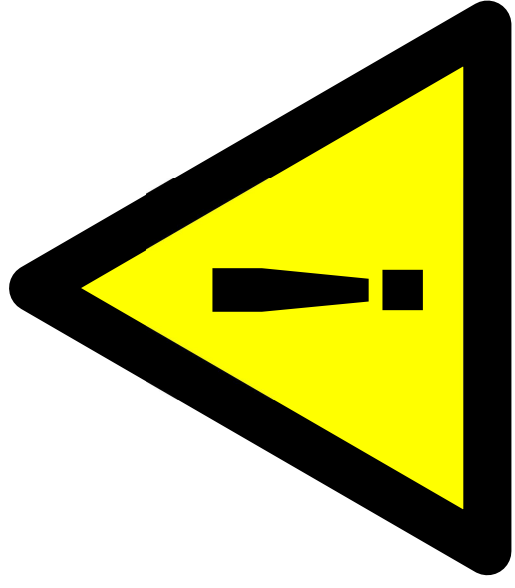
International

[Global Invasive Species Database](#)

[Invasive Species Compendium](#)

[NOBANIS - European Network on Invasive Species](#)

Appendix D – Warning Signage Template



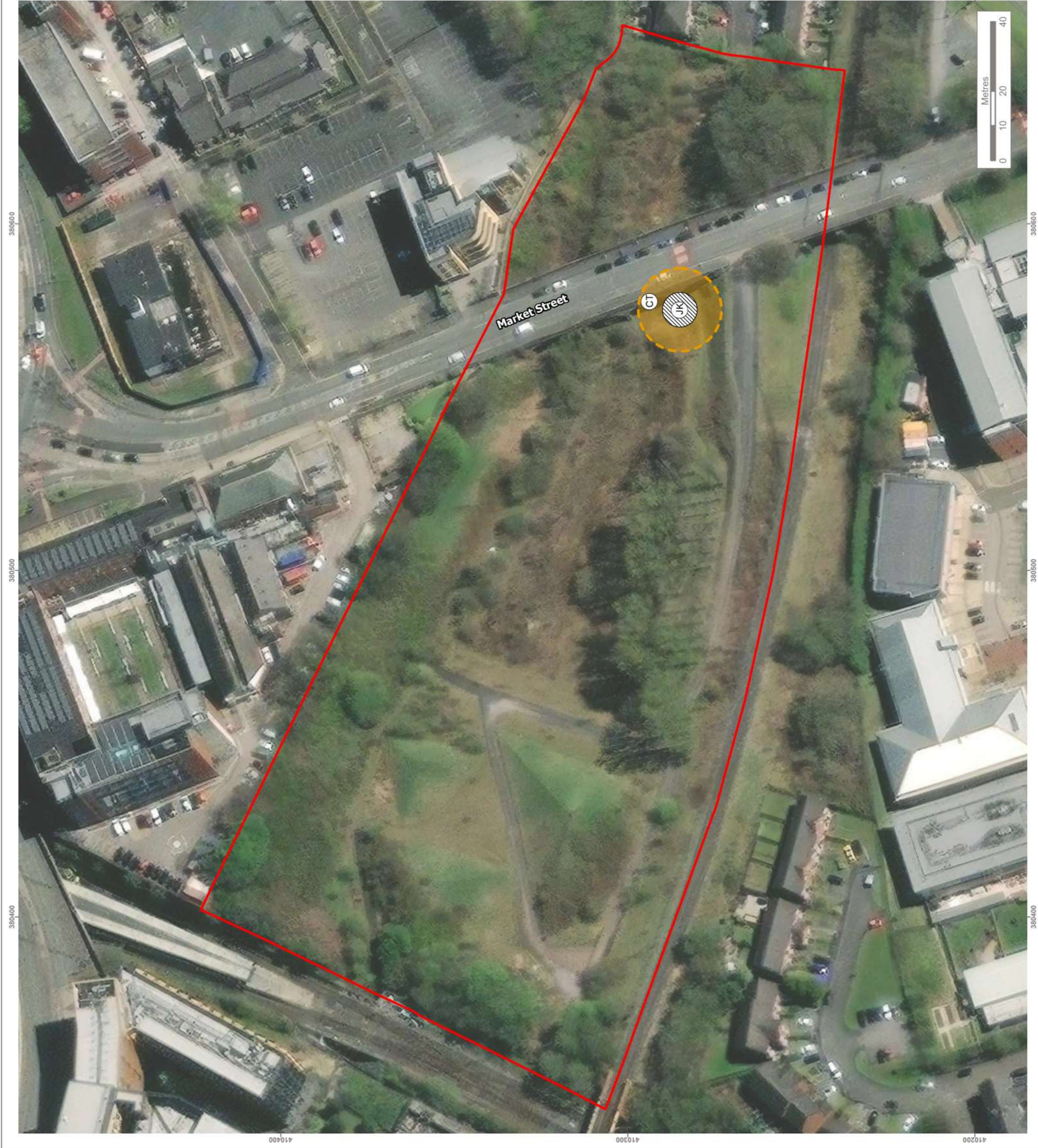
Restricted Access

Do not enter unless authorised.

**Do not remove soil from this area
without authorisation.**

Drawings:

Drawing 1 – INNS Location Plan (TEP ref: G10760.001)



- KEY**
- Site boundary
 - Invasive Non-Native Species Survey
 - Coloneaster
 - Japanese knotweed
 - Japanese Knotweed - extent of spread
 - Japanese Knotweed - 7m buffer

Note:
The locations of habitats and habitat features are indicative.



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Rev	Description	Drawn	Approved	Date

TEP THE ENVIRONMENT PARTNERSHIP

401 Faraday Street, Birchwood Park, Warrington, WA3 6GA
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
Land at Pyramid Park INNS

Title
Invasive Non-Native Species Location Plan

Drawing Number
G10760.001

Drawn	Checked	Approved	Scale	Date
BT	SP	SB	1:1,100 @ A3	11/10/2024