



## *Invasive Species Management Plan*

Cherrywood Greenway, Co. Dublin



**March 2022**

Prepared by Envirico on behalf of  
Dún Laoghaire-Rathdown County Council

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Report Prepared by:	Thomas Sheehan MSc	Envirico	07 <sup>th</sup> October 2021
Reviewed by:	Maurice O'Connor	Envirico	21 <sup>st</sup> October 2021

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Figure 1 *Location of area of investigation in green marked “application site”. Source: DLRCC4*

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## 1. INTRODUCTION

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Envirico have been engaged by Dún Laoghaire-Rathdown County Council (DLRCC) to prepare an Invasive Species management plan for the Linear Park Green Route at Cherrywood, County Dublin. This plan will detail the invasive species identified and recommend treatments for their control.

Senior Ecologist, Thomas Sheehan, visited the site on the 6<sup>th</sup> and 7<sup>th</sup> of September 2021 to carry out a site survey and to determine the presence and extent of any IAS. DLRCC propose to develop a greenway with cycle and pedestrian routes along a route from Druids Glen, Carrickmines Valley, Brides Glen and the Linear Park adjacent to Cherrywood Business Park as part of the network for the Cherrywood strategic development zone (SDZ) (see figure 1)

This Invasive Species Management plan (IASMP) has been prepared in accordance with current Irish best practice guidelines such as 'The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads' – NRA (2010); and Best Practice Management Guidelines *Rhododendron ponticum* and Cherry Laurel *Prunus laurocerasus* – Maguire *et al.* (2008)

**Site Manager/Owner:** Dún Laoghaire-Rathdown County Council (DLRCC)

**Site Address:** Cherrywood Strategic Development Zone  
Cherrywood  
Dublin 18





Figure 1 Location of area of investigation in green marked “application site”. Source: DLRCC

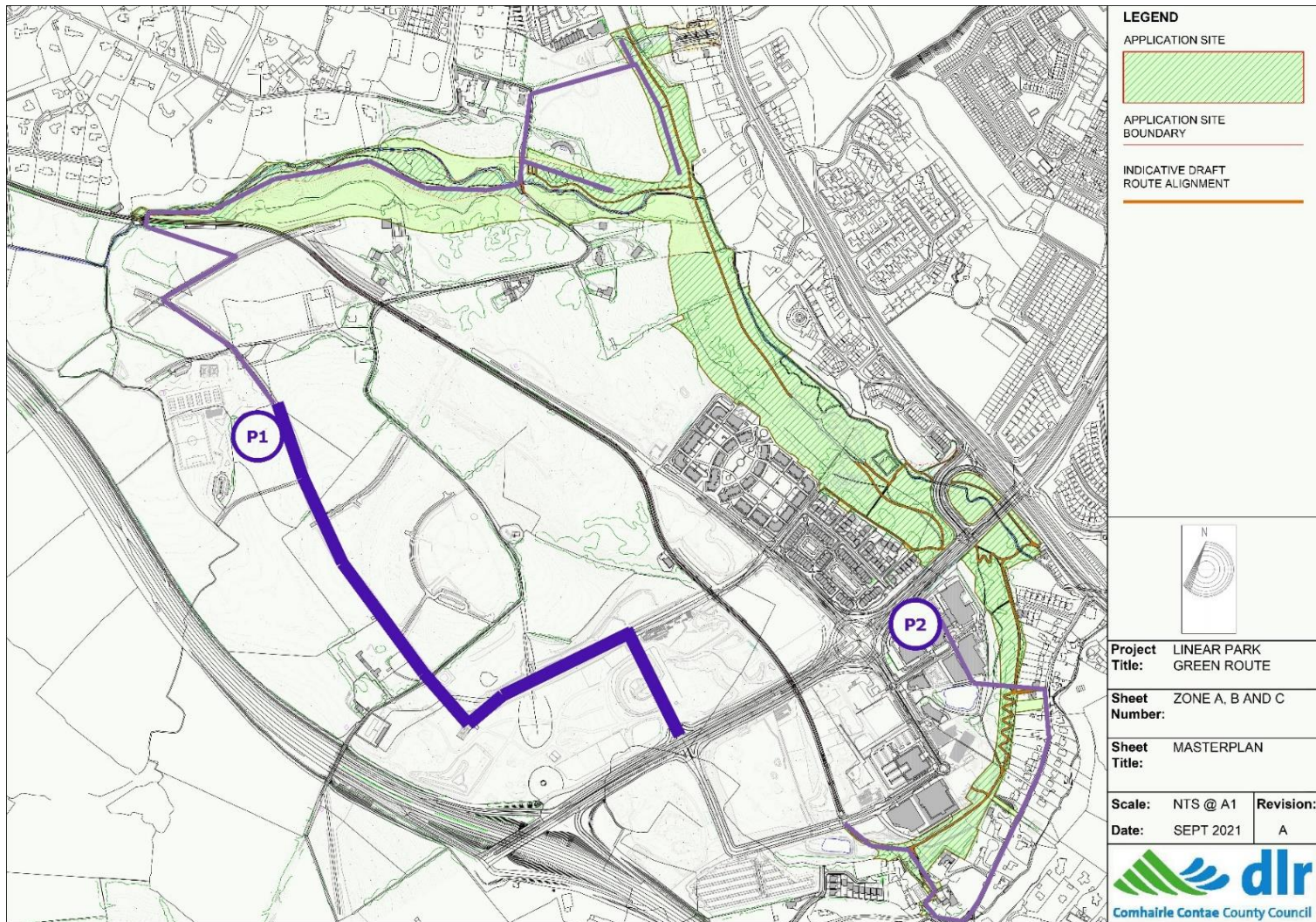
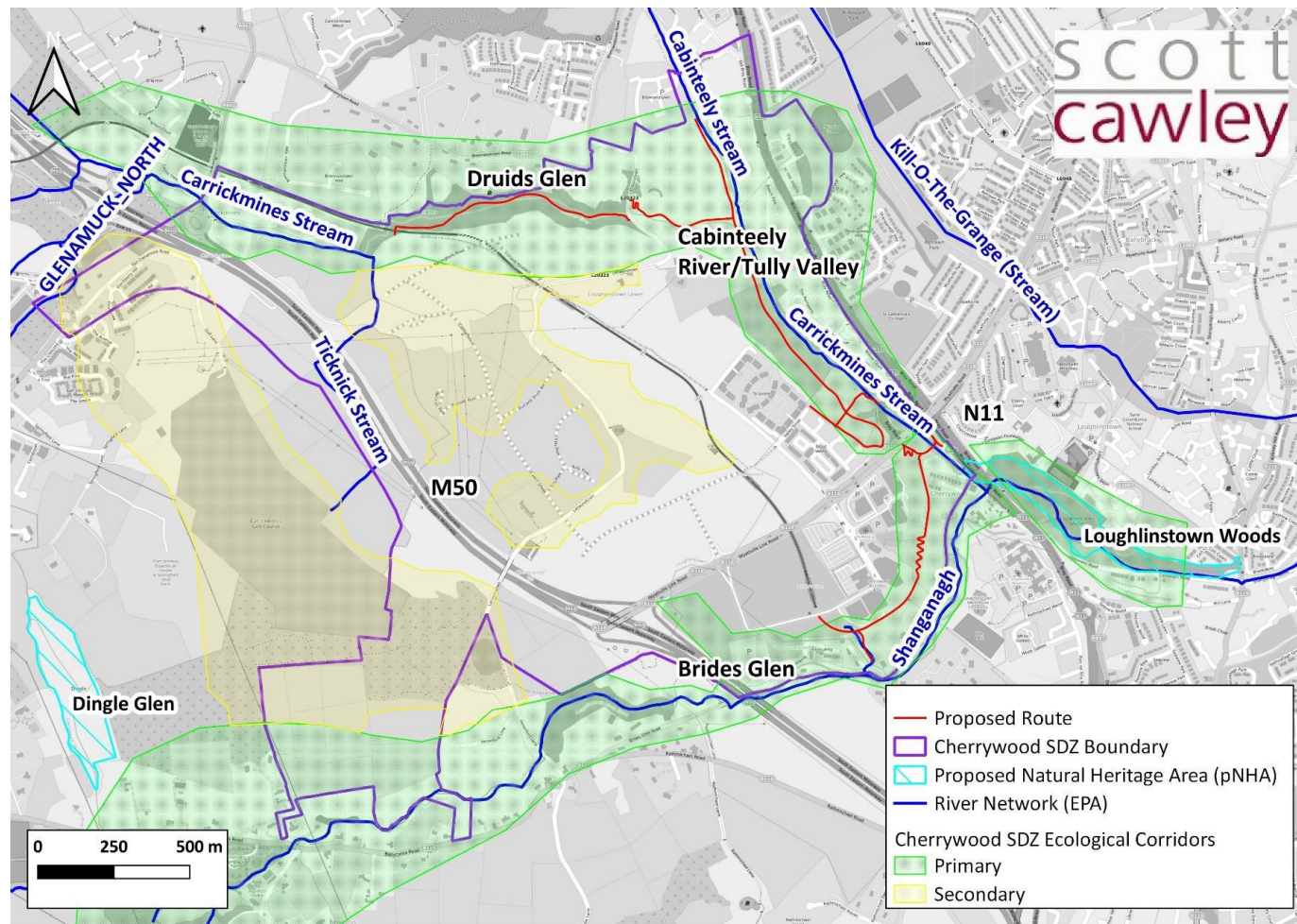




Figure 2 Figure 2. Proposed route in red within the Cherrywood SDZ



Source: Ecological Impact Assessment; Scott Cawley Ltd, Prepared for AECOM on behalf of Dún Laoghaire-Rathdown County Council

## 1.2 Scope of Survey

Our survey covered the following items:

- Botanical identification of all Third Schedule Invasive Alien Plant Species and other IAS of note.
- Map and describe the extent of the infestation.
- Collect a georeferenced photograph for each infestation.
- Discuss the implications of any invasive alien species located and make outline recommendations.

