

Knotweed Management Plan

Town Centre Park

City of Coquitlam

December 8, 2025

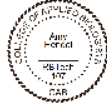


Submitted to:

Michael Teed
City of Coquitlam
Parks, Recreation, Culture & Facilities
3000 Guildford Way
Coquitlam, BC
V3B 7N2



The following Diamond Head Consulting staff prepared the report. All general and professional liability insurance and individual accreditations have been provided below for reference.



Amy Hendel, R.B.Tech.
Field Operations Manager



Fiona Steele, R.P.Bio.
Senior Biologist, Principal

Contact Information

Phone: 604-733-4886
Email: amy@diamondheadconsulting.com, fiona@diamondheadconsulting.com
Website: www.diamondheadconsulting.com

Insurance Information

WCB: # 657906 AQ (003)
General Liability: Northbridge General Insurance Corporation - Policy #CBC1935506, \$5,000,000
Errors & Omissions: Lloyds Underwriters – Policy #1010615D, \$1,000,000

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1.0 Introduction

Diamond Head Consulting Ltd. (DHC) was retained by the City of Coquitlam Parks Recreation, Culture & Facilities department to provide a Knotweed Management Plan for the excavation and off-site removal of knotweed root material and infested soil within the area being developed for new tennis courts located at Town Centre Park, Coquitlam, BC. The site was assessed on November 24, 2025, by Amy Hendel (RBTech).

The purpose of this plan is to provide appropriate knotweed management procedures for excavation and off site disposal of knotweed root material and infested soil as well as procedures for cleaning and disinfection of machinery and equipment.

2.0 Regulations and Best Management Practices

Japanese, bohemian, giant, and Himalayan knotweed are classed as Noxious Weeds within all regions of the province under the BC *Weed Control Act*. The Act places a duty on all landowners and occupiers to control provincially listed Noxious Weeds on their land and premises.

DHC has been managing and treating knotweed in the Metro Vancouver region since 2010. Our knotweed management and treatment protocol has been developed based on a combination of on-the-ground experience as well as regionally relevant information sources from the B.C. South Coast and U.S. Pacific Northwest regions. DHC follows the Best Management Practices outlined in Metro Vancouver's [BMP for Knotweed Species](#) (2024).

3.0 Background Information

Japanese knotweed (*Reynoutria japonica*) is a non-native invasive plant. It forms extensive underground root systems that can extend up to 3 meters deep and 20 meters laterally. These expansive rhizomes are much larger than expected for a plant of its size, creating significant challenges for control. It spreads primarily by rhizomes and can sprout new plants from root and stem segments. Even very small fragments of root material (as small as 0.7 grams) can sprout new plants. Buried fragments at depths greater than 1 meter have been observed to regenerate and revegetate previously cleared areas. Japanese knotweed can also form hybrid varieties with related knotweed species to produce viable wind-dispersed seed with very high germination rates. Bohemian knotweed (*Reynoutria x bohemica*) is such a hybrid and is indistinguishable from Japanese knotweed without genetic testing. Japanese and bohemian knotweed are the two most common knotweed species in Metro Vancouver.

Knotweeds can cause serious social, economic, and environmental impacts, including causing significant disruption of local ecosystems. They can tolerate a wide variety of site conditions such as high salinity, drought, high heat, or high levels of shade. In a construction and development setting, the plant can grow through a variety of barriers including landscape fabric, plastic, riprap, gravel, asphalt, building foundations, and cracks in cement. This can pose a threat to the structural integrity of buildings and infrastructure.

Chemical treatment of knotweed species is the most effective treatment option due to the extensive root system. Currently, the most effective chemical treatment method for knotweed is herbicide application by combination of stem injection and foliar application using a glyphosate-based formulation. Both methods cause translocation of the active herbicide to the root system. Stem injection has the advantage of reducing non-target effects; however, stem injection utilizes a far greater amount of herbicide per square meter than foliar application.

Chemical control methods can take up to three years to control a knotweed population. Follow-up inspections for re-growth are critical to ensure complete mortality and are required under the BC *Integrated Pest Management Act*. Re-growth has been known to occur 10 or more years beyond initial treatment.

Treatment can occur any time during the growing season, but it is best to initially target an infestation once stems are fully leafed out and before stems decaying in the fall (May to the end of October). If knotweed is growing within 10 meters of a watercourse/riparian area, the BC Provincial Integrated Pest Management Regulation provides standards for the application of herbicides in proximity to sensitive habitats and water bodies. Herbicide applicators must have a valid Applicator's License and a Pesticide Use Permit.

4.0 Site Assessment

Knotweed is present within a forested patch south of Percy Perry Stadium in Town Centre Park. The infestation is located along the edge of the forest, adjacent to the asphalt pathway, and extends into the forest interior (see Figure 1). Knotweed is scattered across an area of approximately 70 m², with the total knotweed area estimated at 50 m². The knotweed area is outlined in Figure 1.



Figure 1. Knotweed location at subject site (green polygon).



Photo 1. Knotweed area south of the asphalt pathway.



Photo 2. Dead knotweed canes with orange flagging tape.



