

JAPANESE KNOTWEED

Remediation Report

Private & Confidential

Japanese Knotweed Ltd

has helped thousands of customers resolve the problem of invasive weeds.



Invasive Weed Management Plans for:

CONSTRUCTION PROJECTS
HOUSING DEVELOPMENTS
GROUND REMEDIATION
CHANGE OF LAND USE
COMMERICAL PROPERTY
PRIVATE PROPERTY
CONVEYANCE
MORTGAGES

INVASIVE WEED MANAGEMENT PLAN

REFERENCE

JKLE17671 (revised 20-04-2023)

CLIENT NAME

Highwood Group Ltd

SITE NAME/ADDRESS

Stoneham Lane Nitrates Mitigation Scheme, Eastleigh, SO50 9RL

Invasive Weed Management Plan drafted in accordance with the; Environment Agency 'Treatment and disposal of invasive non-native plants: RPS 178 [2019]' and 'Property Care Association's 'Code of Practice for the Management of Japanese Knotweed, [2018]'

LONDON - MANCHESTER - SOUTHAMPTON - GLASGOW

0333 241 4413

www.japaneseknotweed.co.uk



DUTY OF CARE:

INVASIVE WEEDS AND YOUR OBLIGATIONS

Invasive non-native plant species (INNS) listed under Section 14, Schedule 9 part 2 of the Wildlife and Countryside Act 1981 / Wildlife (Northern Ireland) Order 1985, need to be handled in a responsible manner to protect the environment, be socially responsible and prevent property risk.

The Wildlife and Countryside Act 1981 / Wildlife (Northern Ireland) Order 1985. Part I (Wildlife – Miscellaneous), Section 14, Clause 2 of the Act states: ... 'if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence'.

Under the Environmental Protection Act 1990, Duty of Care Regulations 1991, propagules of Schedule 14, Schedule 9 INNS and materials contaminated with these plant elements when removed from site must be removed by registered waste carriers to a specially licensed landfill site for disposal, accompanied by appropriate Waste Transfer documentation.

Outside of those species listed within the Wildlife and Countryside Act are further non-native and native plant species which have been identified as having a particularly pernicious and invasive growth habit and should be controlled or removed to protect land and property.

Some invasive weeds such as Japanese knotweed and Bamboo if allowed to spread to neighbouring land/properties can also give rise to law of tort private nuisance claims.



A PLAN OF ACTION

The Environment Agency advocate the use of a Management Plan wherever possible on development sites impacted by invasive non-native weeds. Our invasive weed Management Plans (IWMP) are drafted in accordance with the 'Property Care Association's 'Code of Practice for the Management of Japanese Knotweed [2018]', applying this approach to all invasive weeds.

The invasive weeds MP includes a site inspection and survey of visible invasive weeds infestations. The survey records locations and areas and any risks. Proposed usage for the site, including any change of land use plans, are evaluated to decide on an appropriate course of remediation.

Remedial actions may include in-situ herbicide but where there are plans to disturb areas containing invasive weeds the required method is excavation. An active or completed invasive weeds MP should be included within a development sites Operation and Maintenance manual.

**JAPANESE
KNOTWEED
TO BE
IGNORED**



INVASIVE WEEDS MANAGEMENT PLAN

Table of Contents

1 INTRODUCTION.....	4
1.1 CONTACTS.....	4
1.2 PLAN OVERVIEW.....	5
2 PRE-REMEDIATION SURVEY	6
2.1 DESCRIPTION OF THE SITE.....	6
2.2 DISTRIBUTION OF INVASIVE WEEDS.....	6
3 REMEDIATION PROPOSAL.....	8
3.1 EVALUATING APPROPRIATE METHODS	8
4 RECOMMENDATION FOR REMEDIATION	9
4.1 DRAWING PLAN OF PROPOSED REMEDIAL WORKS	12
5 REMEDIATION UNDERTAKEN	13
5.1 SUMMARY OF WORKS COMPLETED	13
5.2 METHOD OF WORKS.....	13
5.3 DRAWING SHOWING COMPLETED REMEDIAL WORKS.....	13
6 APPENDICES	14
6.1 APPENDIX 2 - RECORD OF SITE AND REMEDIAL WORKS	14
6.2 APPENDIX 3 - REMEDIATION STRATEGIES	20
6.3 APPENDIX 4 – SITE RISKS IF INVASIVE WEEDS ARE NOT REMEDIATED.....	22
6.4 APPENDIX 5 – INVASIVE WEEDS AND THE LAW	23
6.5 APPENDIX 6 – EXPERIENCE and QUALIFICATIONS.....	24
6.6 APPENDIX 7 – HEALTH AND SAFETY, INSURANCE, AFFILIATIONS.....	25
6.7 APPENDIX 8 - REFERENCES.....	29

Version 10.1 – 16/11/2021 - JKLE Invasive Weed Mgmt Plan

1 INTRODUCTION

1.1 CONTACTS

INVASIVE WEED SPECIALIST DETAILS

**Japanese Knotweed Ltd**

Unit 13A, Westlink, Belbins Business Park, Cupernham Lane, Romsey, Hampshire, SO51 7JF

0333 2414 413 Option 1 + 1 | estimating@knotweed.co.uk | japaneseknotweed.co.uk

David Cook | Excavations Estimator | david.cook@knotweed.co.uk

Japanese Knotweed Ltd is a market leading national (England, Wales, and Scotland) specialist invasive weed contractor, with an annual turnover of £4.6m. In 2020 we delivered approx. 200 excavation projects, including a £1.3m excavation job between Oct-Nov 2020, and another £0.5m excavation in Nov-Dec 2020. We currently have over 5000 herbicide customers and in 2020 completed approximately 12,000 herbicide programme treatment visits.

We are a safety-first company, and our staff and teams are highly skilled in the work they undertake. We operate a 100% CSCS policy for field staff and managers. Our surveyors are CSJK qualified, plant operators are CPCS ticketed, and supervisors are SSSTS qualified. Our staff receive full and regular training including, First Aid training, NPTC for all herbicide technicians, Lanyard and Harness training and Asbestos awareness training among many others.

