A303 Amesbury to Berwick Down

Applicant's provision of technical reports supporting the Environmental Information Review

Invasive Non-Native Species Report and Management Plan (2019)

Document reference: Redetermination 2.2

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

February 2022

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1 Introduction

1.1.1 An Invasive Non-Native Species (INNS) assessment was required to determine the presence of any INNS plants within the A303 Amesbury to Berwick Down Scheme (hereafter referred to as 'the Scheme'), and to satisfy the requirements outlined within PW-BIO1, MW-BIO5 and MW-BIO6 of the Outline Environmental Management Plan (OEMP) (Highways England 2019).

1.1.2 Precautionary Method of Works (PMoW) for INNS will be produced, this PMoW will outline suitable working methods to avoid impacts from INNS within proximity to working areas, to ensure legal compliance.

1.1.3 The purpose of this INNS assessment was to:

- Carry out a walkover of all land within the Zone of Influence of the Scheme, in order to identify any INNS listed on Schedule 9 Part II of the Wildlife and Countryside Act 1981 (as amended) and, or plants listed under Invasive Alien Species of Union concern (as per EU IAS Regulation 1143/2014) that might be affected by the construction of the Scheme; and,
- Produce a report detailing findings of a site assessment and providing recommendations for the management of any INNS within the preliminary works of the Scheme.

2 Key Legislation

2.1.1 INNS, are species that do not occur naturally in Great Britain, but have been introduced and have subsequently become established. INNS can have economic impacts on a project due to the associated cost of control and removal, as well as the potential for causing delays to the project. They can also contribute to loss of biodiversity within semi-natural habitats, and those growing in the riparian zone can also exacerbate flooding.

2.1.2 Due to the potential negative effects of INNS, legislation has been passed that aims to prevent the spread of such species into the wild. Invasive non-native plant species of particular concern are listed under Schedule 9 Part 2 of the Wildlife and Countryside Act 1981 (as amended). Essentially, this legislation makes it an offence to cause Schedule 9 plant species to grow in the wild and, if transported off-site, there is a duty of care with regard to the disposal of any part of the plant that may facilitate establishment in the wild and cause environmental harm, including, for example, whole plants, seeds, rhizomes, bulbs, corms and cuttings.

2.1.3 If charged with committing an offence, it is a defence against prosecution to prove that all reasonable steps were taken, and all due diligence exercised in attempting to avoid committing the offence. Therefore, in order to reduce the potential for fines/prosecution, a management plan should be in place for INNS on a property, and developers should be able to show that they are following it.

2.1.4 Certain invasive non-native plants are also listed as Invasive Alien Species of Union concern under EU IAS Regulation 1143/2014, which sets out measures to prevent and minimise the impact of the introduction and spread of non-native

animals and plants including prevention, early detection/rapid eradication and appropriate management. Listed species must not be spread into the wild.

3 Method

3.1.1 The INNS survey was undertaken within the Survey Area between the 6th and 8th August 2019, and on the 18th September 2019 by two appropriately experienced ecologists. The Survey Area incorporated all land within the Zone of Influence of the Scheme. This included all land within and immediately adjacent to the Development Consent Order (DCO) limits and 50m up and downstream of the order limits along the River Till and the banks of the River Avon (Appendix A, Figure 1). All invasive terrestrial plant species were recorded if present with a focus on:

i. INNS listed in Schedule 9 part 2 of the Wildlife and Countryside Act 1981 (as amended); and,
ii. Plants listed under Invasive Alien Species of Union concern (as per EU IAS Regulation 1143/2014).

3.1.2 The INNS survey was undertaken in accordance with current good practice published by the Environment Agency (Environment Agency, 2013), Royal Institute of Chartered Surveyors (RICS, 2012) and the Property Care Association (PCA, 2013).

3.1.3 The survey consisted of:

i. a thorough walkover of the area within the Survey Area where access was provided; and
ii. an inspection of immediate surroundings (where accessible).

3.1.4 The location of any invasive species observed was recorded along with a description of their growth, size and extent, location (including habitat present within), possible pathways of introduction, evidence of any management/ control or the species, disturbance impacts and photographs as a record of the inspection (Appendix A).

3.1 Limitations and assumptions

3.1.1 The surveys were undertaken within the months of August and early September 2019, within the main growing season (May-September inclusive). The surveys are therefore considered to have been undertaken at an appropriate time, as all INNS should have been visible, if present.

3.1.2 Some arable fields within the Survey Area were not accessed due to land access issues. Where this was the case, the land was surveyed from the field boundaries, assisted by close-focusing binoculars, whenever possible. This is not considered a limitation as the presence of INNS is unlikely within arable fields due to their continuous management; INNS are more likely to be present around the edges of fields. Although these fields were not physically accessed, it was still possible to visually survey the areas from field margins. Locations within the Survey Area which were not accessed are outlined on Figure 1.

