PROPOSED NEW COMMERCIAL BUILDING
INVASIVE SPECIES MANAGEMENT PLAN
CORNWALL STREET



Job Number: IPM 19 1063
Date of Survey: 18th May 2020
Client: Fozia Ahmed

INCREASING LAND VALUE

LK GROUP

DOCUMENT VERIFICATION

Site Address	Land off Junction of Cornwall Street and Lawton Street Manchester M11 2EN		
Job Title	Land off Cornwall Street		
Document Title	Invasive Species Management Plan		
Job Number	IPM 19 1063	**Document Ref.**	Management Plan
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Prepared By	Lee Worrall	**Signature**	
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1 OVERVIEW

1.1 Project Description:

The Invasive Plant Company (IPC) is a trading name of LK Pollution Response Limited (LKPR). The Invasive Plant Company was asked to provide a quote, management plan and method statement for Invasive Species remediation at Cornwall Street, Manchester.

We understand that the proposed development consists of an erection of a commercial building to accommodate 1 no. MOT station unit with first floor office and associated car parking and landscaping.

Japanese Knotweed and Cotoneaster and Japanese Knotweed has been found to be present on the site and is listed on the Schedule 9 Part II of the Wildlife and Countryside Act as being an invasive non-native species.

This section describes how the client may deal with the species prior to site clearance or construction commencing.

1.2 Cotoneaster and Japanese Knotweed:

Cotoneaster and Japanese Knotweed is a woody, perennial, deciduous or semi-evergreen, procumbent shrub with horizontally spreading branches. It is native to parts of China, and has been introduced widely to Europe, North America, Australasia and other parts of the world as an attractive garden plant with bright red berries which often persist into winter.

Once Cotoneaster and Japanese Knotweed is established, it can dominate areas – outcompeting native flora and creating dense thickets. When plants spread into the wild, they are particularly problematic on limestone cliffs, pavements and screes, through outcompeting rare native plant species. They can also form an extensive root system which is difficult to remove.

1.3 Japanese Knotweed:

Japanese knotweed is a fast-growing and strong clump-forming perennial, with tall, dense annual stems. Stem growth is renewed each year from the stout, deeply-penetrating rhizomes (creeping underground stems).

Leaves are heart or shovel-shaped and up to 14cm (5½in) in length and borne alternately (in a zig zag pattern) along the stems. The stems die back to ground level in winter, but the dry canes remain for several months or longer. The creamy-white flower tassels produced in late summer and early autumn reach up to 15cm (6in).

2.0 Sequence of operations

The sequence of operations shall be as follows:

- The demarcation and isolation of all contaminated areas to prevent any spread from other contractors
- Controlled excavation of Cotoneaster and Japanese Knotweed above ground growth

- Controlled excavation of Cotoneaster and Japanese Knotweed rhizomes
- Controlled excavation of Japanese Knotweed
- Removal off site of Cotoneaster and Japanese Knotweed and Japanese Knotweed rhizomes and above ground growth
- Monitoring and spraying program

3.0 Working area

The working area shall allow sufficient space for operatives to work safely adjacent to the site plant (i.e. 360º hydraulic excavator & 8 wheel wagon) and will include:

- The areas contaminated with Cotoneaster and Japanese Knotweed rhizomes
- The holding area for the wagons
- The entrance and exit roads for the wagons

3.1 Controlled excavation

Before any ground disturbance is carried out a Permit to Dig form will be filled out (see Appendix 1).

The areas subjected to the remediation program shall be excavated with a riddling bucket on a 13 tonne 360º excavator. The detailed method proposed is as follows:

- All Cotoneaster and Japanese Knotweed plants shall demarcated before any work takes place on site to prevent any spread from existing contaminated areas to 'clean' areas from plant and operatives on site.

- The Cotoneaster and Japanese Knotweed vegetation will be cut back at ground level and then be loaded directly into a 40 yard skip, great care will be taken to ensure no cross contamination takes place.

- For the roots/rhizome, where practical, we will excavate from outside the contaminated area to the extent of the Cotoneaster and Japanese Knotweed roots/rhizomes. This reduces the likelihood of getting contaminated material on the tracks and spreading around site. Where it is not possible the tracks will be cleaned in situ before the excavator moves elsewhere on site.

- The excavated soil materials are then loaded directly onto a temporary membraned holding area, great care will be taken to ensure no cross contamination takes place.

