

Project: Hopwood Fmr.
Chapel Site

Client: Hopwood Hall
College

Date: 27 August 2025

Job Ref: BW511

Introduction:

We have been instructed by Ruth Sienkiewicz (Seven Architecture) on behalf of Hopwood Hall to produce a management plan for the treatment of invasive species such as Himalayan Balsam, Japanese knotweed and horsetail growth to a development at Former Chapel at Hopwood Hall College, Rochdale Road, Middleton, Greater Manchester, M24 6XH. The Chapel Building is a historically protected site monument by Historic England ([Reference: IOE01/00608/29](#)) and is under development for restoration.

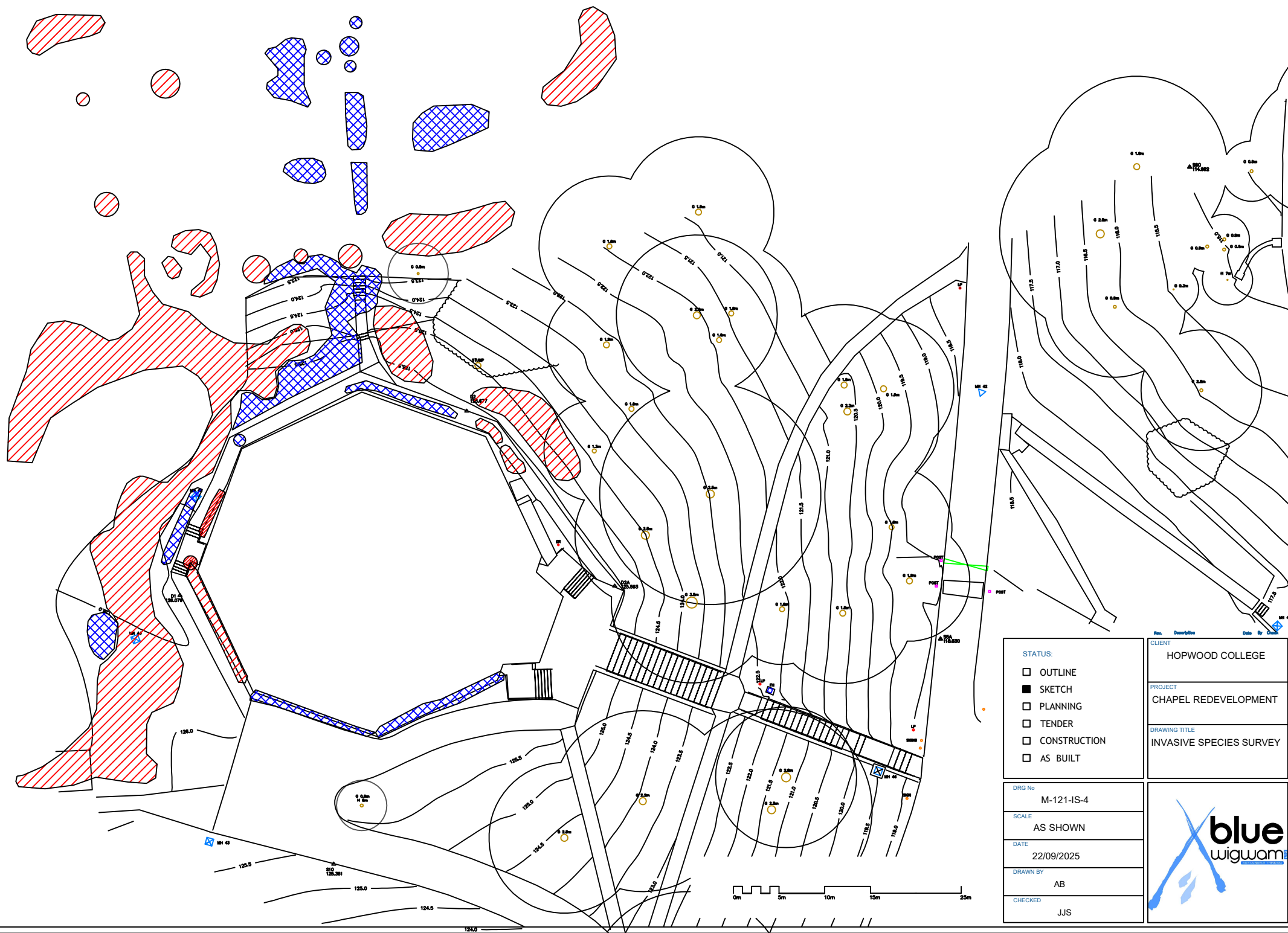
Following an onsite inspection on Tuesday 09 September 2025, we have identified a severe and extreme growth of Himalayan Balsam, Japanese Knotweed and horsetail. Due to the severe and extreme level of infestation, we believe the site is beyond mechanical control and removal from site on the basis of cost and landfill availability for Controlled Waste and requires chemical control and localised mechanical excavations, stockpiling on site, with subsequent chemical control to the stockpile.