Photo 3. Dead knotweed cane with orange flagging.

5.0 Knotweed Management Plan

The project involves the construction of new tennis courts in Town Centre Park. Construction is expected to begin in June 2026, with knotweed excavation scheduled to occur in early June. Tree removal and clearing will occur in February 2026. The knotweed areas will be excavated under the supervision of DHC. The excavated material (roots and soil) will be transported off site to a facility that accepts knotweed plant material and infested soil.

The following sub-sections detail recommended procedures for implementing this knotweed management plan and ongoing monitoring.

5.1 Tree removal and clearing

Tree removal, clearing, and stump grinding are scheduled for February, when knotweed is dormant and not actively growing. Knotweed starts to emerge in early to mid March. It is recommended that DHC conduct a site visit with the contractor before these activities to clearly identify the knotweed area and review spread prevention measures. Tree removal and clearing can be performed with minimal risk of spreading knotweed only if the following precautions and measures are strictly followed:

Key Measures/Precautions for working near knotweed:

- **Avoid soil disturbance:** The knotweed zone must remain undisturbed. Only light surface activities are permitted. Digging into the soil is strictly prohibited to prevent rhizome disturbance.
- **Stump grinding restrictions:** Grinding is permitted only above soil level and must be confined to the stump itself. Do not grind below grade or into surrounding soil where knotweed roots may exist.
- **Vegetation clearing:** Above ground vegetation within the knotweed area may be cleared during the tree removal phase (must avoid soil disturbance).
- **Grubbing schedule:** Grubbing within the knotweed area can be conducted later in spring, in coordination with excavation.

5.2 Excavation of knotweed area

Excavation requires the removal of all plant material including above ground stems and below ground roots. The BC Ministry of Transportation and Transit recommends excavating to a depth of 3 m and an area extending 20 m from the edges of the above ground growth. This represents a large soil volume and is rarely realistic due to site constraints. However, it is difficult to determine the dimensions of excavation required without seeing the roots. For this reason, excavation should be supervised by a QEP knotweed specialist to ensure as much root material is removed as realistically feasible. Excavation must be undertaken with great care as this activity has a high risk of spreading plant fragments. The knotweed infestations should not be disturbed until excavation occurs. Disturbance of the plant or roots can lead to further spread through the site.

Knotweed is scattered over a 70 m² area with a total impacted area of 50 m². Knotweed can be excavated to a depth of 1 m, possibly 1.25 m in specific areas and an area extending 2 m from the edge of the knotweed infestation. In total, the estimated volume of soil impacted by knotweed is between 100 - 125 m³.

5.3 Off site disposal

The knotweed infested soil and plant material can be disposed off site at a facility that accepts such material. To reduce the risk of plant parts, rhizomes, or seeds escaping during transport, all material must be securely tarped and strapped. Proper documentation is to be maintained identifying the facility where knotweed is disposed.

The following facilities may accept knotweed plants and/or infested soil:

- **Fraser Valley Aggregates**, 1080 Bradner Road, Abbotsford, BC. Accepts soil infested with knotweeds. This site is under permit by the City of Abbotsford.
- **Vancouver Landfill and Recycling Depot**, 5400 72nd Street, Delta, BC. Accepts knotweeds and soil for deep burial only (additional charge). **A Waste Assessment Form must be completed.**

- **Envirogreen Technologies Ltd.**, 1901 Hwy 3 Princeton, BC. **Accepts soil portion for thermal treatment, biomass must be separated and disposed of elsewhere. A Waste Approval application is required before scheduling loads.**

5.4 Spread Prevention

To avoid spread of knotweed infested soil and plant material, vehicles, machinery, and footwear should be inspected for plant material and thoroughly washed before leaving the site with attention specifically to the excavator bucket, undercarriage, and tracks. Equipment and machinery should be cleaned and disinfected by hot power washing; wash with 180 °F water at 6 gpm, 2000 psi with a contact time of ≥ 10 seconds on all surfaces to remove dirt, organic matter such as vegetation and seeds. This should be done in a contained area onsite, preferably on a hard surface away from the construction zone. Ensure water run-off does not enter storm drains, waterways or riparian areas.

5.5 Monitoring

Even though knotweed will be excavated and removed off site, the work site should continue to be monitored for knotweed throughout the construction phase. DHC should be informed about any new growth that is observed at the site after the knotweed has been removed, so they can advise regarding treatment and removal of new growth.

5.6 Limitations

This site assessment was conducted in November, when knotweed is dormant. Identification was based on visual inspection of the dead, standing canes. The area will be reassessed in spring, before excavation, to ensure all knotweed locations are accurately identified.

6.0 Concluding Remarks

If you have any questions or require clarification, please contact us at any time.

DIAMOND HEAD CONSULTING LTD.



Amy Hendel, RBTech
Field Operations Manager
604-733-4886 ext. 116
amy@diamondheadconsulting.com



Fiona Steele, RPBio
Principal, Senior Biologist
604-733-4886 ext. 113
fiona@diamondheadconsulting.com

Appendix A - Statement of Limitations

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