- Once all soil material has been excavated, the stockpiled material will be transferred to 20 tonne tipping wagon and removed to a landfill waste transfer station suitable and licenced for Cotoneaster and Japanese Knotweed. The 20 tonne wagon shall be prevented from allowing its wheels to drive on any contaminated soil. This prevents spread of contaminated material on site.

- When an area or section appears to be clean, a careful search of the surface shall be carried out by experienced personnel. If no Cotoneaster and Japanese Knotweed rhizomes are found a further 100mm layer shall be excavated to remove any remaining seedbed.

- If more Cotoneaster and Japanese Knotweed material is found at any stage, the whole process is repeated.

- When moving the Cotoneaster and Japanese Knotweed material from the excavator to the stockpile and wagon, great care will be taken to ensure no cross contamination takes place. This will involve filling each instrument to at least 20cm of the top and through thorough checks of the tyres and tracks.

- The edges of the excavations shall be battered back to a safe angle (approximately 30^{o}), to ensure safe working conditions for the site operatives. Where excavation nears any existing structure, i.e. wall or fence, excavation will cease 30cm from the base of the structure and will not exceed a 30^{o} angle from that point. If Cotoneaster and Japanese Knotweed rhizomes still proceed under these structures a semi-permeable root-barrier geotextile will be installed to restrict growth back onto site from neighbouring properties.

Information related to the excavation of the contaminated area shall be recorded using the Dig Control Form (see Appendix 2). All occurrences on site will be recorded in the Foreman's Diary of Works Form (see Appendix 3).

3.2 Monitoring and spraying program

As a precautionary measure, it is recommended that a monitoring program be implemented in case of any small re-growth of Cotoneaster and Japanese Knotweed. It is expected that there will be no re-growth. If there is however, a monitoring and spraying program will notice and eradicate it before it can become re-established. The monitoring program, which includes spraying as required, is recommended to last for a three to four-year period.

The recommended monitoring program is as follows:

- Year 1 – at least 2 visits
- Year 2 – at least 2 visits
- Year 3 – at least 2 visits
- Year 4 – at least 2 visits

The application of herbicide shall be undertaken by knapsack sprayers, using telescopic or extended lances. Pressure limitation valves will be set at 1 Bar and coarse droplet nozzle shall be used to reduce drift to a minimum. Glyphosate bioactive will be used in all circumstances within this site.

Information related to the monitoring and spraying programme shall be recorded using the Site Monitoring and Spraying Log (see Appendix 4).

Any herbicide treatments or inspections will be carried out during the growing season only.

4.0 Operational risk management

In order to prevent cross-contamination, tracks/wheels and compartments of machines in addition to any tools used on the site shall be inspected and cleaned as required before moving from the contaminated areas.

IPC requires that information relating to the physical and chemical nature of the ground containing the Cotoneaster and Japanese Knotweed areas are provided. The information will assist IPC in its Health & Safety plan for the site and will also ensure that no preferential pathways will be created for contaminants that may be present in the ground.

All operatives shall wear appropriate PPE.

5.0 Additional services

In addition to the services described, The Invasive Plant Company shall provide the resources and management to:

- Manage and control the Cotoneaster and Japanese Knotweed on site to enable other trades and construction work to undertake their activities with the least hindrance.

- To provide documentary and photographic evidence to be able to demonstrate to any legislative or other interested bodies that due care has been taken to address all issues relating to the on-site Cotoneaster and Japanese Knotweed problem.

6.0 Health & Safety Management Proposals

All staff shall wear the appropriate safety clothing, including protective headgear, safety boots, and high-visibility jackets/vests.

The work shall be carried out in conformity with the Requirements of the Health and Safety Executive Guidance Notes:

- No. GS6 ‘Avoidance of Danger from Overhead Electrical Cables’;
- No. HS(G) 47 ‘Avoiding Danger from Underground Services’.

Spraying shall be undertaken by operatives qualified to recognised national standards and shall follow all training guidelines and label recommendations and DEFRA off-label recommendations, where applicable. Spraying activities shall comply with the relevant legislation including:

- The *Control of Pollution Act 1974*;
- The *Control of Pesticides Regulations 1986*;
- The *Code of Practice for the Use of Approved Pesticides in Amenity Areas 1988*;
- The *Control of Substances Hazardous to Health Regulations (COSHH) 2004*;
- The *Control of Pesticides Regulations under the Food and Environment Protection Act (FEPA) 1995*;
- And, Pesticides: Codes of Practices 1990.