## 1.3 Survey Limitations:

While every effort was taken to identify the presence or absence of invasive alien plant species on the site, this survey consisted of a visual inspection only and cannot be taken as a guarantee that the invasive alien plant stands identified are the only ones on site. Invasive alien plant species can be temporarily concealed if they have been mown or covered over with gravel, mulch, turf, hard standing, etc.

## 1.4 Site Description:

The proposed Cherrywood Greenway provides a cycle and pedestrian greenway network, for the area within the Cherrywood SDZ. The greenway network is based on the preliminary routing indicated in the Cherrywood SDZ, extending for 3.0km from Brides Glen Road in the south to Lehaunstown Road and Brennanstown in the north. The greenway provides links to improve the pedestrian and cycle connections to key external desire lines, including links to the N11, Wyattville Link Road, and Brides Glen / Cherrywood Road in the south. The proposed greenway will be 4.0m wide, designed in accordance with TII Publication 'DN-GEO-03047-02 – Rural Cycleway Design (Offline)', with the exception of a section through Druids Glen Woodland. In the Druids Glen Woodland, an 800m long pedestrian walking route is proposed, which will comprise resurfacing of existing pathways through the existing Druids Glen Woodland. The pathway through Druids Glen will be 1-2m wide in keeping with the terrain (TBC). A type of barrier is also proposed to restrict walkers and their dogs straying from the designated pathway.



The Cherrywood Strategic Development Zone (SDZ) lands are located approximately 16km southeast from Dublin City Centre, 8 km south of Dún Laoghaire, 3 km from the coastline, and 4km from the Dublin and Wicklow mountains. The lands have a varied landscape and topography, flanked by three valleys; Druid's Glen, Bride's Glen and the Cherrywood / Loughlinstown River Valley. The site is currently under development with a mix of residential, retail, commercial and community uses.

### 1.5 Site Management Objectives and Threats to Objectives

The site management objectives, threats to achieving those objectives and the planned strategies for minimising these threats are outlined in Table 1.

**Table 1: Site management objectives, threats and mitigation for these threats.**

Objective	Threat(s)	Mitigation
1. <b>To prevent the spread of invasive species</b>	<p>Movement of equipment and personnel throughout areas contaminated with invasive species.</p> <p>Movement of contaminated clay/ peat.</p> <p>Digging amongst invasive species or areas containing propagules.</p>	<p>All machinery that is working in infested areas must be thoroughly washed down and certified as clean before exiting the site.</p> <p>All personnel and equipment that enter the site will be certified as clean before exiting.</p> <p>Strict biosecurity protocols will be implemented.</p>
2. <b>To mitigate against the threat of Invasive species</b>	<p>Invasive species growths pose a threat to the integrity of semi-natural habitats and human health, particularly in relation to Cherry Laurel (<i>Prunus laurocerasus</i>) and Giant Hogweed (<i>Heracleum mantegazzianum</i>).</p>	<p>All works within and adjacent to stands of invasive plant should be adequately monitored and completed with appropriate PPE.</p>
3. <b>To enable semi-natural habitat enhancement works to go ahead in a timely fashion without compromising objectives 1 or 2.</b>	<p>Works may be delayed due to the implementation of biosecurity protocols, particularly in relation to the on-site treatment of invasives.</p>	<p>Delays will be minimised by following the protocols laid out in this management plan.</p>





## 2. ABOUT THE INVASIVE SPECIES

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### 2.1 Cherry Laurel (*Prunus laurocerasus*)

Cherry Laurel is an evergreen shrub that grows up to 10 metres high, with wide spreading, dense, coarse-textured waxy foliage. Leaves are alternate, oblong, range from slightly to fully serrated, and are between 5 – 15 cm long. The leaves range from medium to dark green and are often confused with those of Rhododendron (*Rhododendron ponticum*). The flowers of Cherry Laurel are white and fragrant, they consist of 5 – 10 cm long blooms in clusters predominantly seen in mid spring. The plant produces berries in the summer, which are purple to black and poisonous to humans. It may spread by suckering (underground buds along a root system) and by seeds which are dispersed by wind, water or by birds who eat the fruit.

Native to south-east Europe, this terrestrial plant grows on acidic, well drained soils and is tolerant of salt spray. This species is often observed in woodlands where it can be seen to outcompete native flora. Cherry Laurel (*Prunus laurocerasus*) is not part of the Third Schedule Invasive Species in S.I. 477/2011. This plant has been assessed as a High Impact Invasive species and allocated as score of 18. (Species score 18+ is a species with a risk of High Impact). The threats imposed by Cherry Laurel is that all parts are considered poisonous (cyanide), it reduces biodiversity by forming dense coppices, therefore outshading native species and preventing tree seedlings from growing.

### 2.2 Giant Hogweed (*Heracleum mantegazzianum*)

An introduced invasive species in Ireland, thought to have been brought into the country in the 19th Century as an ornamental plant, Giant Hogweed has since spread across Irelands riversides and ditches. Common along riverbanks, this species, native to the Caucasus Mountains, displays a highly aggressive growth and can easily outcompete native flora with mature plants reaching heights of 5-6m.

Giant Hogweed's leaves are serrated and sharply divided, they can grow up to 3m in length and 1.5m id width. The leaves are in contrast to those of the native hogweed (*Heracleum sphondylium*), which are lobed and of smaller stature. The main stem of Giant hogweed is large in mature plants, the presence of these tall dead 'canes' is a common sign that the



species is present within the area. These canes, which can be 5-10cm in diameter, are hollow and are covered in hairy bristles. Throughout the lifecycle of Giant Hogweed purple blotches or freckles are always present along the length of the stem, this is a particularly good indicator of differentiating between native and giant hogweed saplings allowing for treatment at the early stages of growth.

The white, or rarely pink, flowers of Giant Hogweed are visible from June to August. These large flat heads can produce up to 50,000 (1.5 cm) seeds per plant per year, resulting in mass spread of the species throughout a particularly vulnerable area.

Giant Hogweed poses a threat to human health due to production of a hazardous sap that can cause severe burns and scarring by sensitising the skin to light (UV radiation). Its large surface area means it shades out native species and its high volume of seed production means it easily propagates. The species can also increase soil erosion along riverbanks.

**Giant Hogweed (*Heracleum mantegazzianum*) is part of the Third Schedule Invasive Species in S.I. 477/2011.** This plant has been assessed as a High Impact Invasive species and allocated as score of 19.

### **2.3 Buddleia/Butterfly-bush (*Buddleja davidii*)**

Butterfly-bush is a small multi-stemmed tree often planted in gardens for its ability to attract pollinators. It is native to China and Japan but is found to be more successful outside of its home range in places such as New Zealand, much of central Europe and in the UK & Ireland. The first record of the invasive in Ireland was in 1957 and is thought to have been introduced for ornamental purposes. Since then, it has become established all across the country and is still grown and sold in garden centres.

The species is thought to impact ecological features and native flora and fauna due to its invasive nature. Buddleia is classed as being a species of 'Medium Invasive Impact' by Kelly, et al., (2013) and is not listed in Part 1 of the Third Schedule of Statutory Instrument 477/2011.

The Butterfly-bush is a semi-deciduous shrub/tree with finely toothed opposite leaves that are ovate and shortly petiolate. They are hairless and green on-top, with the underside being paler and hairy, and can reach 20cm long. The shrub can grow up to 2m annually and reach 5m tall, with long arching branches that produce dense pyramidal panicles of lilac or



purple flowers. However, there are now seven subspecies and over 90 cultivars, meaning flowers have variation in form and size, and can be any colour. Flowering is short, not lasting much more than a fortnight with panicles producing seeds that are small and can be smooth or hairy. This is the main method of reproduction but can also spread asexually through a fragment of the root or stem.

Suitable habitats include forb or moss-dominated grasslands, scrub, woodland or riparian habitats, but common receiving environments are disturbed grounds in constructed or industrial areas. One notable example is railway line verges, where it has spread prolifically in the UK. Its growth habit means it can interfere with railway power lines and obscure visibility of the track. The association with urban areas has become an issue where it can exploit and weaken crumbling brickwork, and the seeds can germinate within decaying mortar. Another problem is that it is highly effective at attracting native pollinators and can result in declines in native plant species.

Network Rail cuts large plants down before spraying the stumps with herbicide to kill the plant. Gardeners are asked in the UK by DEFRA to remove seed heads after flowering. The National Biodiversity Data Centre recommends reporting any sightings. *Buddleja davidii* has a risk of Medium Impact and has an invasive score of 15.



### 3. INVASIVE ALIEN SPECIES LEGISLATION

Invasive species in Ireland, depending on their invasive impact, are categorized within a number of articles of legislation. These articles assist in the control of these species and, in some cases, allow for the prosecution of those who knowingly or unknowing allow their spread. Ireland has also ratified a number of international conventions that oblige the Government to address the issue of non-native invasive species, including the Convention on Biological Diversity, the Bern Convention and the International Plant Protection Convention.