Excellent  4.9 out of 5 based on 803 reviews  Trustpilot

5-star review, Japanese Knotweed Ltd, 2020:

'We used Japanese Knotweed Ltd on a Civil Engineering project to treat a large Japanese Knotweed infestation to make way for a new link road and viaduct. They were very professional to deal with, and they managed the excavation process well. The material was moved to a different area of the site and shaped into a spoil bund for chemical treatment. We found them to be very helpful and the work was competitively priced.'

CLIENT DETAILS

**Highwood Group Ltd**

The Hay Barn, Upper Ashfield Farm, Hoe Lane, Romsey, Hampshire SO51 9NJ

Elliott Carley

02380 748900 | 07956 069992

e.carley@highwoodgroup.co.uk

1.2 PLAN OVERVIEW

FULL SITE ADDRESS

Stoneham Lane Nitrates Mitigation Scheme
Eastleigh
SO50 9RL

DESCRIPTION OF MANAGEMENT PLAN

The management plan should be implemented to control the spread of invasive weeds on to and out from the site. The plan details the problem caused and how management and remedial actions should be implemented.

The Plan should be overseen by the Site Manager, and in his absence, his deputy. The Plan, its appendices and revisions shall be kept for future site owners.

The Management Plan should be read in conjunction with the Property Care Association's 'Code of Practice for the Management of Japanese Knotweed [2018]' and Environment Agency 'Treatment and disposal of invasive non-native plants: RPS 178 [2019]'.

PREVENTING FURTHER SPREAD

Where possible all areas affected by invasive weeds should be fenced off and isolated from any activities on site immediately to avoid potential disturbance and spread.

The fencing should be erected at least 5 metres (minimum 3m) away from the visible above ground extent of target weed growth to protect against potential disturbance of underground elements of these plants (e.g. see Property Care Association's 'Code of Practice for the Management of Japanese Knotweed').

No material is to leave site from the invasive weed areas, except as part of specially supervised invasive weed treatment works. No new materials should be stored in or adjacent to invasive weed areas.

Where there is a high risk of invasive weed infestation from neighbouring land, contact the landowner and agree on a co-ordinated treatment programme.

2 PRE-REMEDIATION SURVEY

We have been instructed to undertake a survey of the above property, to determine to the best of our ability the presence of the invasive non-native plants as well as native pernicious invasive weeds.

The site survey was undertaken by Japanese Knotweed Ltd on **04/04/2022**

2.1 DESCRIPTION OF THE SITE

The site is an unused field which has become overgrown with soft vegetation, grass, rushes small trees, brambles, hogweed, and invasive species. It is relatively flat and has the Monk's Brook River running along one boundary and a land drain from the road which cuts across the bottom corner. There is also a central area of the field that is very wet and boggy.

See Appendix Report Section 5.2.1 for Image of site layout

2.2 DISTRIBUTION OF INVASIVE WEEDS

A limited assessment (due to access) of the site was undertaken to identify the presence, locations, and extent of invasive weeds growth. The survey was undertaken in accordance with current good practice published by the Royal Institute of Chartered Surveyors (RICS, 2012) and the Property Care Association (PCA, 2018).

The areas of invasive weeds identified are detailed below:

Himalayan Balsam stand (HB1): this covers the majority of the site, with dense and sparse patches of growth. It is assumed that balsam is present within the bramble areas, however access and visibility was limited to some areas due to the thickness of the vegetation. The balsam was actively growing and at the juvenile seed leaf stage.

Horsetail stand (HT1): this is located, at the time of our survey, in an area of boggy ground and was juvenile in nature, but actively growing.

Ref	Growth Type	Avg. Growth Height	Veg Composition	Proximity to Water (<12m)	Slope / Gradient	Onsite / Offsite	Visible Area
HB1	mature	1-2m	HB & Other	Yes	Flat	Onsite	3456m ²
HT1	mature	<1m	HT & Other	Yes	Flat	Onsite	85m ²

See below for Site Plan of site showing invasive weed distribution

See Appendix Report Section 5.2.3 for Photographs of the Site and Invasive Weeds

IMAGE 1: SITE PLAN OF PROPOSED SITE LAYOUT SHOWING INVASIVE WEED DISTRIBUTION



KEY

- | | |
|--|---|
| ○ Subject Property/Site Boundary | ● Areas not surveyed due to restrictive vegetation access |
| ● Visible Himalayan Balsam (Subject Property) | ● Visible Horsetail (Subject Property) |

LIMITATIONS OF SURVEY

The findings of this survey are the result of a visual inspection only and should not be taken as a guarantee that invasive weeds are not present on the site or neighbouring land. The presence of invasive weeds can sometimes be concealed by property owners (occupiers) or contractors deliberately or by accident by way of: Physical removal of the plants above ground growth material through grounds maintenance, vegetation clearance or site demolition or by being covered over with turf, hard standing, landscape fabric, ornamental gravel, bark mulch and so on.

3 REMEDIATION PROPOSAL

3.1 EVALUATING APPROPRIATE METHODS

DESCRIPTION OF ANY PROPOSED DEVELOPMENT

The proposal is for the construction of two attenuation ponds to reduce the nitrate levels in the river and run off from the nearby developments.

See Appendix Report Section 5.2.2 for Site Plan of Proposed development

See Appendix Report Section 5.4 for invasive weed impact on development objectives

SETTING PRIORITIES

PRIORITY				
ACTIONS				
Isolation / Exclusion	✓			All invasive weed areas to be understood and managed. The whole site should be regarded as an INNS bio-security zone with movements onto and off the site managed to avoid spread of INNS propagules coming off the site via human activities.
Monitoring		✓		A scheme for monitoring will be agreed with the Site Manager, who will ultimately be responsible for overseeing the control of invasive weeds on site.
Management			✓	This Management Plan will be reviewed on a regular basis and in any case every 12 months from site acquisition to completion of works.
INVASIVE WEED AREAS				
HB1, HT1	✓			Bio-security management during construction – with the working site treated as INNS contaminated. A cleaning station to be set up to decontaminated plant, equipment and PPE Boots when leaving the site. Surplus soils which cannot be retained on site will need to be classed as controlled waste (contaminated with INNS). In addition, the design and install of a simple filtration system between Pond B and the Monks Brook to help collect floating INNS seeds in the water during construction and a short period after the ponds are in use. During and after construction (and for an initial total period of 5 years) monitor the whole site and herbicide treat Himalayan balsam growth to prevent the plants going to seed.