We recommend a first chemical control spray in September, combined with a wetting agent to the horsetail that cannot be removed due to it's proximity to the listed building. The Himalayan balsam and Japanese knotweed can be excavated to the recommended depths and offsets, stockpiled on site and then subject to chemical control from May through to next September 2026, with a repeat of the chemical control in the 2027 and 2028 seasons as and if required.

This report outlines the impacts of invasive species and maps the extent of the infestation with recommendations.

Impacts:

Due to the projectile seed dispersal properties of Himalayan Balsam, the effected area is likely to be up to an 8 to 10m offset over and above the area of growth of the plant recording during the 2025 survey. The Japanese knotweed is likely to have a similar area offset from the edge of the area in which it is growing due to it's prolific root growth properties, which will include a minimum 2m excavation depth, depending on the extent of establishment. This will be accurately assessed on site during the excavation works.



STATUS: ☐ OUTLINE ☒ SKETCH ☐ PLANNING ☐ TENDER ☐ CONSTRUCTION ☐ AS BUILT	CLIENT HOPWOOD COLLEGE PROJECT CHAPEL REDEVELOPMENT DRAWING TITLE INVASIVE SPECIES SURVEY
DRG No M-121-IS-4 SCALE AS SHOWN DATE 22/09/2025 DRAWN BY AB CHECKED JJS	

Map Key:

- Red hatched areas marked show the extent of the Himalayan balsam.
- Blue hatched areas mark the spread of Horsetail.

Treatment Areas on Site:

Following a site survey, we have identified the following areas require immediate treatment.

The density of vegetation to the west made surveying in parts of the area shown on the plan impossible. We recommend undertaking the initial excavations to remove the Himalayan balsam infestation and it's seed projection offsets and then we can return to site and survey these areas more accurately. There is also elements of rhododendron and cotoneaster in this area. It is imperative that the more destructive and invasive Himalayan balsam and Japanese knotweed are remediated to the on-site stockpile first and then we will be able to complete the survey of these two more benign species subsequent to these operations.

There is an additional, extensive area of Himalayan balsam infestation to the west of the area covered by the provided site plan above. This should also be included in the on-site stock pile and chemical treatment strategy.

Managing Invasive Species:

To reduce costs and additional effort it is important to prevent Himalayan Balsam, Japanese Knotweed and horsetail from spreading around a site contaminating unaffected areas. This is best achieved by:

- Production of a detailed invasive species management plan.
- Ensuring that all relevant staff are briefed and aware of Himalayan Balsam, Japanese Knotweed and horsetail issues, how to identify it, the management plan and their responsibilities.

For areas of the site that do not have Himalayan Balsam, Japanese Knotweed and horsetail present, efforts should be put in place to prevent the species establishment. The most common ways a site can become infected are:

- Importation of infected soil.
- Contamination on vehicles and equipment.
- Colonisation from upstream or areas adjacent to a watercourse.
- Illegal dumping of contaminated soil.

For all sites, the following steps may be useful to ensure success and prevent spread:

1. Identify how much Himalayan Balsam, Japanese Knotweed and horsetail there is within and adjacent to the site and map it.

2. Ensure that everyone working on the site is aware of and adheres to good site hygiene such as:

- Marking out of contaminated areas.
- Ensuring that vehicles and plant do not work within contaminated areas.
- Treating contaminated soils carefully.
- Limit use of plant and tracked machinery at infested sites.
- Cleaning machinery or equipment that could be contaminated.

3. Attempt to establish the length of time Himalayan Balsam, Japanese Knotweed and Maires Tail has been on site. Long- standing infestations over many years will have more impactful rhizome material.

4. Ensure all staff are aware of the Management Plan and that all staff working in the area are aware of its location and the impacts of Himalayan Balsam, Japanese Knotweed and horsetail.

5. Follow-up control work will be necessary to ensure that any regrowth is not missed.

Due to the deep rooting nature and extreme waxy cuticle characteristics of Himalayan Balsam, Japanese Knotweed and horsetail, no treatment strategy can be guaranteed 100% effective.

Encouraging Native Species:

Himalayan Balsam, Japanese Knotweed and Horsetail are known to reduce native plant diversity with some figures estimated in excess of 30% over effected areas. This effect can be detected at both localised and wider scales.

It is possible to successfully control or eradicate Himalayan Balsam, Japanese Knotweed and horsetail from infested sites, however, while removal these invasive species increases plant diversity, it is recommended that efforts are made to enhance native species as part of an enhanced biodiversity control programme.