#### 3.1 Irish Statutory Instrument 477/2011

The EC Birds and Natural Habitats Regulations introduced important legislation concerning invasive species in the Republic of Ireland. There is a total of thirty-four terrestrial and aquatic alien plant species currently listed in Part 1 of the Third Schedule (as amended by S.I. No. 355/2015) which is included in Table 2 below;

**Table 2: Third Schedule of S.I. 477/2011 as amended**

Common Name	Scientific Name
American skunk-cabbage	<i>Lysichiton americanus</i>
A red alga	<i>Grateloupia doryphore</i>
Brazilian giant-rhubarb	<i>Gunnera manicata</i>
Broad-leaved rush	<i>Juncus planifolius</i>
Cape pondweed	<i>Aponogeton distachyos</i>
Cord-grasses	<i>Spartina</i> (all species and hybrids)
Curly waterweed	<i>Lagarosiphon major</i>
Dwarf eel-grass	<i>Zostera japonica</i>
Fanwort	<i>Cabomba caroliniana</i>
Floating pennywort	<i>Hydrocotyle ranunculoides</i>
Fringed water-lily	<i>Nymphoides peltate</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>
Giant knotweed	<i>Fallopia sachalinensis</i>
Giant-rhubarb	<i>Gunnera tinctoria</i>
Giant Salvinia	<i>Salvinia molesta</i>
Himalayan balsam	<i>Impatiens glandulifera</i>
Himalayan knotweed	<i>Persicaria wallichii</i>





<b>Hottentot-fig</b>	<i>Carpobrotus edulis</i>
<b>Japanese knotweed</b>	<i>Fallopia japonica</i>
<b>Large-flowered waterweed</b>	<i>Egeria densa</i>
<b>Mile-a-minute weed</b>	<i>Persicaria perfoliate</i>
<b>New Zealand pigmyweed</b>	<i>Crassula helmsii</i>
<b>Parrot's feather</b>	<i>Myriophyllum aquaticum</i>
<b>Rhododendron</b>	<i>Rhododendron ponticum</i>
<b>Salmonberry</b>	<i>Rubus spectabilis</i>
<b>Sea-buckthorn</b>	<i>Hippophae rhamnoides</i>
<b>Spanish bluebell</b>	<i>Hyacinthoides hispanica</i>
<b>Three-cornered leek</b>	<i>Allium triquetrum</i>
<b>Wakame</b>	<i>Undaria pinnatifida</i>
<b>Water chestnut</b>	<i>Trapa natans</i>
<b>Water fern</b>	<i>Azolla filiculoides</i>
<b>Water-primrose</b>	<i>Ludwigia</i> (all species)
<b>Waterweeds</b>	<i>Elodea</i> (all species except <i>E. canadensis</i> )
<b>Wireweed</b>	<i>Sargassum muticum</i>

Article 49 prohibits the introduction, breeding, release or dispersal of certain species; and Article 50 prohibits dealing in and keeping certain species.

**Article 49 (2)** “Save in accordance with a licence granted under paragraph (7), any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place specified in relation to such plant in the third column of Part 1 of the Third Schedule, any plant which is included in Part 1 of the Third Schedule, shall be guilty of an offence.”

Article 49 (3) states that you can defend against allegations that you committed an offence under Article 49 (1) or (2) by proving that you took all reasonable steps and exercised all due diligence to avoid committing the offence:

**Article 49 (3)** “Subject to paragraph (4), it shall be a defence to a charge of committing an offence under paragraph (1) or (2) to prove that the accused took all reasonable steps and exercised all due diligence to avoid committing the offence.

**Article 50 (2)** “Save in accordance with a licence granted under paragraph (7), a person shall be guilty of an offence if he or she imports or transports –



- (a) an animal or plant listed in Part 1 or Part 2 of the Third Schedule
  - (b) anything from which an animal or plant referred to in Part 2 of the Third Schedule can be reproduced or propagated, or
  - (c) a vector material listed in Part 3 of the Third Schedule,
- into or in or to any place in the State specified in relation to such an animal or plant or vector material in relation to that animal or plant or vector material in the third column of the Third Schedule.”

The Wildlife Amendment Act (2000) of ***The Wildlife Act (1976)*** made it an offence to cause an exotic species of flora to grow in the wild anywhere in the state:

“Any person who plants or otherwise causes to grow in a wild state in any place in the State any (exotic) species of flora, or the flowers, roots, seeds or spores of flora, otherwise than under and in accordance with a licence granted in that behalf by the Minister shall be guilty of an offence.”

### 3.2 EU Regulation 1143/2014

EU Regulation 1143/2014 on invasive alien species entered into force on 1 January 2015. It provides for a set of measures to be taken across the EU in relation to invasive alien species included on a list of Invasive Alien Species of Union concern. The list of invasive alien plant species can be seen in Table 3 below;

**Table 3: Plants listed as Invasive Alien Species of Union Concern (EU Regulation 1143/2014)**

Scientific name	English name	Entered
<i>Acacia saligna</i>	Golden wreath wattle	2019
<i>Ailanthus altissima</i>	Tree of heaven	2019
<i>Alternanthera philoxeroides</i>	Alligator weed	2017
<i>Andropogon virginicus</i>	Broomsedge bluestem	2019
<i>Asclepias syriaca</i>	Milkweed	2017
<i>Baccharis halimifolia</i>	Eastern baccharis	2016
<i>Cabomba caroliniana</i>	Green cabomba	2016
<i>Cardiospermum grandiflorum</i>	Balloon vine	2019
<i>Cortaderia jubata</i>	Purple pampas grass	2019
<i>Ehrharta calycina</i>	Perennial veldtgrass	2019
<i>Eichhornia crassipes</i>	Water hyacinth	2016



<i>Elodea nuttallii</i>	Nuttall's waterweed	2017
<i>Gunnera tinctoria</i>	Chilean rhubarb	2017
<i>Gymnocoronis spilanthoides</i>	Spadeleaf plant	2019
<i>Heracleum mantegazzianum</i>	Giant hogweed	2017
<i>Heracleum persicum</i>	Persian hogweed	2016
<i>Heracleum sosnowskyi</i>	Sosnowski's hogweed	2016
<i>Humulus scandens</i>	Japanese hop	2019
<i>Hydrocotyle ranunculoides</i>	Floating pennywort	2016
<i>Impatiens glandulifera</i>	Himalayan balsam	2017
<i>Lagarosiphon major</i>	Curly waterweed	2016
<i>Lespedeza cuneata</i>	Chinese bushclover, sericea	2019
<i>Ludwigia grandiflora</i>	Water primrose	2016
<i>Ludwigia peploides</i>	Floating primrose	2016
<i>Lygodium japonicum</i>	Vine-like fern	2019
<i>Lysichiton americanus</i>	American skunk cabbage	2016
<i>Microstegium vimineum</i>	Japanese stiltgrass	2017
<i>Myriophyllum aquaticum</i>	Parrot's feather	2016
<i>Myriophyllum heterophyllum</i>	Broadleaf watermilfoil	2017
<i>Persicaria perfoliata</i>	Asiatic tearthumb	2016
<i>Parthenium hysterophorus</i>	Whitetop weed	2016
<i>Pennisetum setaceum</i>	Crimson fountaingrass	2017
<i>Prosopis juliflora</i>	Mesquite	2019
<i>Pueraria montana</i> var. <i>lobata</i>	Kudzu vine	2016
<i>Salvinia molesta</i>	Giant salvinia, kariba weed	2019
<i>Triadica sebifera</i>	Chinese tallowtree	2019



## 4. SURVEY FINDINGS

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### 4.1 Summary of Site Visit

Site visits were conducted by Envirico Ecologist, Thomas Sheehan, on the 6<sup>th</sup> and 7<sup>th</sup> of September 2021 and were supported by Sophie Barwich, Assistant Parks Superintendent for Dun Laoghaire Rathdown County Council on the 6<sup>th</sup> September for route locations as well as safe entry and exit points.

In total, three invasive/ non-native species were noted within and or adjacent to the site.

#### 4.1.1 Giant Hogweed

Of these species, Giant Hogweed (*Heracleum mantegazzianum*) is listed in the Third Schedule of S.I. 477/2011. The Giant Hogweed is currently under treatment by Envirico Ltd.

#### 4.1.2 Buddleia (*Buddleja davidii*)

Two stands of Buddleia/Butterfly-bush (*Buddleia davidii*) of approx. 0.5m height were noted near the overpass/stream at 0724148, 0723531 and can be treated by removing the seed heads after flowering, cutting down of the plants and treating the stumps with herbicide to kill the plant.

#### 4.1.3 Cherry Laurel (*Prunus laurocerasus*)

Cherry Laurel, a High Impact Invasive species, was noted throughout the woodland at Druid's Glen.

In total, an area of **1128m<sup>2</sup>** of Cherry laurel was estimated in the Druids Glen woodland. This area was arrived at assuming a 2m cutback requirement from the pathway. This included 470 linear metres (470 x 2m = 940m<sup>2</sup>) estimated along the northside (stream side) and 94 linear metres (94 x 2 = 188m<sup>2</sup>) along the southern edge of the pathway. It should be noted that several mature Cherry Laurel plant overhangs will require removal with a chainsaw with an estimated height of approximately 8m and diameter of approximately 30cm in places. (see Appendix II – Photographic Record).

#### 4.1.4 Japanese Laurel/Spotted Laurel (*Aucuba japonica*)

Two areas, 1m<sup>2</sup> x 1m height and 18m<sup>2</sup> x 3m height of Japanese laurel/ Spotted laurel (*Aucuba japonica*) was also found within the Druid's Glen woodland (0723138, 0724125) it has not be yet assessed as invasive and is probably a garden escapee, still it is





recommended that it should be removed and treated in the same manner as the Cherry laurel.