4 RECOMMENDATION FOR REMEDIATION

In consideration of the survey findings and evaluated proposals for the site we provide our remedial recommendations below:

The Himalayan Balsam and some Horsetail are going to be disturbed by the development. At the time of our survey, 04/04/2022, there were dense areas of vegetation that could potentially harbour or cover further areas of invasive weeds.

Under our Watching Brief (expert supervision) we will ensure correct bio-security controls in handling and treating Himalayan balsam.

[The solution would manage the Himalayan balsam infestation during and after the construction works. However, it should be noted that there is a high risk of seed re-infestation to the banks of the Monks Brook that may happen at any time from up-stream off-site sources – that cannot be controlled as part of this plan.]

INNS Management and Bio-Security Controls:

Managing a Bio-Security Zone

The site is heavily contaminated with Himalayan Balsam (a legislated Invasive non-native weed, INNS).

Therefore, the whole site must be treated as an INNS bio-security risk zone, with all personnel, vehicles and plant considered INNS contaminated when on site.

Decontamination/Cleaning Station

There must be rigorous decontamination controls for personnel and plant leaving the site.

A cleaning station should be created that ensures all plant. Equipment and personnel leaving the site filter through it and are clean before leaving site. At end of works the plant (excavator) should be cleaned down fully before leaving site.

There should be a temporary water flow filtration system in place in any channel between Pond B and the Monks Brook during and for a short period after construction to help remove the risk of floating HB seed leaving the site.

Vegetation Management

The site is overgrown with bramble, weed trees, and other vegetation.

The vegetation should be machine flailed (mulched) and dropped to the ground.

Where necessary excess mulched vegetation to be scrapped off to the periphery of the site into Tree RPZ areas.

Waste Removal from site.

Surplus soils from forming the ponds that cannot be retained on site will have to be removed.

Unfortunately, those soils will be considered contaminated with Himalayan balsam, due to the infested nature of the site and the difficulty in identifying and keeping separate; soil contaminated with INNS, and soils clean from INNS.

Long-term professional herbicide/control treatment and monitoring

Undertake a 5-year programme of herbicide treatments with continued on-going monitoring by CSK within the site ownership boundary. Herbicide treatments, cutting or pulling will be undertaken as necessary to Himalayan balsam germinated plants prior to seeding.

Key Deliverables in relation to site planning agreements

Invasive Weed Management Plan

The date the plan was last updated is 28-02-2023.

Excavation Depths and Proposed Formation levels

Himalayan balsam: A maximum 0.25m deep excavation in most cases will remove all plant roots (which are not deep) and seed-bearing soils.

Field Horsetail: Horsetail is a native naturally occurring plant in the UK. Remediation is only recommended as a precautionary measure to remove the worst of the plant's bio-mass volume from the working area of the site. A 0.3m deep excavation will remove the soils with the highest concentration of the plant's rhizome .

In excavating the ponds, the contaminated soils will be lifted and removed from the pond footprint and connecting channels. The pond extents will be marked out and excavated soils where possible retained on site.

Non-Surveyed Areas:

If the vegetation is to be removed and/or the area developed, then we should provide watching brief to monitor for the presence of invasive weeds in non-surveyed areas. Himalayan balsam or Horsetail present should be remediated in accordance with the main methodology.

Spread of Himalayan balsam and aquatic habitat to be created:

The excavation should remove the vast majority of the plants and seed bank from the areas to be created as aquatic habitat.

The planned 5-year herbicide programme will treat re-growth of plants on any/all areas around the ponds to help ensure that plants do not reach seed generation and seed cast growth stage. CSK will continue monitoring beyond the 5 years.

This will help prevent re-colonisation from within the site (and manage the arrival of new imported seed from upstream of the brook onto the banks of the brook).

5-Year Treatment Plan

JKLs management plan proposal is to provide herbicide treatment to the site during and beyond the proposed site works programme. We have allowed for a 5-year treatment programme. During this period Himalayan balsam will be identified and chemically treated to ensure ongoing effective control. Eradication is not an aim of this management plan.

Himalayan balsam infestations are present to the Monks Brook (up-stream) and re-infestation of the site from up-stream seed spread sources beyond the end of the programme remains an ongoing risk.

The programme will ensure within the 5-year period that all on-site growth will be treated and controlled in compliance with responsible duty of care applications.

Area covered by the 5-year Treatment Plan

JKL have an option out with our client to extend the scope of the 5-year Treatment Plan to include land and banks to the Monks Brook, which are under ownership of the employer, east of the red-line site boundary currently shown within our management plan doc.

Site Management

Tool box talks will be undertaken prior to starting any works on site and to induct persons to works involving the target invasive weed species.

Works involving INNS contaminated soils will be overseen by JKL/EC, who will also provide the 5-year monitoring and treatment to treat Himalayan balsam growth anywhere on site and prevent seed production and spread to the banks of and/or into the Monks Brook.

Tree Officer Watching Brief

Where soil strip works are to take place within tree root zones we expect the Principle Contractor to arrange for the presence of the local tree officer to oversee these works.

Waste Management

The creation of the ponds and surrounding earth works may result in creating soil volumes surplus to what can be effectively retained on the site without reducing the size specification and performance of the ponds in filtrating nitrates.

Where soils need to be removed from site, wastes containing Himalayan balsam are a controlled waste if leaving site, in accordance with the Environmental Protection Act. The wastes must be shown and recorded to have been removed via registered waste carriers and disposed of at a facility licensed by the E.A. to be able to receive and dispose of controlled wastes.

Nb. Remedial works quotations we provided under separated attached cover

4.1 DRAWING PLAN OF PROPOSED REMEDIAL WORKS

IMAGE 2: SITE PLAN OF PROPOSED SITE LAYOUT SHOWING REMEDIATION WORKS



KEY



Subject Property/Site Boundary



Bio-Security and long term treatment area



Reduced Level Works Areas, to be cleared of soils containing Himalayan balsam during construction. On completion the areas to form part of the Bio-Security and long term treatment area.