7.0 OPERATIVES CONFIRMATION

All operatives will sign and date below which states that they have read and understood this Method statement and associated Risk Assessments;

Name	Signature	Date
.....	……	……..
.....	……	……..
.....	……	……..
.....	……	……..
.....	……	……..
.....	……	……..
.....	……	……..
.....	……	……..

8.0 APPENDICES

Appendix 1 – Permit to Dig Form

The Invasive Plant Company
29 Eton Business Park
Eton Hill Road
Radcliffe, M26 2ZS

Tel: 0161 763 7200
Fax: 0161 763 7318

Project:……..**Date:**……**Time:**……

Location:……

Section 1 (to be completed by IPC Site supervisor) • Have current drawings showing location, type and status (i.e. live or dead) of all under-ground services been provided ……....Yes/No • Has a visual inspection of the dig area been carried out ……..Yes/No • Has a Cable Locating Device (CAT) been used to sweep the area to establish under-ground services ……..Yes/No • Are all operatives conversant with safe digging practices? ……..Yes/No • Are appropriate tools available ……..Yes/No Any other precautions (if any)
I hereby declare that the above precautions will be put into effect prior to the work commencing **Name:** ……**Sign**:……**Date**:……**Time:**……..
Section 2 Control I am satisfied that the precautions identified above are satisfactory for the works to be undertaken Digging may proceed ……Yes/No Further action required: (Specify) **Name:** ……**Sign**:……**Date**:……**Time:**……..
Section 3 Completion I am satisfied that the work area has been left in a safe condition and therefore this permit is hereby cancelled **Name:** ……**Sign**:……**Date**:……**Time:**……..

APPENDIX 2 – DIG CONTROL FORM

The Invasive Plant Company
29 Eton Business Park
Eton Hill Road
Radcliffe, M26 2ZS

Tel: 0161 763 7200
Fax: 0161 763 7318

Site Name: **Job Number:**

Area/ Section	(A) Dig to visual extent of JK & CA search	(B) Dig a further 100mm layer & search	(C) Dig & loosen a further 200-300 & search	Arising's fate	Initials	Date
…						
…						
…						
…						
…						

I confirm that the works to the above site have been carried out according to the method statement for Cotoneaster and Japanese Knotweed treatment, submitted for works on this site.

Supervisor for IPC	Client representative (if applicable)
Name:……..	Company:……
Date:……	Name:……..
Signed:……	Date:……
	Signed:……

Appendix 3 – Forman's Diary of Works

The Invasive Plant Company
29 Eton Business Park
Eton Hill Road
Radcliffe, M26 2ZS

Tel: 0161 763 7200
Fax: 0161 763 7318

Job No:	**Address:**	**Client:**
Date started:	**Foreman:**	

Date	Time Started	Persons Present	Notes	Time Finished

Appendix 4 – Monitoring Program Form



The Invasive Plant Company
29 Eton Business Park
Eton Hill Road
Radcliffe, M26 2ZS

Tel: 0161 763 7200
Fax: 0161 763 7318

Site:	**Client:**	**Date:**
Job No:	**Visit No:**	**Time on site:**
Operatives Names:		**Time off site:**

Area No	**Est % or m^2 live**	**Details**	**Photo No**

Herbicide used	**Rate ml/litre**	**No of (L) mix used**	**Total Chem**	**Wind**	**Weather**

Operatives Signature:	**Client representative** (when applicable)
	Client signature (when applicable)



Extract from: Google Earth

0 20

SCALE (Metres)

KEY

- Site Boundary
- Japanese Knotweed
- Cotoneaster

Sampling Locations and features annotated by LK Ltd are approximate and are based upon observed measurements unless otherwise stated. Do not scale from this drawing and work from marked dimensions only. All dimensions and features should be confirmed on site by the Contractor. Where this drawing includes information provided to LK Ltd by others, LK Ltd gives no warranty, representation or assurance as to the accuracy of such information.

InvasivePlantCompany
japanese knotweed specialists

Client: Fozia Ahmed

Site: Cornwall Street, Openshaw

Title: Invasive Species Survey

Job No.:	Scale (See Scale Bar):	Figure:	Revision:
IPM 19 1063	1:500 @ A3	1	

Drawn By:	Checked By:	Drawn:
CRL	LW	May 2020

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