Invasive Species on Adjacent Sites:

It is particularly important to consider Himalayan Balsam, Japanese Knotweed and horsetail in the wider environment around a particular site. If this species is growing in an adjacent site, or upstream of a site on a riverbank, then no matter how good on-site control is, re-colonisation is likely to occur. An understanding of

the wider area is necessary to determine if eradication or control efforts are likely to be successful.

In some situations, eradication of all Himalayan Balsam, Japanese Knotweed and horsetail on site might not be possible due to the likelihood of re-colonisation. Effective eradication may require collaboration with neighbouring landowners to tackle these invasive species on a wider scale.

Due to the major level of growth and spread of the infestation, collaboration with adjacent sites is recommended to keep infestation to a minimum.

Control Options:

Mechanical/physical control

Due to the development programme constraints, we are recommending mechanical excavation of invasive plants within the zone of influence of the development proposals and service connections. These will be excavated to the offsets and depths recommended within the Method Statement and the arisings moved to a chemical treatment stockpile, the location of which will be agreed jointly by ourselves, the Main Contractor and Client/Clients Agent.

The method statement for the excavations and stockpiling is included below.

Chemical control

Glyphoste with a wetting agent blended into it, or Triclophyr is effective at eradicating all of the invasive species on this site with repeated applications over the growing season. Re-application in the same season should be planned to treat new plants that typically grow to replace dead plants.

We are recommending a Triclophyr spray treatment in late September with a monitoring inspection in October with a possible final spray for maximum eradication and control. We recommend a check on April/ May next year depending on development program. Ideally this should be after several days of dry weather. We recommend checking product details for timing of treatment and forecasted rainfall.

Triclophyr is a herbicide that acts via the auxin system in plants. Triclophyr is seriously irritating to skin and eyes and may induce cardiovascular impairment if

ingested. The Hazardous Substances Data Bank (HSDB) toxicology database that focuses on the toxicology of potentially hazardous chemicals describes Triclophyr as an Irritant, a Health Hazard and a Environmental Hazard. GHS Hazard statements state Triclophyr may be very toxic to aquatic life with long lasting effects.

Please refer to Health and Safety Section for more information.

Summary of Actions Required for Effective Management:

1. Confirm Himalayan Balsam, Japanese Knotweed and horsetail identification.
2. Carry out a survey and produce a distribution map indicating the location across the site. It is important to include rivers/streams in this process.
3. Consider surrounding properties and potential for reintroduction. Talk to adjacent landowners and make them aware of the issues and what you plan to do, and if possible, work in partnership. Identify potential contamination routes to your site and mitigate against these. You may be unable to prevent reintroduction without the help of other landowners.
4. Agree if the programme should aim for continuous control on a yearly basis or eradication from the site. Base your decision on an understanding of the biology, size of infestation, potential for reintroduction and other relevant sensitivities in the area.
5. Produce appropriate method statements and risk assessments for the treatment programme.
6. Identify if sufficient land resources are/will be available to complete the work within the planned timescale if on site translocation/receptor areas are to be utilised.
7. Ensure disposal options for the plant material are in place prior to work commencing.
8. Develop and produce a site-specific control/management plan.
9. Monitor for regrowth and/or reintroduction during site visits. Map any regrowth incidents and modify the roiling management plan to provide appropriate control and eradication methodology.

Preparatory Works and Routes to Infestation:

Our initial visual survey was undertaken on the 09 September 2025, where we assessed the extent of the Himalayan Balsam, Japanese Knotweed and horsetail growth. There is no watercourse in the proximity of the infestation which would be known to further increase the risk of additional on site and off site infestation. The Himalayan balsam infestation appears to be spreading into the development area from the west.

We are proposing to undertake a Triclopyr spray treatment to all invasive species not included within the initial excavations and stockpiling activity to enable development. This will be followed up with a monitoring inspection and a second monitoring spray from April/ May 2026 through to September, depending on the emergence of next seasons growth.

Timing is very important to the efficient operation of the control programme and heavily infested sites need to be treated at least twice a year for the first two control seasons due to germination of seed.

Special care and attention are given to the environment and other plant life in the area. Reference to Health and safety information and relevant warnings and guidelines about substances and methods used are required.

Health and Safety:

[Warning] Herbicide Spray: Triclopyr

IMMEDIATE FIRST AID:

Get medical aid. Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water.

Do not induce vomiting. If vomiting occurs, lean patient forward or place on the left side of (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention.

BASIC TREATMENT: (Get medical aid)

Eyes: Flush immediately with plenty of water.

Skin: Wash thoroughly with soap and water. Remove contaminated clothing and shoes.

Inhalation: Remove to fresh air.

Establish a patient airway (oropharyngeal or nasopharyngeal airway, if needed). Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilation if needed. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for pulmonary oedema and treat if necessary. Monitor for shock and treat if necessary. Anticipate seizures and treat if necessary.

For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with 0.9% saline (NS) during transport. Do not use emetics.