5 REMEDIATION UNDERTAKEN

This section of the report may be used to detail any remedial works undertaken. Works records (i.e. photos and waste records if applicable) in relation to these works will be provided in the appendix.

5.1 SUMMARY OF WORKS COMPLETED

To be inserted here on completion of works

5.2 METHOD OF WORKS

Please see the 'Pricing Notes and Method' footnotes on the accepted quote (Bill of Quantities), or separately supplied 'Risk Assessment and Method Statement' (RAMS) for the excavation works. For Methods in relation to herbicide works please see separately supplied 'Risk Assessment and Method Statement' (RAMS).

5.3 DRAWING SHOWING COMPLETED REMEDIAL WORKS

IMAGE 3: SITE PLAN OF PROPOSED SITE LAYOUT COMPLETED REMEDIATION WORKS

To be inserted here on completion of works

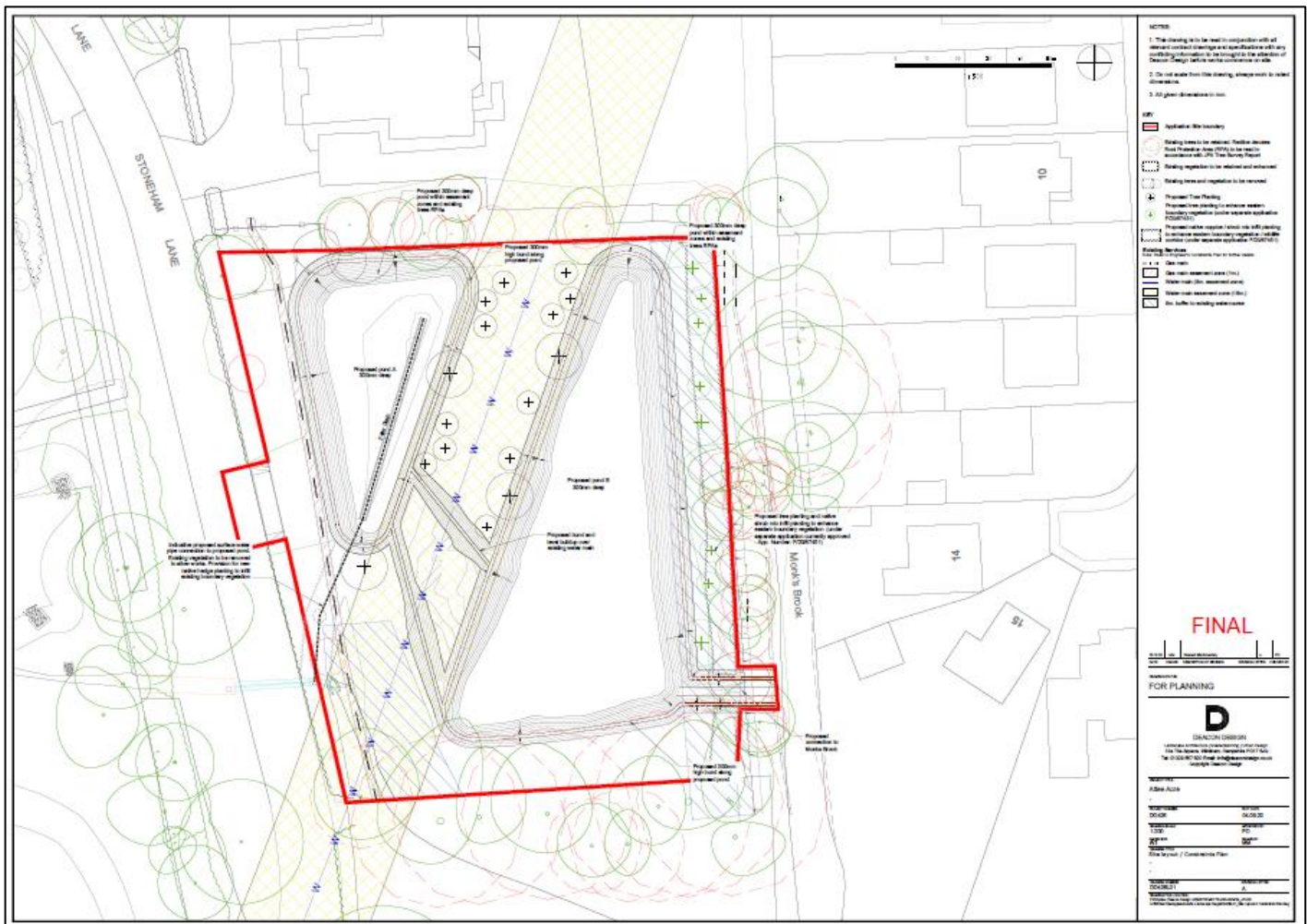
6 APPENDICES

6.1 APPENDIX 2 - RECORD OF SITE AND REMEDIAL WORKS

AERIAL PHOTOGRAPH OF CURRENT SITE



PROPOSED DEVELOPMENT PLAN FOR SITE



PRE-REMEDIATION - PHOTOGRAPHS OF INVASIVE WEEDS

Image 1: 2022.04.04 JKLE17671 area with no access



Image 2: 2022.04.04 JKLE17671 boggy area



Image 3: 2022.04.04 JKLE17671 boggy area



Image 4: 2022.04.04 JKLE17671 brambles



Image 5: 2022.04.04 JKLE17671 brambles along river, no access



Image 6: 2022.04.04 JKLE17671 centre of site



Image 7: 2022.04.04 JKLE17671 drain from road



Image 8: 2022.04.04 JKLE17671 entrance



Image 9: 2022.04.04 JKLE17671 HB _2



Image 10: 2022.04.04 JKLE17671 HB _3



Image 11: 2022.04.04 JKLE17671 HB _4



Image 12: 2022.04.04 JKLE17671 HB amongst trees



Image 13: 2022.04.04 JKLE17671 HB in brambles near river



Image 14: 2022.04.04 JKLE17671 HT _2



Image 15: 2022.04.04 JKLE17671 HT _3



Image 16: 2022.04.04 JKLE17671 neighbouring trees down



DURING AND POST REMEDIATION – PHOTOGRAPHS

To be inserted here on completion of works

SITE VISIT RECORDS (Monitoring) - Herbicide (Pesticide) Application Records

To be inserted here on completion of works

SITE WASTE TRACKING RECORD

To be inserted here on completion of works

WASTE TRANSFER NOTES

To be inserted here on completion of works

WEIGHBRIDGE TICKETS

To be inserted here on completion of works

6.2 APPENDIX 3 - REMEDIATION STRATEGIES

We can undertake the following methods of invasive weed remediation to resolve a problem that, if handled the wrong way, can end up being a long-term problem for the developer and landowner:

FULL EXCAVATION and DISPOSAL AT LANDFILL

Full and complete excavation of invasive weeds providing an instant, hassle free and impressive rectification method. The excavation process is monitored by our site supervisors who not only ensure that all the plant material is removed (via visual identification), but that only soils contaminated with invasive weed propagules are removed (reducing cost by avoiding unnecessary excavation and waste disposal). All legislated invasive non-native weed contaminated material arising from these works is removed from site as controlled waste. This requires removal via registered waste carriers to a landfill site fully licensed to receive and dispose of invasive weeds.



No restrictions left on



Can be more expensive than other solutions



Work can continue immediately after removal

REDUCED LEVEL EXCAVATION and CAPPING

As with the Dig and Dump method, the invasive weeds are accurately excavated, but only down to a depth required by the development or end use of the site. On a development site this will often mean excavation of the invasive weeds to construction formation levels only. The excavated invasive weed contaminated material can either be removed from site as controlled waste or disposed/treated on site. The remaining invasive weed contaminated ground (beneath the excavation depth) will then be capped off with root barrier to prevent re-emergence of the plant from underneath. Where necessary (i.e. if the invasive weed roots transverse the boundary of the site, or where invasive weeds in neighbouring property is in proximity to the site boundary) the root barrier is returned vertically at the site boundary.



Limited restrictions left on site



Can be more expensive than other solutions



Work can continue immediately after removal

CELL-BURIAL

Excavated invasive weeds material is buried on site in a suitable location, so it is encapsulated in root barrier (the cell), with the top of the cell residing 2m below finished ground levels. The depth of 2m is a pre-caution against burrowing animals penetrating the cell and bringing out invasive weed material. If burial of invasive weeds is to take place without the encapsulation or root barrier it must be done so that the buried waste resides below a depth of 5m. Where on-site burial is undertaken, it is strongly advised that to prevent potential disturbance and re-infestation the burial site location is recorded, and any future owners are advised of its position (i.e. on development site the cell-burial locations should be recorded in the O&M manuals for the site manuals for the site).



Normally cheaper than landfill disposal of waste



Requires significant space to allow for deep burial



Land Remediation Tax Relief



Location to be recorded in property records

DIG AND RELOCATION

The invasive weeds are excavated either fully or to a reduced level, and the arising invasive weed waste is relocated to another area of the site, where it can be treated with herbicide. Relocation is normally carried out by loading the waste to dump trucks and transporting over site on a controlled haul route to a designated location. At the relocation point the invasive weed waste is either; Stockpiled, Bunded or resides at ground level via a Cut and Fill procedure. The Cut and Fill procedure has the benefit of not producing a bund or stockpile of spoils on site, and it also provides back fill to the void created by the excavation of the invasive weeds.



Relatively Cost effective



Requires significant space to relocate spoils



Fully removes the knotweed from the critical area



Restricted future use of the relocation area

DIG AND SIFT

Excavated invasive weeds contaminated spoil is passed through a mechanical screener. The sifting process crushes and fragments the plant material, reducing its regenerative power. The sifted invasive weeds materials can then be buried on-site, typically as fill or fill to raise site levels. The key benefit of this procedure is that the spoil which passes through the screener will only contain very small fragments of the plants, which have lowered regenerative power. This allows for the sifted spoil to be re-used on-site as backfill subject to local Environment Agency Officer approval. To further exploit the lowered regenerative power of these fragments the sifted spoil is buried under compaction and covered with a geo-synthetic membrane prior to clean backfill being installed above. Alternatively, the sifted spoil can be re-used on site at finished levels to areas of Public Open Space landscaping; However, there will be a flourish of juvenile growth from the fragmented plant material, and this will need treating with herbicide for 2-3 years. The IWMP should be used to record the position of the low-level burial or re-use area. This will help prevent potential future disturbance of these locations. If these works are part of a site development project the IWMP should then be included in the Operations and Maintenance (O&M) Manuals.



Moderately cost effective



Land Remediation Tax Relief



Restrictions remain on site



Location to be recorded in property records

WATCHING BRIEF (SUPERVISION)

To guard against accidental spread of invasive weed material, a 5m risk/control zone should be created around the visible above ground growth extent of the invasive weed, via erecting temporary fencing. Any vegetation clearance, ground disturbance or invasive weed treatment/removal works within the risk zone should be overseen by a specialist Watching brief (site supervisor) to ensure contamination is not spread from the area. Arising waste from within the RSZ which is found to be contaminated with invasive weeds will be either: disposed of on-site (burial/relocation), removed from site (to landfill) or temporarily stockpiled and then returned to area on completion of works if possible. Root Barriers can be introduced to cap or separate invasive weed contaminated ground from clean or imported clean ground or to protect new services/structures/hard standing. Watching brief (site Supervisor) will ensure that all personnel and machine are properly decontaminated before leaving the fenced control zone area. During and/or post completion of the development works any invasive weed remaining on-site (original position or relocation area) should be treated under a herbicide application programme to control the plant.

ROOT BARRIER CONTROL

Where invasive weeds exist either on-site or off-site and is to remain in-situ its spread can be controlled by the insertion of vertical root barrier. Root barrier can retain underground plant growth and prevent the spread of the plant under the ground. These root barriers can be inserted to protect structures and services and have a life span of at least 50 years. Vertical root barriers can help prevent encroachment of invasive weeds from one property to another, known as encroachment. Allowing encroachment to occur can be deemed as an actionable private nuisance in a civil claims court. Vertical root barriers should always be backed up by a herbicide treatment programme wherever possible, unless excavation has taken place.