**Table 4 Coordinates and estimates of Cherry Laurel with the Druid's Glen woodland (points are taken from east to west)**

Point	Coordinates	Point	Coordinates	Estimated length	Height	No. plant	No. plant
<b>A</b>	0723227, 0724130	<b>B</b>	0723208, 0724117	A-B = 20m	0.5 -5m	10-15 x 4-5m	10 x 0.5-1m
<b>B</b>	0723208, 0724117	<b>C</b>	0723174, 0724121	B-C = 40m	3-5m	Unknown	Unknown
<b>C</b>	0723174, 0724121	<b>D</b>	0723136, 0724132	C-D = 45m	3-5m	Unknown	Unknown
<b>D</b>	0723136, 0724132	<b>E</b>	0723095, 0724138	D-E = 40m	5-6m+	Unknown	Unknown
<b>E</b>	0723095, 0724138	<b>F</b>	0723059, 0724172	E-F = 60m	0.5-5,	Unknown	Unknown
<b>F</b>	0723059, 0724172	<b>G</b>	0723022, 0724189	F-G = 35m	1-8m+ up to 30cm stem thickness	Unknown	Unknown
<b>G</b>	0723022, 0724189	<b>H</b>	0722972, 0724186	G-H = 0	N/A	N/A	N/A
<b>H</b>	0722972, 0724186	<b>J</b>	0722828, 0724145	H-J = 150m	1-8m+ up to 30cm stem thickness	Unknown	Unknown
<b>J</b>	0722828, 0724145	<b>K</b>	0722765, 0724125	J-K = 80m	1-8m+ up to 30cm stem thickness	Unknown	Unknown
<b>K</b>	0722765, 0724125	<b>L</b>	0722553, 0724072	0			
<b>L</b>	0722553, 0724072	<b>AQUADUCT</b>		<b>END</b>			

## 4.2 Site Access

There are several access points to the overall site however access to the Druid's Glen woodland area is limited and can only be accessed by foot. At the western end of Druid's Glen access is adjacent to the new Luas stop by descending an embankment (53.2526866, 6.160244), while at the eastern end, there is a break in a boundary wall that allows access to the woodland from the Lehaunstown road (53.253028, -6.151818). An old archway in the



wall which is currently bricked up is proposed to be reinstated as a permanent access point for the public, (see Appendix II – Photographic Record). Various other access points are present including at the N11 junction to the northeast (0723645, 0724430). For the most part other areas can be accessed by vehicle and then a short walk.

#### **4.3 Previous Site Management**

There is evidence of previous management of the Cherry Laurel within the woodland, possibly by local walkers attempting to keep the current woodland walkway clear. It appears that only cutting methods were used.

#### **4.4 Possible Source of Infestation**

Unknown.

#### **4.5 Likely Sources of Reintroduction**

Unless the Cherry Laurel in the woodland area is managed in its entirety, then there is a very high risk that the Cherry Laurel will continue to spread and be introduced back along the proposed walkway. Annual management may restrict the spread somewhat, however the Cherry Laurel will continue to reduce the semi-natural state of the woodland.

#### **4.6 Future Site Development**

The site and surrounds form part of the Cherrywood Strategic Development Zone (SDZ) lands and is currently under development with a mix of residential, retail, commercial and community uses.



## 5. RECOMMENDED MANAGEMENT PLAN

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It should be noted that the treatment of the Cherry laurel within the Druid's Glen woodland may in places undermine the stability of the soil bank of the walkway as the Cherry laurel root structure dies after treatment and structural mitigation should be put in place for this risk.

Strict biosecurity measures will need to be implemented around all works in the areas (see section 6).

Ann understanding of the ecology of Cherry laurel and Giant hogweed along with careful planning should provide successful management and eradication outcomes.

It is also important to consider the presence of Cherry Laurel and Giant hogweed throughout the site and the possibility of other non-native species in the surrounding environment, especially adjacent to the site as reintroduction may occur. Discussions with neighbouring landowners and informing the general public about native biodiversity, including addressing the issues of non-native species, is advisable.

An experienced Invasive Species Clerk of Works should supervise any construction works that occur within or adjacent to an area infested with Cherry Laurel or Giant hogweed.

### 5.1 Specific Mitigation in Relation Cherry Laurel

Recommended treatment will be a combination of Stump Treatment and Snip and Treat.

Treatments recommended within this plan in relation to this species are done so in order to retain the integrity of and prevent further impact on the semi-natural habitats present.

An option for the disposal of Cherry Laurel brash includes its removal and disposal using an appropriately licensed waste contractor, as with any other trees, as this species is not controlled under Irish legislation. The stem can be cut, and the stump immediately treated with Roundup Biactive XL in accordance with the label.

Monitoring of the exposed stumps for re-growth will be required. Best-practice dictates that all equipment that is used on the site is thoroughly washed down before exiting, in order to prevent the spread of this species.

#### 5.1.1 Timeline Management

A site survey including updating maps should be carried out at the beginning of each phase of management during the winter to early spring when evergreen plants are highly visible.





Records should include the works carried out in each sector (i.e. how the area has been treated) so that at the end of each phase areas can be re-evaluated.

### **Site Preparation Phase**

Preliminary clearance should comprise of the removal and treatment of the Cherry Laurel. Normally this would begin in the densest areas of infestation and then work towards the areas of lower density, however due to limitations of access, it will be more feasible to work along the pathway from either east to west or west to east and finish each section “as you go”.

Where possible, young seedlings should be pulled from the ground by hand while ensuring the root structure is attached. If this is not possible then younger single stemmed seedlings should be cut and treated. Plants which have been previously cut back and are multi-stemmed should be cut to stump level and treated.

Some brash could be stored and during Phase 2 placed back as piles into treated areas that are free from Cherry Laurel and have reduced ground vegetation. *These Piles will provide shelter for re-establishing plants, bring insects and other wildlife back into the area* (Higgins, 2008).

Seed will be present in the substrate surrounding the infestations. Its presence may not be apparent until it is disturbed, for example during clearance works, moving of soil, construction works and landscaping. Strict biosecurity protocols should be implemented when working in these locations to prevent the spread of this invasive species. These protocols should continue to be enforced right throughout the construction works.

### **Construction Phase**

Exclusion zones should be marked off as described in Section 6. All biosecurity protocols outlined in Section 6 should be strictly enforced for the duration of the construction works.

### **Operation phase – short term**

During years 2 to 3 areas that have been treated in phase 1 must be surveyed at least annually to check the effectiveness of treatment. Again, new younger seedlings can be pulled and treated. Stumps which have not been killed and have sprouted can be snipped and treated.

Once final clearance is achieved, that is, when all plants are dead then phase 3 can begin.

### **Operation phase – long term**



**Monitoring and Maintenance** During this phase, once all areas have been treated, restoration of damaged or degraded areas should be considered with replanting of native shrubs. This is important as these areas are liable to invasive seed establishment and this restoration will also minimise soil erosion. For Cherry laurel eradication to succeed it is vital that this phase is undertaken otherwise missed seedlings from Phase 2 and seeds blown in from outside the site are likely to re-establish and flower.

- Monitor and remove any regrowth that arises every 2 years.
- reinstate an understorey by under-planting cleared areas.

**Table 5 Cherry Laurel treatment times– Maguire *et al.* (2008)**

Cutting	J	F	M	A	M	J	J	A	S	O	N	D
Glyphosate	J	F	M	A	M	J	J	A	S	O	N	D
Tryclopvr*	J*	F*	M*	A*	M*	J*	J*	A*	S*	O*	N*	D*
Ammonium sulphate	J	F	M	A	M	J	J	A	S	O	N	D

**Optimum treatment time. Remember to consider breeding birds before embarking on a programme.**

**Suboptimum treatment time but can be effective. In the case of glyphosate-based herbicides consider higher concentrations 25--100% during this time period.**

\* Suitable for treatment any time after cutting and appearance of new growth.

**Table 6 Management Plan for Cherry laurel**

Year	Dates for Works	Proposed Treatment(s)
2022	Feb/March	Stump Treatment, Snip and treat
2023	Sept/Oct	Inspect stands and seedlings, retreat if necessary
2024	Feb/March	Inspect stands and seedlings, retreat if necessary
2025 and ongoing	Feb/March	Monitor for new growth and retreat if necessary

## Stump Treatment

Stump Treatment is the preferred treatment of invasive plants within a woodland setting. This involves cutting the plant 2-4 cm from the ground and immediately applying 20% glyphosate herbicide to the wound. If conditions are sub-optimal, it is possible to make a higher cut up to 40cm then wait for optimal conditions to then cut the remaining stump to ground level and apply herbicide (Higgins, 2008). The herbicide used will be Roundup



Biactive XL. Roundup Biactive XL is an aquatic-approved, glyphosate-based herbicide that is highly effective and is considered suitable to use in and near watercourses.

Herbicide application will only be undertaken when weather conditions are suitable – after dew has dried, with no rain forecast for six hours and a wind speed of Beaufort force  $\leq 3$ , and after an environmental risk assessment has been carried out.

Every effort will be made to ensure that herbicide is only applied to the invasive plant species, and no spray drift occurs onto the surrounding environment.

- A blue tracer dye should be added to the herbicide to highlight treated stems.
- Stumps will need to be checked 15-18 months after treatment to ascertain if follow up treatment is required
- Follow up should consist of the snip and treat method.
- follow up treatment and record keeping are essential.

#### **Advantages of stump method**

- More likely to be killed by one treatment and therefore less follow up treatments.
- Less herbicide is required than that of foliar application.
- As plant is physically removed, surrounding native plants can immediately begin to recover.

#### **Snip and Treat**

This method is essentially the same as the stump treatment method except that it is carried out on smaller plants, as well as plants which are located nearer watercourses\*, or plants which are too large for controlled foliar application or on the re-growth of stumps that have been previously treated during phase 1. Stems are cut back to ground level/old stump and spot treated with 20% glyphosate (Higgins, 2008).

The herbicide used will be Roundup Biactive XL. Each individual stem of will be cut between 2-4 cm from the ground. Roundup Biactive XL at a concentration of 20% will be applied to the cut stump by trained operatives by targeted application using a 1L pressure sprayer. A blue tracer dye will be added to the herbicide to highlight previously treated stems.

Herbicide application will only be undertaken when weather conditions are suitable – after dew has dried, with no rain forecast for six hours and a wind speed of Beaufort force  $\leq 3$ , and after an environmental risk assessment has been carried out.