For ingestion, rinse mouth and administer 5mL/kg up to 200mL of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool. Cover skin burns with dry sterile dressing after decontamination.

Ingestions of these herbicides are likely to be followed by vomiting and diarrhoea because of the irritant properties of most of the toxicants. Management depends on: (a) the best estimate of quantity originally ingested, (b) the time elapsed since ingestion and (c) the clinical status of the subject.

Health and Safety information.

Health and Safety should be considered when using Triclopyr Spray. Chemical dangers are present when using Triclopyr decomposes on heating and under the influence of UV light. This produces toxic and corrosive fumes including hydrogen chloride and nitrogen dioxide. Symptoms of inhalation exposure may include coughing. Skin exposure may include redness. Triclopyr is not classifiable as to human carcinogenicity as of April 2006 by USEPA Office of Pesticide Programs (HSDB).

Triclopyr can be absorbed into the body by inhalation of its aerosol through the skin and by ingestion. Triclopyr is not combustible. In addition, Triclopyr may be toxic to liver in animal studies [HSDB]. Triclopyr should be safely stored in the dark and contained tightly in a closed, dry and well-ventilated place.

IDENTIFICATION AND USE:

Triclopyr is a solid. It is used as an herbicide that acts via the auxin system in plants.

HUMAN EXPOSURE AND TOXICITY:

Triclopyr is irritating to skin and eyes. One case report describes patient who ingested Triclopyr and developed metabolic acidosis and coma with cardiovascular impairment.

H302 (100%): Harmful if swallowed [Warning Acute toxicity, oral]

H317 (59.22%): May cause an allergic skin reaction [Warning Sensitization, Skin]

H319 (60.19%): Causes serious eye irritation [Warning Serious eye damage/ eye irritation]

H373 (54.37%): May causes damage to organs through prolonged or repeated exposure [Warning Specific target organ toxicity, repeated exposure]

H400 (54.37%): Very toxic to aquatic life [Warning Hazardous to the aquatic environment, acute hazard]

H410 (54.37%): Very toxic to aquatic life with long lasting effects [Warning Hazardous to the aquatic environment, long-term hazard].

(Source: <https://pubchem.ncbi.nlm.nih.gov/source/hsdb/7060#section=Human-Health-Effects>)

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Eye/ face protection must be used. Safety glasses with side shields conforming to relevant regulation, tested and approved under the appropriate government standards. Skin protection must be used. Protective gloves must be used at all times in the vicinity and use of Triclopyr. Protective overalls and coveralls should be used when spraying Triclopyr.

Personal precautions, protective equipment and emergency procedures:

1. Use Personal Protective Equipment
2. Avoid dust formation
3. Avoid breathing vapours, mist or gas.
4. Ensure adequate ventilation
5. Avoid breathing dust

Environmental precautions: Do not let product enter drains.

Methods and materials for containment and cleaning up:

1. Pick up and arrange disposal without creating dust.
2. Sweep up and shovel.
3. Keep in suitable, closed containers for disposal.

ACCIDENTAL RELEASE MEASURES

In the event of Spillage Disposal, personal protective filter respirator with adaption to airborne concentration of substance should be used. Sweep the spillage into covered containers and wash away with plenty of water (ILO-WHO Internal Chemical Safety CARD ICSC, see source hyperlink above).

Conclusions:

Due to the requirement for immediate excavation works to enable development and service connections, this report will be issued in two stages. The initial stage will enable the excavation works and once complete, this will open up the western area of the site to enable the remaining invasive survey activities to be completed. These will also include for any rhododendron and cotoneaster evident in these areas. These two species have not currently been prioritised as they are not as aggressive as the Himalayan balsam, Japanese knotweed and horsetail and their control methods are not as seasonally demanding.

The two phase process for control of the invasive species is as follows:

Phase 1

1. The Main Contractor, Client or Client's Agent will provide us with a plan of the overall development proposals and a date related development programme so that we can identify initial areas for excavation to be stockpiled on site.
2. All parties agree the on site stockpile location.
3. We will issue a Method Statement to cover the excavation and stockpiling activities.
4. We will identify which infested areas are to remain unexcavated and chemically treated in situ. The survey plan will be revised and updated to identify this.
5. The main contractor will construct the receptor stockpile site in accordance with the method statement.
6. The stockpile receptor area will be approved by orselves by either on site inspection, or by means of photographic evidence.
7. The Main Contractor will undertake the excavation works to the requirements of the Method Statement.

Phase 2

1. Upon completion of the excavations, the survey activities to the west of the site will be completed and the Management Plan updated and reissued to cover the ongoing chemical control to both the receptor stockpile and the invasive species retained in situ that are outside of the zone of influence of the development.
2. Chemical control activities will be implemented in accordance with the revised Management Plan.

Report Checked by:

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Last updated: 22.09.25