HERBICIDE TREATMENT PROGRAMME

Often the most cost-effective treatment and control method is a Herbicide Treatment Programme. This requires methodical and carefully managed visits with correct use of chemical over a sustained period of time (typically 2-5 years). It should be noted that invasive weeds can take many years to control via chemical application. Chemically induced control does not facilitate removal of the plants underground propagules. This will remain often in a dormant but viable state and could re-grow if disturbed. The above is an important note for developers as the Environment Agency recognise the limitations of herbicide control and class the ground which contains treated or dead invasive weeds (even after a specialist has deemed the plants as eradicated under chemical treatment) as controlled waste when removed from site. This is the same classification that is given to viable living plant material and ground contaminated with untreated alive invasive weeds. More often than not, if developing a site, you will need to adopt one of the instant remediation methods involving excavation.



Cost effective



Quick control of the plant



Takes 2-5 years of treatment to stop growth



Severely restricted use of the treatment area



Does not remove the underground plant growth

6.3 APPENDIX 4 – SITE RISKS IF INVASIVE WEEDS ARE NOT REMEDIATED

A strategy for managing and/or removing the invasive weed problem has been proposed for the site. If no remedial works were undertaken, you may be presented with the following complications and associated costs:

INVASIVE WEED IMPACT ON DEVELOPMENT OBJECTIVES

SITE VEGETATION STRIP/CLEARANCE

During vegetation clearance disturbance of the invasive weeds can occur resulting in the translocation of the plant material to other areas of the site or even unintentional illegal removal of controlled waste from the site.

DEMOLITION

During demolition disturbance of the invasive weeds can occur resulting in the translocation of the plant material to other areas of the site or even unintentional illegal removal of controlled waste from the site.

FORMATION LEVEL EXCAVATIONS

Groundwork excavation to reach construction formations levels (if site levels are to remain the same or be reduced) may encounter ground contaminated with invasive weed propagules. This can result in the translocation of the plant material presenting possible but rare structural risk and/or unintentional illegal removal of controlled waste from the site.

BUILDING FOUNDATION EXCAVATIONS

Groundwork excavation for proposed building foundations may encounter ground contaminated with invasive weed propagules. This can result in un-controlled or un-treated invasive weed propagules remaining under building footprints (i.e. in ground underneath suspended Block and Beam floors) presenting a rare but possible structural risk and/or unintentional illegal removal of controlled waste from the site.

MATERIAL MOVEMENTS AND WASTE

The development project may necessitate the removal of material from site and/or the importation of soil material onto the site. It is imperative that all necessary steps are taken to ensure these materials are free of legislated invasive non-native weeds.

IMPACTS ON PROPOSED END USE

STRUCTURAL RISK

Some invasive weed growth has the potential (rare cases) to cause damage to services, structures and hard standing.

PLOT SALEABILITY

Invasive weeds can be a recognised property risk and will be flagged up on building surveys as part of the conveyance process. Where invasive weeds have been identified, it can prevent lending agreements (i.e. on new residential development site this can stop sales of completed units!).

CONTAMINATION

Un-managed invasive weed growth can be disturbed by site maintenance activities such as grounds maintenance. This can quickly translocate material to other areas of the site and spread and worsen an infestation and associated risks.

RE-INFESTATION

Any presence of invasive weeds off-site can present the likely potential for re-infestation of the site across site boundaries.

6.4 APPENDIX 5 – INVASIVE WEEDS AND THE LAW

The growth of Invasive Non-Native Species (INNS) is controlled by acts of law and legislation, don't fall foul and act responsibly:

THE WILDLIFE AND COUNTRYSIDE ACT 1981

The Wildlife and Countryside Act 1981 / Wildlife (Northern Ireland) Order 1985 controls the spread of INNS into wild habitats. Part I (WILDLIFE – Miscellaneous), Section 14, Clause 2. Knowingly allowing INNS to spread too and grow in the wild is a criminal offence, resulting in a fine or even imprisonment. Japanese knotweed Ltd advises our clients and help them ensure they do not contravene the act by following E.A. and PCA Codes of Practice.

ENVIRONMENTAL PROTECTION ACT 1981 AND DUTY OF CARE REGULATIONS 1991

The prologues of INNS plants listed in under Section 14, Schedule 9 Part II of the Wildlife and Countryside Act 1981 are classed as controlled waste if removed from site. Failure to remove these wastes via registered waste carriers and dispose of them at appropriately licensed waste disposal facilities is a criminal offence resulting in a fine or even imprisonment. Using Japanese Knotweed Ltd we will correctly dispose of all Controlled Waste, Contaminated Waste and Hazardous Waste streams.

ENCROACHMENT

If INNS have spread from one property to another it is called encroachment. Once encroachment or imminent encroachment has been established, it can give rise to claims under private nuisance law. As well as the law of private nuisance, if it be proven that INNS have encroached (with a before and after record) the Anti-Social Behaviour, Crime and Policing Act 2014 can be used to serve a community protection notice, via the council or the police, on to the offender. Failing to then take action to control INNS can result in fines.

PRIVATE NUISANCE

Land/property owners must prevent allowing or causing INNS to spread from their land onto neighbouring land, otherwise it could be deemed as an actionable private nuisance. Once encroachment or imminent encroachment is established, damage is assumed, and the affected property owners can claim for private nuisance and be compensated for both the cost of treatment and loss of amenity caused by the INNS infestation (Williams & Waistell v Network Rail Infrastructure Ltd [2018] EWCA Civ 1514). Therefore, although it is not an offence for INNS to be on someone's property, the owner of this land may find that they are liable for damages if it affects their neighbour's ability to use and enjoy their property.

MISREPRESENTATION (SPECIFICALLY JAPANESE KNOTWEED)

If a property is affected by Japanese knotweed specifically the owner will need to declare this when selling. They could be guilty of misrepresentation if they have not correctly responded to the question in the Law Society Property Information TA6 Form (3rd edition) seller's questionnaire regarding knotweed, and they are responsible for all damage up until the point of sale. They remain liable for this historic damage even after the sale of the property. As knotweed is a 'continuing nuisance', liability for any damage caused after the sale of the property attaches itself to the buyer.