3.1.3 The survey of the River Avon only comprised a terrestrial plant INNS survey of its banks and did not cover aquatic plant INNS. This is not considered a significant limitation to the survey, as no construction works will occur within 8m of the banks of the River Avon, aside from resurfacing works on the existing A303 River Avon bridge, and as such would not cause the spread of any INNS.

4 Results

4.1.1 Three stands of variegated yellow archangel (*Lamiastrum galeobdolon argentatum*) were recorded within the Survey Area. Details of these stands are outlined in Table 4-1

4.1.2 Figure 1 shows the locations of the stands of variegated yellow archangel.

4.1.3 No other plant INNS were recorded within the Survey Area during the walkover.

Table 4-1: Summary of INNS within the Survey Area

INNS reference	Species	Location	Approximate area of stand	Description	Photograph reference
INNS-1	Variegated yellow archangel	SU 18174 42652	1.5 x 0.5 m	Located within a plantation woodland on bark chippings that appeared to have been brought into the area.	Photograph 1 and 2
INNS-2	Variegated yellow archangel	SU 18163 42659	5 x 0.5 m	Located adjacent to track within woodland. Area seemed fairly disturbed.	Photograph 3 and 4
INNS-3	Variegated yellow archangel	SU 06760 40839	0.5 x 0.5 m	Located adjacent to a layby of the A303.	Photograph 5

5 Control Options and Recommendations

5.1.1 As only three individual stands of variegated yellow archangel were found within the Study Area, with all stands located in areas where only minimal disturbance during construction of the Scheme is anticipated, the risk of spread of INNS is considered to be low. However, as variegated yellow archangel rapidly spreads via stolons and the smallest stolon fragment with one pair of leaves can grow into a new plant it is recommended that the following action is undertaken:

- All personnel who might come into contact with the variegated yellow archangel should be informed of their locations and the requirements to prevent their spread; and,
- A toolbox talk should be provided by a suitably qualified Ecological Clerk of Works (ECoW) at the onset of works, providing details of variegated yellow archangel identification and the required biosecurity precautions.

5.1.2 Two control options are suitable for this species, these are treating the plants with herbicide or leaving the plants in-situ.

5.1.3 The preferred option would be herbicide treatment as this would ensure the future control of the species. As variegated yellow archangel is evergreen/ semi-evergreen, treatment can take place once most other plants have died back (late autumn), and/ or before most other plants have sprouted (early spring), reducing collateral damage to other plants. The herbicide treatment should be undertaken prior to works and the area should be fenced off with signage erected, to avoid accidental incursion during treatment. Following works, the area should be monitored for the presence of variegated yellow archangel, with any plants being treated with herbicide by foliar application.

5.1.4 If the plants are left in-situ, fencing and signage of the area will be required, to prevent any accidental spread of the plants. A buffer of 2m around the total extent of the variegated yellow archangel should be included and the signage should clearly specify the species present and the strict reasons for no entry into the area.

5.1.5 A pre-construction survey, as outlined within the INNS PMoW, will be required to update the information contained within this report, and to satisfy the requirements outlined within PW-BIO1, MW-BIO5 and MW-BIO6 of the OEMP. If required, an update management plan will be produced in consultation with Natural England and approval by The Authority.

6 References

CIEEM (2019) Code of Professional Conduct. Chartered Institute of Ecology and Environmental Management (CIEEM) January 2019.

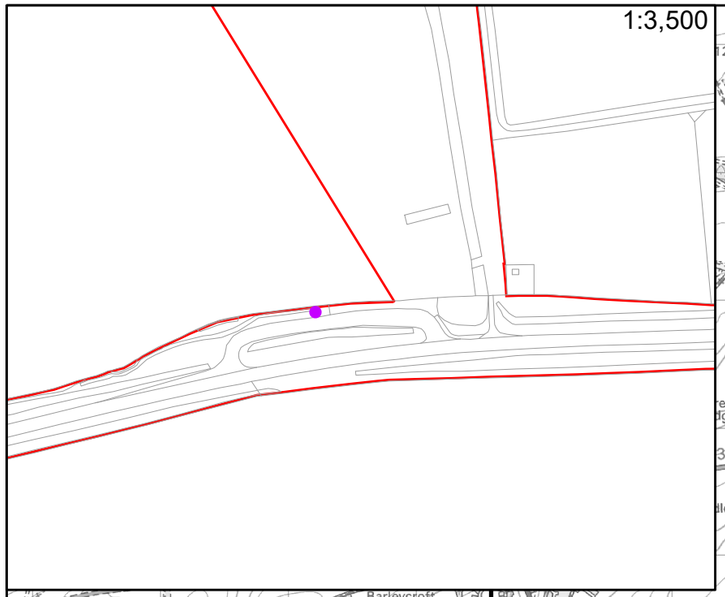
Environment Agency. (2013). Managing Japanese knotweed on Development Proposed Developments: The knotweed Code of Practice. Environment Agency, Bristol.