Every effort will be made to ensure that herbicide is only applied to the invasive plant species, and no spray drift occurs onto the surrounding environment.

\*While Roundup Biactive XL is an aquatic-approved product it is still best practice to reduce its interaction with waterways.

**Table 7 Methods for the control of seedlings and small plants**

Method	Factors critical to success	Advantages	Disadvantages/ Constraints
Snip & Treat	Must cut at ground level Weather Chemicals and concentration used	Potentially very high kill rate Lower risk of non-target damage Low volume of herbicide used No soil disturbance	Requires use of herbicides Not suitable in wet weather Discarded cut stems may obscure missed plants, especially where there is a high density of plants.
Pull	Need to remove majority of root Need to remove soil from root system Need to dispose of pulled plants carefully	Potentially very high kill rate No herbicides required Not dependant on good weather	Some soil disturbance; particularly if plants are so large as to require the use of pick or mattock. Potential for uprooting of native vegetation, especially where high densities of larger plants May be labour intensive Dry, hard ground can result in snapping off from roots.
Spot Spray	Weather Timing of application of herbicide Chemicals and concentration used Adjuvant used Complete coverage	Potentially very high kill rate Can be done as part of spraying of regrowth if that was initial clearance method	Dry weather required for spraying Very high risk of herbicide drift and damage to existing and recovering native vegetation. Can create suitable conditions for reinfestation by seed. Standing dead shoots remain





**Table 8 Eradication techniques options for larger plants (Higgins, 2008)**

Method	Factors critical to success	Other issues
Cut plants to ground level & treat stumps with herbicide	Immediate herbicide application Requires low cut Chemical and concentration used Ensure all stumps treated (dye) Dry conditions required Quality control is required	Main kill achieved in single work phase Less herbicide used Very low risk of herbicide drift Reduced soil disturbance
Apply herbicide directly to stem	Chemical and concentration Timing of herbicide application Weather requirement Quality control is required	Requires access to stem base Very low risk of herbicide drift Very low volumes of herbicide used Standing dead plants
Cut plants to ground level & spray regrowth/ spray standing plants <i>Herbicide Options:</i> <i>Glyphosate (water or emulsion based)</i> <i>Triclopyr</i>	Completeness of spraying Dry weather & 6 hours after Timing of herbicide application (month) Chemical and concentration used Adjuvant used Age of regrowth Quality control is required	Need for second major work phase Time delay in completing initial kill Damages native vegetation and may delay recovery by several years May facilitate reinfestation Less effective on waterlogged plants Standing dead plants
Cut plants to ground level, knock off regrowth after 12-18 months & treat stump collar with herbicide	Requires low cut Chemical and concentration used Ensure all stumps treated (dye) Dry conditions required Quality control is required	Need for second major work phase Less herbicide used & very low risk of herbicide drift Reduced soil disturbance
Extraction of root ball/ or entire plant <i>Machine mounted bucket/fork</i>	Entire root ball must be extracted Quality control required	Requires site to be accessible Potential damage to mature trees & their roots High soil disturbance. Risk of erosion & run off
Cut plants and grub out stumps	Entire root ball must be extracted Quality control is required; some herbicide use may be necessary	Very labour intensive Moderate soil disturbance



### **5.1.2 Brash Management**

There are several options available for the managing of brash (woody debris) generated during Cherry laurel management. The creation of “wood piles” within open areas can be valuable as invertebrate and bird habitats. If the brash is left in situ it may need to be monitored for regrowth.

In some areas, the quantity of brash may be considered excessive, and its removal and disposal of using an appropriately licensed waste contractor would be required.

#### **Windrow/Brash Pile**

Brash may be stacked into distinct piles or windrows. This will allow for monitoring and follow up treatments if necessary. Attention must be paid to possible regrowth within the windrow.



**Table 9 Summary of Options for Brash Management (Higgins, 2008)**

<b>Brash Treatment - Dense stands</b>	<b>Advantages</b>	<b>Disadvantages</b>
Leave in situ	Less labour required during initial clearance	Inhibits access for stump/re-growth follow up
	May deter browsing animals from site	Inhibits access for seedling follow up
	Brash can act like shrub layer – bird perches, invertebrate habitat etc.	Rotting biomass may affect soil chemistry
Leave in situ, pile after several months	Faster initial clearance	May be more difficult to clear collapsed and tangled brash
	Only chainsaw labour used during initial clearance	Adds an extra work-phase to clearance programme
	Can employ unskilled labour for piling	Will disturb any wildlife that has used brash as habitat
	Acts as barrier to browsers and shelter to vegetation for duration in-situ	Fire risk
Burn green/after drying out	Removes material from site, so easy access for follow up management	Risk of air pollution
		Danger of damage to other vegetation
		Currently illegal: Waste Management & Air Pollution Acts.
Windrow/discrete piles	Leaves site relatively clear for access for follow up management	May require control of re-growth/seedlings from within/under pile
	May provide shelter to recovering vegetation and act as wildlife piles	Piles may pose fire hazard
Dead Hedging	Leaves site relatively clear for follow up management	Requires control of re-growth/seedlings from under hedge
	Excludes browsers to facilitate native vegetation recovery	Hedge may pose fire hazard and require fire break
	Act as shelter and habitat for wildlife	
Mulch	Can provide usable material (paths and gardens)	Requires access for mulcher
	Mulched stumps much less likely to re-sprout	Mulcher can be expensive
		Must then dispose of mulch/accept mulch piles
Remove from site	Leaves site clear for follow up management	Requires good access
	Firewood may provide income source to offset clearance cost	Requires labour



## 5.2 Specific Mitigation in Relation to Giant Hogweed

### 5.2.1 Precautions

This plant is part of the Third Schedule Invasive Species in S.I. 477/2011 and has been assessed as a High Impact Invasive species with an allocated score of 19. It is particularly important to consider this species in the wider environment around the greenway. As this species is growing on an adjacent site then recolonisation is likely. Thus, an understanding of the wider catchment context is necessary to determine if eradication or control efforts are likely to be successful. In some situations, eradication of all Giant Hogweed on site might not be possible due to the likelihood of re-colonisation, but infested areas accessed by staff or public must receive control measures.

The seeds of Giant Hogweed can be viable for up to 15 years and pose a real threat of further dispersal. They are easily dispersed by wind, water, animal or human influence. On average 10,000 – 20,000 seeds are dispersed from each Giant Hogweed plant. The majority of seeds fall close to the main plant and therefore it is a successful invasive plant due to its prolific seed bank and its ability to disperse seeds easily. Humans can influence seed dispersal on the treads of footwear, on clothing, by moving soil containing seeds and by vehicle transport including seeds that may be stuck to tyres.

Giant Hogweed sap contains a chemical, which in the presence of sunlight causes a painful and potentially dangerous skin reaction in almost everyone who comes into contact with it, resulting in burning, itching and blistering. The lesions are slow to heal, and any consequent scarring may persist for at least 6 years. The reaction can occur by individuals accidentally brushing past leaves and can be especially acute in children. For this reason, it is considered to be a serious and significant danger to public health. For this reason, it is particularly important that public access to any locations containing Giant hogweed, or its seed is prevented.

Giant Hogweed is currently under treatment in areas adjacent to the greenway and surrounding areas must be considered to be contaminated with Giant hogweed seed therefore, biosecurity measures (see section 6) including designated washdown areas, site access and egress must be strictly enforced in all work areas. These precautions should be



enforced during the site preparation phase, as well as during the construction phase and should follow the protocols described in Section 6.

Once construction works have been completed, annual monitoring of the site for the presence of Giant hogweed seedlings and/or more mature plants should be carried out. If Giant hogweed plants are found onsite or adjacent to the site, liaison with other project leaders in the area should take place. A treatment programme should be implemented immediately using an experienced reputable eradication specialist. A record should be kept of any treatments or site monitoring carried out.

### 5.2.2 Soil Removal Options

This section relates to any soil removal from the greenway outside of the Druids Glen woodland section. As areas of the greenway adjacent to Giant Hogweed must be considered contaminated with Giant Hogweed seeds, any soil removal must be under strict biosecurity measures (see section 6).

- The soil may be stored within the site at a height **no more than 750mm**, where it can be treated over a number of years or
- may be buried at least one metre below ground level in an area where it is not likely to be disturbed.
- Records should be kept of the quantity of material that has buried and a map showing the location of the burial pit and its depth.
- Use signs to mark the burial pit and keep heavy tracked machinery off the area.
- Subject to a site engineer review it should not be buried deeply within 7 metres of an adjacent landowner's site.
- Precautions must be taken that deep burial does not interfere with the ground water level.
- It is advisable to fence off stands of Giant Hogweed, including a 4m buffer zone and put-up warning notices.
- Buried soil and plant material must only have been treated with glyphosate type herbicide as herbicide that does not break down in the environment could cause groundwater pollution.



- Soil contaminated with Giant hogweed seed or other plant material cannot be removed off site except under licence issued by National Parks and Wildlife.

### 5.2.3 Eradication and control

The following procedure is currently underway adjacent to the site.

The application of herbicides over several years, prior to seed set, has been proven effective for both control and eradication. It is important to again remember that the seeds of this plant can remain viable for 7 years (possibly up to 15) although most will become unviable after just 2 years. Once a plant has produced seed, it should be assumed that the seeds will be present in the surrounding area for at least this length of time. Control measures will only affect those plants which have already germinated, and viable seed may continue to germinate each year until the seed bank is exhausted. Eradication, as opposed to temporary control will therefore require annual checks to ensure that any germinating plants are controlled before they can seed. See Giant hogweed treatment schedule in Table 10.