PROFESSIONAL NEGLIGENCE (SPECIFICALLY JAPANESE KNOTWEED)

If you are buying or have bought a house and had a survey undertaken by a professional surveyor, the surveyor owes you a professional duty of care in its undertaking. This includes identifying and recording the presence of any Japanese knotweed affecting the property if it was reasonable to have expected the surveyor to do so. The type of survey (i.e. valuation, or home buyers) may be a mitigating factor, according to the depth and breadth of property investigation undertaken. However, the failure to identify knotweed when it was reasonable to have expected them to do so can give rise to claims for damages under professional negligence. Also, unless specifically tasked with surveying a neighbouring property a surveyor may not be negligent for failing to identify knotweed in neighbouring property. Similarly, a solicitor owes you a duty of care when buying a property to ensure that the seller has completed a Law Society Property Information TA6 Form (seller's questionnaire). A solicitor could be liable if he has breached his duty of failing to get a TA6 form completed.

6.5 APPENDIX 6 – EXPERIENCE AND QUALIFICATIONS

SPECIALIST INVASIVE WEEDS CONTRACTOR

Japanese Knotweed Ltd is a private limited company solely dedicated to the trade of Japanese knotweed and Invasive Weeds Survey, Management, Treatment and Removal. Working for:

- Construction and Developers
- Housing Associations
- Local Authorities
- Commercial Companies
- Private Individuals

TRADE AFFILIATION: PROPERTY CARE ASSOCIATION – INVASIVE WEED CONTROL GROUP



Japanese Knotweed Ltd is an affiliated member of the Property Care Association (PCA) Invasive Weed Control Group (IWCG). Why was there a need for the PCA IWCG?

- National bodies such as the Royal Institute of Chartered Surveyors (RICS) and the Council of Mortgage Lenders needed to be able to refer customers to trusted/regulated invasive weed contractors.
- RICS selected PCA as a recognised professional trade association capable of hosting a trade body for the invasive weed industry.
- PCA are an independent association not run by other invasive weed industry contractors.
- PCA IWCG members have undergone a rigorous pre-qualification criterion to become affiliated
- Membership criteria set and established democratically by those who worked with the PCA to establish the group. These are publicly available and can be seen and reviewed by anyone – including clients.
- PCA IWCG members will undertake professional trustworthy site surveys and investigations delivering peace of mind through detailed investigation and correct diagnosis.
- PCA IWCG members provide these services with trained, experienced, vetted, and qualified surveyors and inspectors.
- PCA IWCG members can complete highly specialised remediation treatments, effectively, efficiently, and safely, using skilled experienced site operatives
- PCA IWCG members continue to be the only companies in the invasive weed industry that can provide consumers with access to Financial Conduct Authority (FCA) approved insurance products. These products include insured guarantees, insurance against structural defects caused by a reoccurrence of Japanese knotweed and protection for money paid in advance. These highly cost-effective products continue to be developed to meet the needs of industry.
- The adoption of Codes of Ethics and Codes of Practice that are enforced by the members of the Association by a fully employed Executive.
- The establishment of a published disciplinary process that is used to ensure members who fail to meet standards can be disciplined or removed from the Association.
- An independent audited complaints management and mediation service designed to assist clients.
- The creation of operating standards that exceeds the Governments TrustMark standards, confirmed with annual audits. As such, all PCA contractor members automatically become accredited by the TrustMark scheme.
- PCA is ISO 9001 accredited to ensure published operating standards are maintained.
- PCA provides support services to members that include Health and Safety, Human Resources etc.

6.6 APPENDIX 7 – HEALTH AND SAFETY, INSURANCE, AFFILIATIONS

HEALTH & SAFETY REGULATIONS AND LEGISLATION COMPLIANCE

Japanese Knotweed Ltd is fully compliant with the relevant Health and Safety regulations. As a business, we know our number one asset is our staff and therefore pride ourselves in aiming to have the most appropriately trained employees in the industry.

This starts with an in-depth induction and carries on through their employment/career, with a phased process of taking new employees through our internal training plans until they are at the level we expect for each job role.

The commitment then is to periodically refresh skills and introduce new training and development initiatives; ensuring that the company can be safe in the knowledge, that the staff they send to our customers premises, will have all the necessary internal and external training to supply our high levels of customer service.

To support this, as the staff develop so does the company and therefore the company rewards its employees each time certain levels or training are attained.

Table 1: Japanese Knotweed Ltd Staff training matrix

Occupation	Leadership					First Aid	CITB			Training for Equipment								Specific Workplace Hazards						
	CITB Directors Safety	IOSH	SSSTS	Supervisory Skills	Emergency First Aid	ROLO	Touch Screen Test	CSCS Card	CPCS Card	Agrasive Wheels	Dumper Plant	Excavator Plant	Access Plant	Brush Cutter	CAT & Genny	Harness and Fall Arrest	Work at Height	Lone Working	Driving Awareness	Manual Handling	Banksmen Signaller	Asbestos Awareness		
Director	✓	✓				✓	✓	✓											✓					
Manager		✓	✓		✓	✓	✓	✓										✓	✓			✓		
Supervisor			✓	✓	✓	✓	✓	✓	✓	✓		✓			✓		✓	✓	✓	✓	✓	✓		
Excavation Operative					✓	✓	✓	✓	✓	✓	✓						✓	✓	✓	✓		✓		
	Legend																							
		Not Required																						
		Optional																						

TECHNICAL AND SAFETY QUALIFICATIONS

Japanese knotweed Ltd has been trading since 2010 within the invasive weeds control sector, specialising in the remediation of Japanese knotweed and other invasive non-native plant species. The company structures itself around the two disciplines of remediation it undertakes; (1) herbicide control and (2) excavation.

SURVEYING

The company's surveyors are PCA Certified Surveyors in Japanese knotweed (CSJK) qualified, ensuring they are able to accurately identify knotweed, establish the risks it presents and assess feasible remediation solutions. Once a site survey is undertaken it is returned either to our herbicide sales team or excavation estimating team to provide a report and remediation quotation to the client. These teams study the survey findings and assess these in relation to any change of use proposals for the site to offer the optimum remedial method(s) to the client.

HERBICIDE OPERATIONS

The companies Area Technicians undertake herbicide application works and are 'NPTC PA1/PA6/PA6AW', 'PCA Qualified Technician in Japanese knotweed', Brushcutter and Lanyard and Harness trained as a minimum.