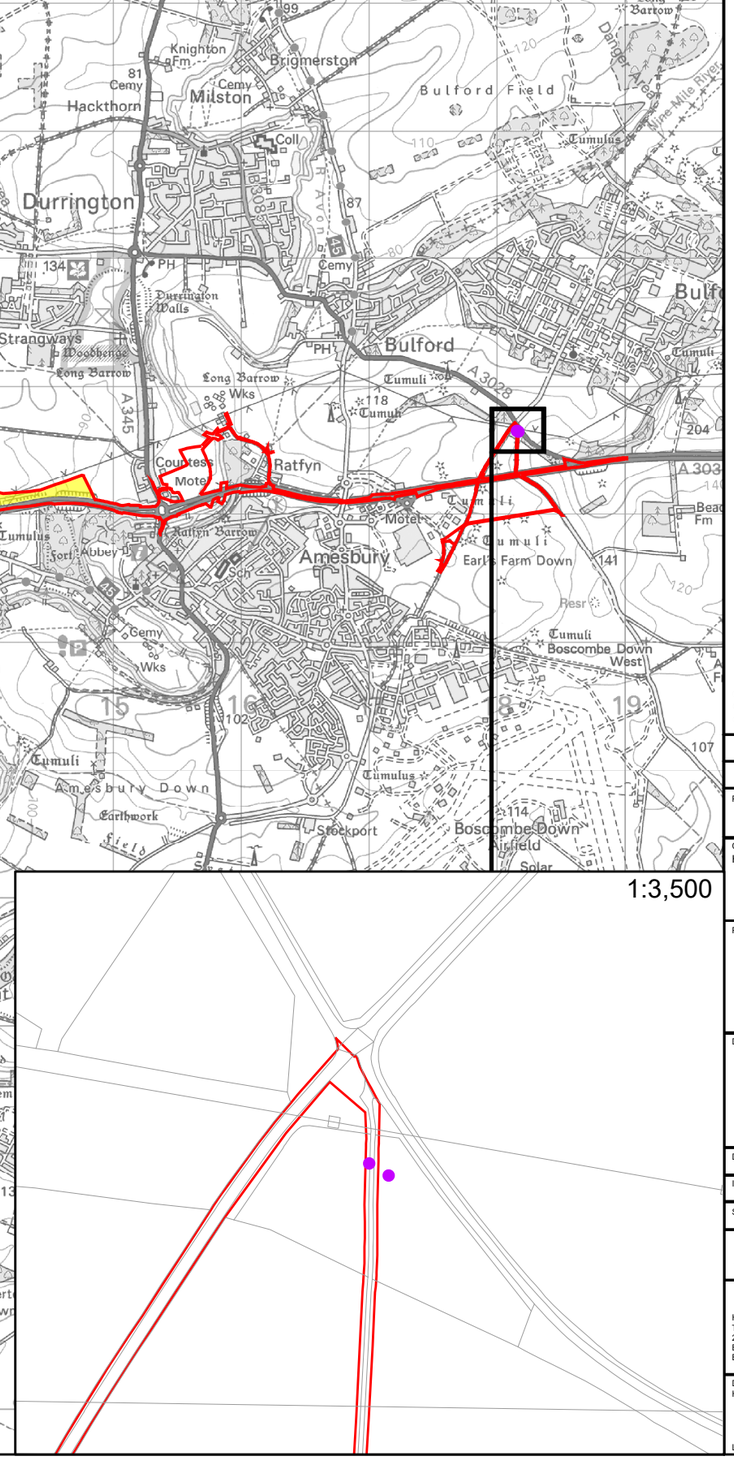
Highways England (2019) A303 Amesbury to Berwick Down, TR010025, 6.3 (4) Environmental Statement, Appendix 2.2 – Outline Environmental Management Plan (OEMP).

Property Care Association (2013). Code of Practice for the Management of Japanese knotweed. PCA.