**Table 10 Giant Hogweed Treatment/Monitoring Programme**

Treatment	Action	Time	Year
1	Monitor for new growth and take appropriate action if new plants emerge	<i>Apr - Jun</i>	1
2	Monitor for new growth and take appropriate action if new plants emerge	<i>Apr - Jun</i>	2
3	Monitor for new growth and take appropriate action if new plants emerge	<i>Apr - Jun</i>	3
4	Monitor for new growth and take appropriate action if new plants emerge	<i>Apr - Jun</i>	4
5	Monitor for new growth and take appropriate action if new plants emerge	<i>Apr - Jun</i>	5





### **5.3 Specific Mitigation in Relation to Buddleia**

Buddleia can be removed from the site following the same methods used for any trees or large shrubs as it does not possess a rhizomatic root system. It is also advised that any plant and machinery operating on site be thoroughly washed down before exiting the site to avoid the spread of this plant via seed to new locations. This should be considered during all phases, from site preparation through construction phase and ongoing in operation phase.

Please Note: Although medium-impact invasive species Buddleia was noted during the survey, as this species is not listed in the Third Schedule of S.I. 477/2011 there is no special legal requirement surrounding this species other than not to cause it to grow in the wild.



## 6. BIOSECURITY PROTOCOLS

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Persons/machinery entering or working within an area infested with an invasive alien species must take certain precautions to prevent the spread of that species.

**These guidelines must be strictly adhered to at all times.**

### 6.1 Exclusion Zones

- Exclusion zones must be clearly marked or fenced off in order to prevent accidental incursion.
- Any personnel or machinery accessing the area is entering a potentially contaminated area and as such must be subject to strict biosecurity protocols.
- Exclusion zones must also be set up to keep machinery and personnel away from any stored contaminated clay or plant material.

### 6.2 Machinery/Equipment

- All equipment and machinery to enter an exclusion zone must be thoroughly clean before entering.
- The number of machines that enter exclusion zones or come into contact with contaminated material should be kept to a minimum.
- Machinery will stick to pre-set haulage routes at all times.
- A designated wash-down area(s) lined with appropriate geo-textile will be set-up within the exclusion zone(s). A power washer and stiff bristled brushes will be made available at these locations.
- In the washdown area, all equipment and machinery must be thoroughly cleaned before exiting the exclusion zone, paying particular attention to any part of the machinery or equipment that may have come into contact with an invasive species or contaminated clay e.g. tracks/tyres, bucket, machine arm, wheel arches etc.
- All equipment and machinery must be certified as clean by the Ecological Clerk of Works (ECoW) before they are removed from the exclusion zone.
- Any material that is washed off equipment and machinery and the geo-textile used to line the wash down area will be added to the material to be removed/encapsulated/incinerated.



- Personnel are at all times to be mindful of the threat posed by the spread of Giant Hogweed and to take all possible precautions to ensure that their actions do not result in the accidental movement of contaminated material.

### **6.3 Ground Personnel**

- A toolbox talk with emphasis on biosecurity measures must be carried out prior to works by the Ecological Clerk of Works (ECoW). Further toolbox talks may be required in the case of new working constraints, new operatives or refresher talks.
- All PPE to enter an exclusion zone must be thoroughly clean before entering.
- Before leaving an infested area, individuals must thoroughly inspect their clothing, PPE, any equipment and their footwear for seeds, rhizomes, or other plant fragments that may be stuck on.
- A designated wash-down area(s) lined with appropriate geo-textile will be set-up within each exclusion zone. A bucket with soapy water, a hoof pick and a stiff bristled brush will be situated at these locations.
- In the washdown area, all PPE and equipment must be thoroughly cleaned before personnel leave the exclusion zone.
- All personnel should use a hoof pick to thoroughly clean the treads of their footwear. All footwear must be thoroughly cleaned before leaving the exclusion zone.
- All PPE, other equipment and machinery, clothing and footwear must be thoroughly cleaned with soapy water and a stiff bristled brush before leaving an infested zone.
- PPE (incl. boots) and equipment should be certified as clean by the Ecological Clerk of Works (ECoW) before they are removed from the exclusion zone.
- Any material that is washed off equipment and machinery will be added to the material to be removed/encapsulated/incinerated.
- Personnel are at all times to be mindful of the threat posed by the spread of invasive species and to take all possible precautions to ensure that their actions do not result in the accidental movement of contaminated material.

### **6.4 Haulage Routes**

- All haulage routes must be pre-defined and lined with an appropriate geotextile.



- If required to protect the integrity of the geotextile from the wheels of the trucks, a layer of sand blinding will be laid over top.
- Trucks must stick to predefined haulage routes at all times.
- Geotextiles that overlaid haulage routes can be added to the material to be removed/encapsulated/incinerated.

### **6.5 Loading of Contaminated Materials**

- When contaminated material is being loaded, particular care must be taken that a minimum of the material is dropped so as to avoid spreading Giant hogweed on- or off-site.
- Geotextile will be laid to cover all the areas where the material will pass while in the loading bucket.
- Where the truck collecting the material is parked, geotextile will extend out 2m on either side of the truck so as to ensure any spillages land on the geotextile.
- Any spillages will be cleaned up immediately and loaded onto the truck.
- With the final load, the geotextile membrane will be added to the load of material to be removed/encapsulated/incinerated.



## 7. CODES OF PRACTICE

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### Ireland

- Invasive Species Ireland Horticultural Code of Good Practice (<http://invasivespeciesireland.com/wp-content/uploads/2010/07/Horticulture-Code-Final.pdf>)
- National Roads Authority – The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads (<http://www.tii.ie/technical-services/environment/construction/Management-of-Noxious-Weeds-and-Non-Native-Invasive-Plant-Species-on-National-Road-Schemes.pdf>)
- National Biodiversity Data Centre Invasive Species (<http://www.biodiversityireland.ie/projects/invasive-species/>)
- Invasive Species Ireland Website (<http://invasivespeciesireland.com/>)
- Sligo Institute of Technology Alien Species ([http://staffweb.itsligo.ie/staff/dcotton/Alien\\_Species.html](http://staffweb.itsligo.ie/staff/dcotton/Alien_Species.html))
- Online Atlas of the British and Irish Flora (<http://www.brc.ac.uk/plantatlas/>) – *UK also*

### UK

- Department for Environment, Food and Rural Affairs Horticultural Code of Practice (<http://www.botanicgardens.ie/gspc/pdfs/defra%20code%20of%20practice.pdf>)
- GB Non-Native Species Secretariat (<http://www.nonnativespecies.org>)



## 8. ABOUT ENVIRICO

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Envirico are an Irish ecological company that specialise in invasive species monitoring and control. We tackle invasive alien species found in domestic, commercial and amenity sites in terrestrial, riparian and freshwater habitats.

Our qualifications include:

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- MSc Ecology/Microbiology
- MSc Aquatic Ecology
- PA1 – Safe use of chemicals
- PA6A – Operating hand-held pesticide equipment
- PA6AW – Operating hand-held applicators to apply pesticides near water
- PA6INJ – Operating hand-held pesticide injection equipment
- PA6MC – Operating other hand-held applicators
- Registered Professional Pesticide User of Pesticides
- SOLAS Safe Pass Certified
- CSCS Personnel
- PTS Certified
- HSE Commercial Divers
- National Powerboat Certificate (Level 2)

Our services include:

---

- Site-Specific, Best-Practice Management Plans
- Site Excavation and Management
- Chemical Control
- Post-Treatment Monitoring
- Completion Certificate
- Habitat Restoration
- LANTRA Certified Training in Biosecurity and Identification





## 9. REFERENCES

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- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures,



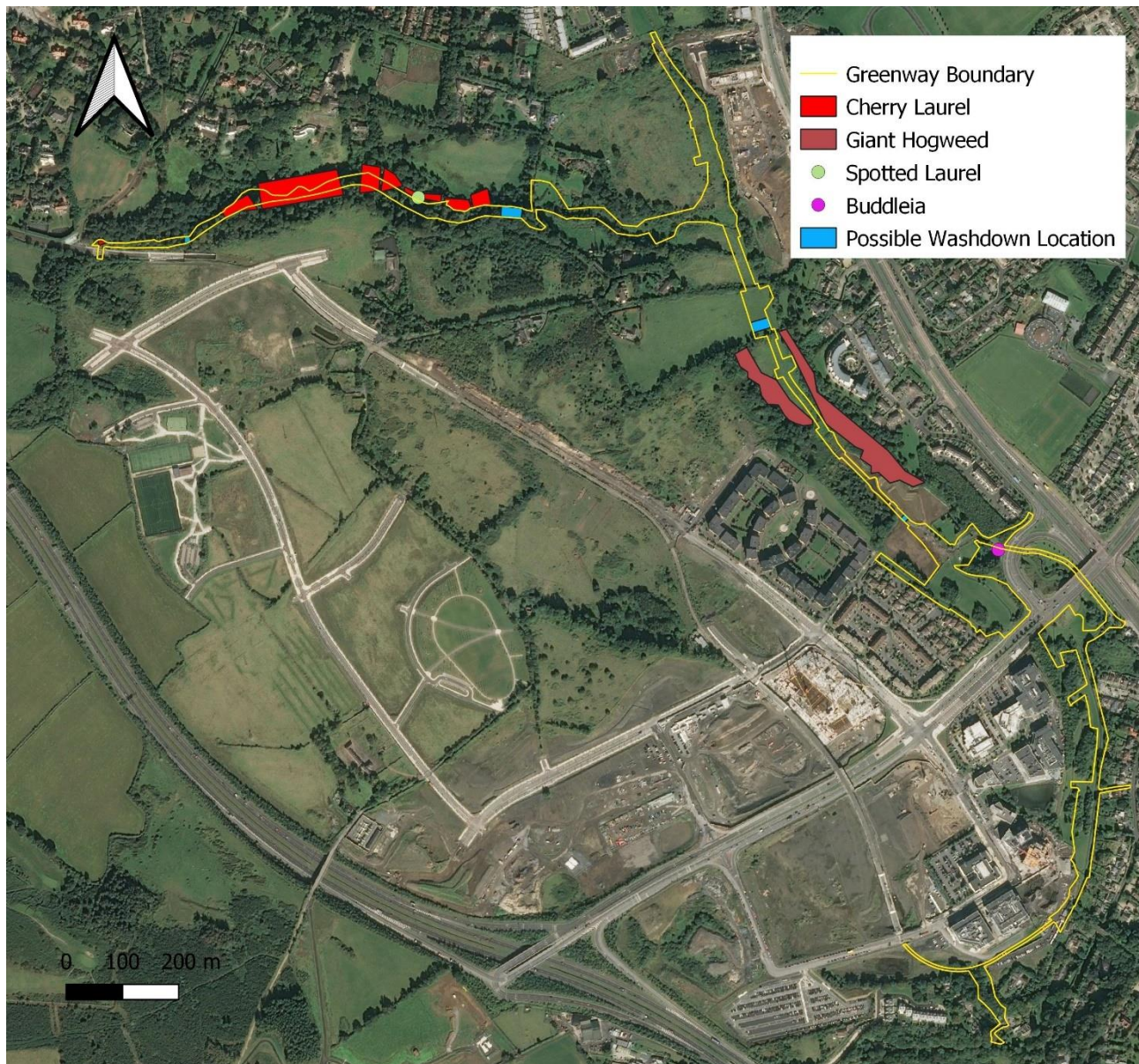
amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006