Herbicide works are undertaken to ensure maximum damage to the target plant while avoiding damage to any non-target plants. Folia Spraying, Stem Injection and Leaf wiping are all methods of treatment undertaken to treat invasive plants.

The company employs a BASIS registered advisor, and the company is looking to become BASIS and Amenity Assured accredited in 2020.

EXCAVATION OPERATIONS

The company's excavation operatives are CSCS, CPCS, SSSTS, CAT & GENNY, NPTC PA1/PA6/PA6AW, and 'PCA Qualified Technician in Japanese knotweed', certified as a minimum. They are also Asbestos Awareness trained. Excavation works are undertaken using expert identification of the target plant material above and below ground.

This ensures that only the target plant is excavated and is fully excavated to remove all plant and root, rhizome, tuber and corm (as applicable) material in accordance with the planned method of works. Remedial methods are used in accordance to their suitability in relation to the site and current and proposed use for the site.

Excavation remediation methodologies include; full or part excavation, with waste either disposed off-site at landfill (as controlled waste) or sustainably on site as either a burial or relocation.

OUR INSURANCE

EMPLOYERS LIABILITY INSURANCE

Japanese Knotweed Ltd holds Employers Liability Insurance
Limit of Indemnity: £10,000,000

PUBLIC AND PRODUCT LIABILITY INSURANCE

Japanese Knotweed Ltd holds Public and Product Liability Insurance
Limit of Indemnity: £10,000,000

PROFESSIONAL INDEMNITY INSURANCE

Japanese Knotweed Ltd holds Professional Indemnity Insurance, which has been checked to ensure it covers advice given on Invasive Weeds.
Limit of Indemnity: £1,000,000

HIRE IN PLANT

Japanese Knotweed Ltd holds Hired-In Plant Liability Insurance.
Limit of Indemnity: £150,000

OUR AFFILIATIONS



PROPERTY CARE ASSOCIATION (PCA) INVASIVE WEED CONTROL GROUP

This provides consumers with a means of identifying specialist vetted contractors and consultants who can undertake invasive weed control services. Affiliation enables contractors to provide Insurance Backed Guarantees. Accreditation to this scheme demonstrates our professionalism in the industry of invasive weed management, treatment and removal.



TRUSTMARK

TrustMark is the only Government endorsed scheme for trades in and around the home. They accredit firms after thorough vetting and on-site inspections to ensure the firm is raising industry standards. This accreditation gives customers reassurance of quality and protection from rogue traders.



BUILDER'S PROFILE

Used by companies such as Balfour Beatty and Wates Group, Builder's Profile is the open-access Common Database service providing compliance and PQQ (pre-qualification questionnaire) information to the construction industry. For main contractors and clients, it provides all the information, documents and tools required to manage a supply chain no matter how large or small.



SAFECONTRACTOR

The SafeContractor scheme provides a health and safety audit service for contractors who want to reassure their clients that health and safety is being handled correctly and sufficiently on their sites. Accreditation to this scheme demonstrates our proficiency to Public, Company, Employer and Employee Health and Safety.



CHAS (THE CONTRACTORS HEALTH AND SAFETY ASSESSMENT SCHEME)

Japanese Knotweed Ltd are registered contractors to the CHAS Government backed and SSIP Health and Safety scheme. Accreditation to this scheme demonstrates our proficiency to Public, Company, Employer and Employee Health and Safety.



CONSTRUCTIONLINE

As 'Gold Members' we can demonstrate a 'high professional standard' to our clients. We are verified against an extended PQQ (covering Environmental Management, Equalities and Diversity, and Quality Management, and ensuring legislative compliance), and possess a valid SSIP certificate.



RISQS (RAILWAY INDUSTRY SUPPLIER QUALIFICATION SCHEME)

RISQS qualifies suppliers for all products and services that are procured by the industry. RISQS supports Network Rail, LUL/Transport for London, passenger, light rail and freight train operators, rolling stock organisations, main infrastructure contractors and other rail products and service providers in the management of supply chain risk. RISQS is an independent, third party qualification assessment of a supplier's capability to supply products and services.



THE AMENITY STANDARD

Organisations that promote the Amenity Standard logo show that they have a "licence to practice" and you can have confidence that work undertaken is to best practice standards and fully meet the legal requirements.



SUPPLY CHAIN SUSTAINABILITY SCHOOL

The School is an award-winning industry-wide collaboration, led by their Partners and Members whose Vision for the School is to be "A world-class collaboration to enable a sustainable built environment".

JAPANESE KNOTWEED™ TO BE IGNORED

SURVEY

TREATMENT

REMOVAL

GUARANTEE

Japanese Knotweed Ltd is the UK's trusted invasive weed removal company for providing surveys, treatment and removal services for Japanese knotweed and other invasive weeds.

We are a private limited company, working throughout England, Wales, and Scotland for all types of customers, including construction, developers, facilities management, housing associations, local authorities, property maintenance and private property owners.



DO YOU have Japanese knotweed on your site or property?

ARE YOU looking for tailor-made, efficient knotweed remediation options?

CONTACT US **0333 241 4413**
contact@knotweed.co.uk

“ Very professional and they dealt with our Japanese knotweed in a timely, practical and affordable manner.
- Christopher Hill, Taylor Wimpey West London Ltd ”



www.japaneseknotweed.co.uk

6.7 APPENDIX 8 - REFERENCES

Environment Agency 'Treatment and disposal of invasive non-native plants: RPS 178' (2019)

Property Care Association's 'Code of Practice for the Management of Japanese Knotweed (2018)'

RICS (2012) Japanese knotweed and residential property. RICS Information Paper IP 27/2012. RICS.

Home Office (2014) Reform of anti-social behaviour powers Japanese knotweed and other invasive non-native plants. Home Office.

Environment Agency and Cornwall County Council (2001) Japanese knotweed. Guidance for householders and landowners. Cornwall County Council.

Child, L.E. and Wade, P.M. (2000) The Japanese Knotweed Manual. Packard Publishing Limited, Chichester. ISBN 1 85341 127 2.

Welsh Development Agency (1998) The control of Japanese knotweed in construction and landscape contracts: Model specification. Former Welsh Development Agency, now part of the Welsh Assembly Government.