RICS (2012). Japanese knotweed and Residential Property. RICS Information Paper JP 27/2012. RICS, London

Appendix A : Figure 1





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NOTES / LEGEND

- Survey Area
- Areas not accessed (viewed from field boundaries)

Invasive Non-Native Species

- variegated yellow archangel *(Lamiastrum galeobdolon argentatum)*

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Revision Details	By / Check	Date	Suffix

Purpose of issue: For Information

Client: Highways England

Working on behalf of: highways england

Project Title: A303 AMESBURY TO BERWICK DOWN

Drawing Title: Figure 1: Invasive Non-Native Species Survey

Designed	Drawn	Checked	Approved	Date
	BM	HM	SP	13/11/19

Internal Project No. 60598638

Scale @ A3: 1:48,000 | Zone: SW

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Temple Quay House
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Bristol
BS1 6PN

AECOM + mace + WSP

Drawing Number: Highways England PIN	Originator	Volume			Rev
HE551506	AMW	GEN			01
SCHEME WIDE	DR	GI	00671		
Location		Type	Role	Number	

Appendix B : Photographs

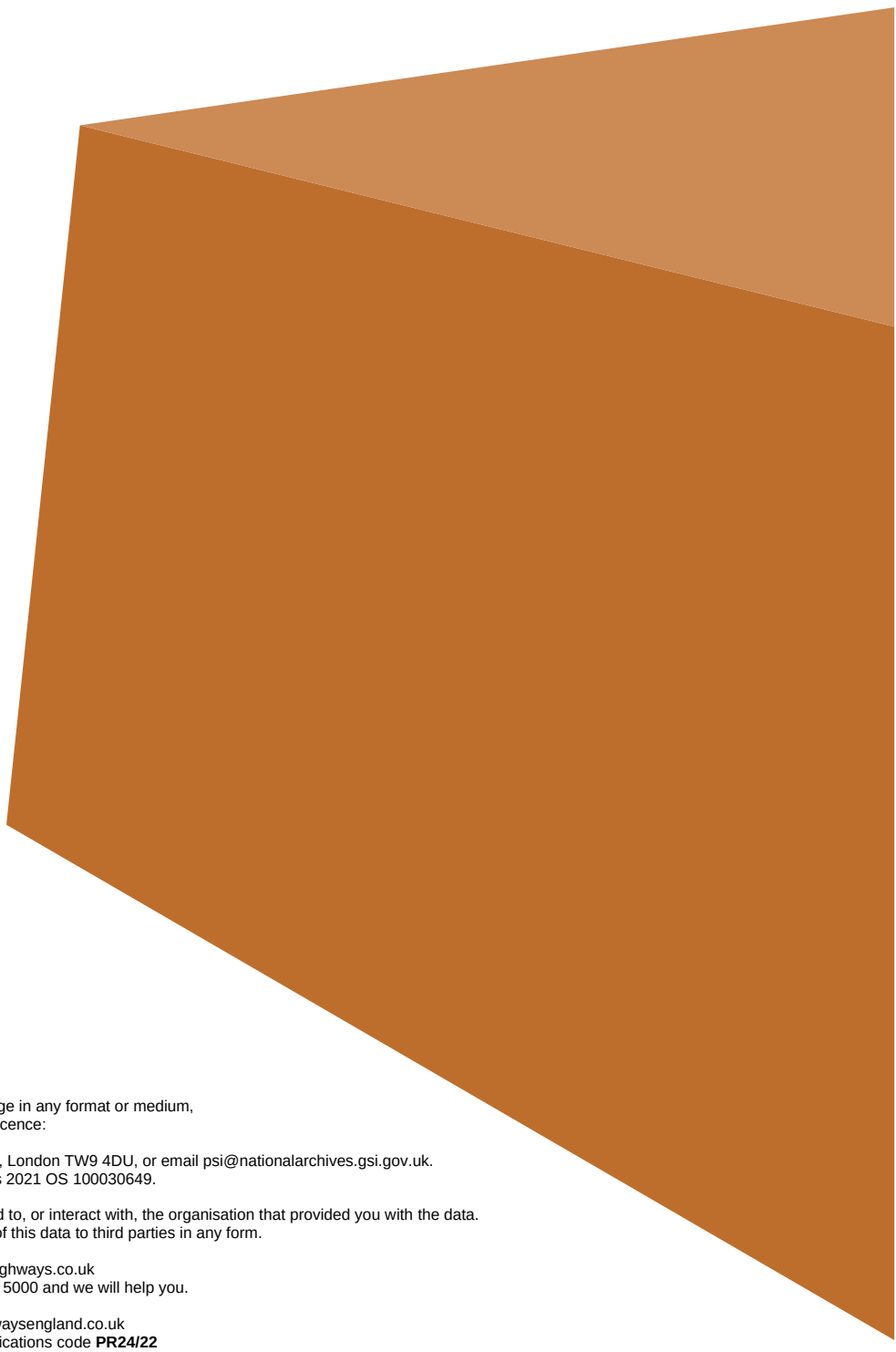
Photograph 1: INNS-1, variegated yellow archangel on wood chippings pile

Photograph 2: INNS-1, zoomed out view of variegated yellow archangel

Photograph 3: INNS-2, variegated yellow archangel adjacent to byway track in plantation woodland

Photograph 4: INNS-2, zoomed out view of variegated yellow archangel

Photograph 5: INN-3, variegated yellow archangel located adjacent to layby.



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