## APPENDIX I – Drawings







*Client:*

Dún Laoghaire-Rathdown Co. Co.  
2 Marine Road  
Dún laoghaire  
Co. Dublin



*Consultant:*

Envirico,  
Bonnetstown,  
Co. Kilkenny,  
R95 V2T4  
Tel: +353 56 7801277  
Email: [info@envirico.com](mailto:info@envirico.com)  
Web: [www.envirico.com](http://www.envirico.com)



*Drawing Title:*

**Drawing 1: Overview  
Cherrywood Greenway**

*Project Name:*

Cherrywood Greenway IAS

*Project Code:*

0383

*Drawn:*

NS

*Approved:*

MOC

*Date:*

20/03/2022

*Drawing Number:*

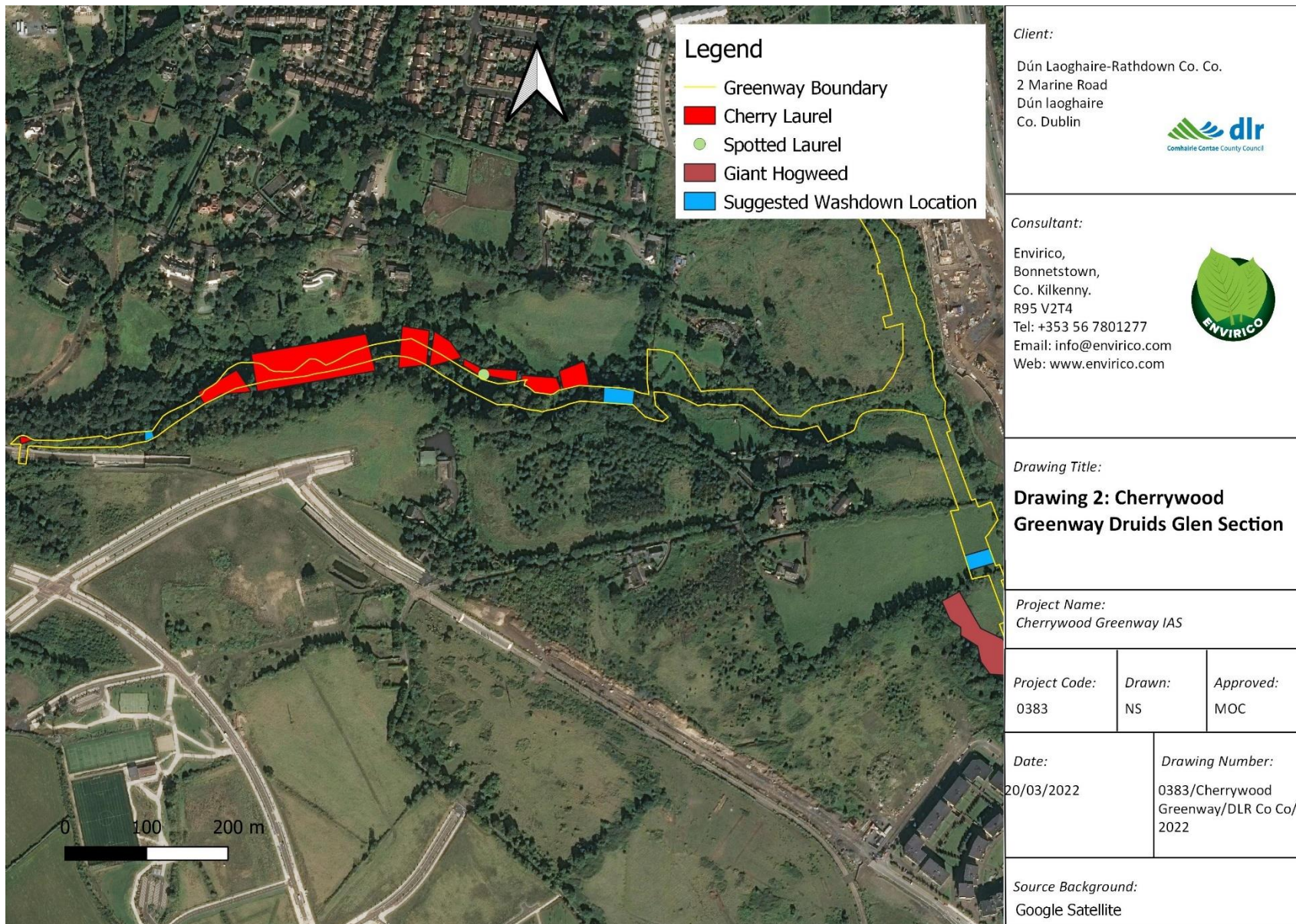
0383/Cherrywood  
Greenway/DLR Co Co/  
2022

*Source Background:*

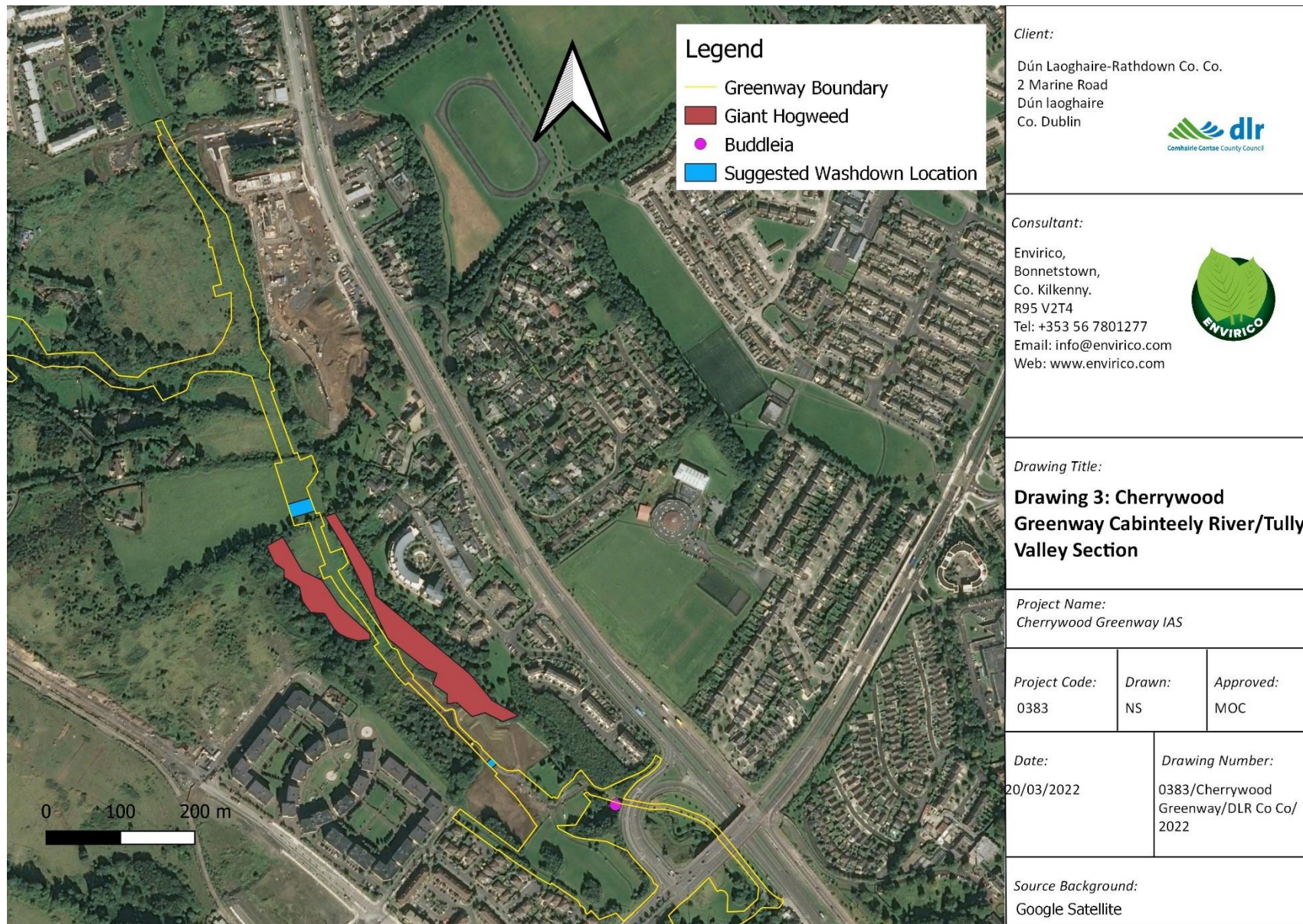
Google Satellite



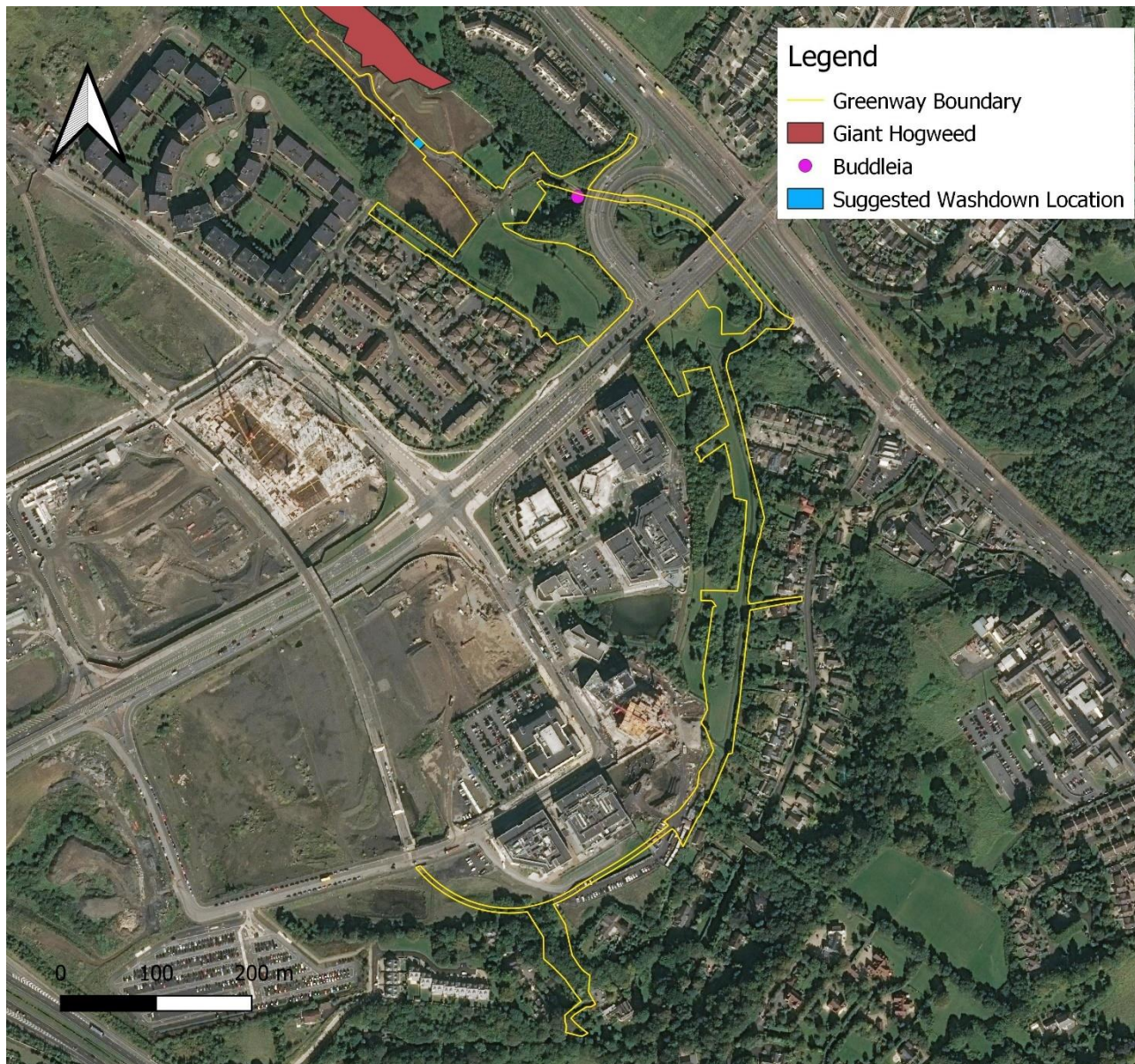












### Legend

- Greenway Boundary
- Giant Hogweed
- Buddleia
- Suggested Washdown Location

#### Client:

Dún Laoghaire-Rathdown Co. Co.  
2 Marine Road  
Dún laoghaire  
Co. Dublin



#### Consultant:

Envirico,  
Bonnetstown,  
Co. Kilkenny.  
R95 V2T4  
Tel: +353 56 7801277  
Email: [info@envirico.com](mailto:info@envirico.com)  
Web: [www.envirico.com](http://www.envirico.com)



#### Drawing Title:

### Drawing 4: Cherrywood Greenway Southern Section

#### Project Name:

Cherrywood Greenway IAS

#### Project Code:

0383

#### Drawn:

NS

#### Approved:

MOC

#### Date:

20/03/2022

#### Drawing Number:

0383/Cherrywood  
Greenway/DLR Co Co/  
2022

#### Source Background:

Google Satellite





## APPENDIX II – Photographic Record

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Image 1 Cherry laurel within the Druid's Glen Woodland

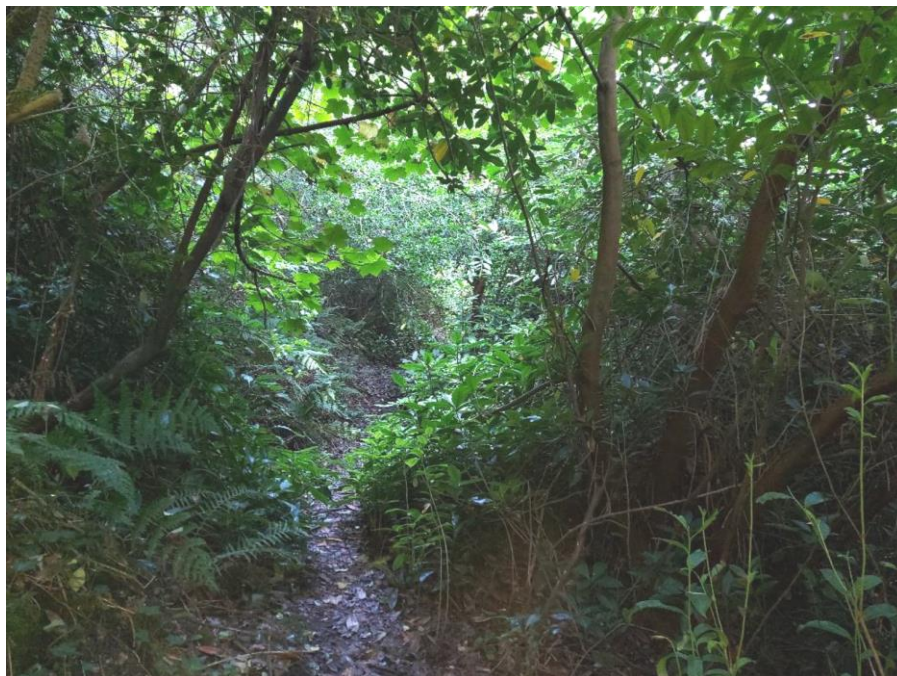


Image 2 Mature Cherry laurel within the Druid's Glen Woodland

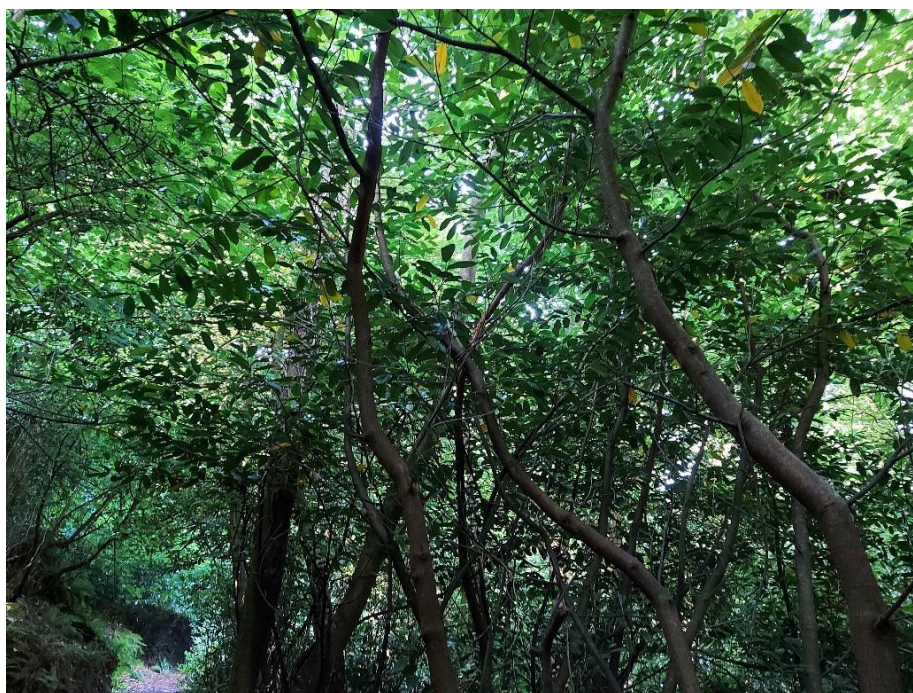




Image 3 Regrowth of Cherry laurel that has been previously managed



Image 4 Mature Cherry Laurel plant overhangs requiring removal with chainsaw





**Image 5 An old archway in the wall which is currently bricked up and is proposed to be reinstated as a permanent access point for the public at Lehaunstown road**



**Image 6 Cherry laurel adjacent to stream within the Druid's Glen Woodland requiring careful management for erosion and stream integrity**





Image 7 Previous management within the woodland



Image 8 Previous management within the woodland with regrowth





Image 9 Japanese laurel/ Spotted laurel within the woodland



Image 10 Current access point to woodland at Lehaunstown road

