Salmonberry is widespread in Northern Ireland, especially in the centre and west of the province. It occurs in various habitats, but particularly associated with, and spreading from, existing hedges, scrub, or woodland.

The Wildlife and Natural Environment Act (Northern Ireland) 2011 came into law on the 17th August 2011 and added Salmonberry (Rubus spectabilis) to Schedule 9 of the Wildlife (Northern Ireland) Order 1985 (where it joins e.g. Japanese Knotweed), it is therefore an offence to plant or cause it to grow in the wild. This includes spreading it from one site to another via stem, crown fragments, and root, and rhizome (underground stem) fragments in excavated soil (= accidental dispersal through lawful activities).

Therefore if Salmonberry is located on a development site it has implications that can be involved and expensive. It is strongly advised that early identification of a Salmonberry problem is most helpful. For a developer, screening a potential development for this plant is advisable, as its presence is a reason to negotiate the land price down.

Salmonberry is a multi-stemmed shrub with the woody stems that in a mature stand reach around 3m tall. Individual stems are usually biennial. They are deciduous and the leaves fall in late-October.

In the winter it is possible to confuse poorly developed Salmonberry and well-developed Raspberries. Salmonberry is generally thornier, and mature stems often develop light russet tones but thorn development and stem colour are both very variable. In the summer, Salmonberry leaves lacking the felted under-surface and with the extra ‘thumb’ are a giveaway, and if this is not enough, either pink flowers or orange fruits will confirm.
Salmonberry is fertile in the British Isles, and though fruit production is low compared to e.g. Blackberry or Raspberry, seedling establishment is a significant factor in its dispersal. Spread of established stands is mainly by vegetative processes.

Salmonberry can sprout from stem base, root crown, root stock or from rhizomes (underground stems). These regenerative structures are capable of relatively rapid production of aerial stems. Once established, spread is through rhizome extension, above-ground creeping stems and layering of arching stems.

The rhizome network is complex and extensive. Rhizome diameters range 5-50mm and younger rhizomes can have buds every 1cm. Most are close to the surface, but they commonly extend to 30 cm and can reach depths over 100 cm. Normally the speed of spread is slow, although it exhibits a vigorous rhizome growth response to fire or mechanical removal when annual growth rates of 190 cm have been recorded. In the western USA, annual normal rates of extension up to 2.5m are reported, but in Northern Ireland, rhizomes seldom seem to extend more than 1m from an aerial stem, though in extensively managed or unmanaged, open to semi-shaded habitats, this spread can be relentless.

Seeds seem to be bird-spread, with new plants often appearing associated with isolated shrubs in the locality of well-established fruiting stands. Although most seed germination occurs during the first growing season, seeds may remain viable for ‘several years’ in its native North America, contributing to soil seed banks.

If this is also the case in Northern Ireland, then surface soil containing seeds may require special disposal measures.
Disposing of soil with Salmonberry root/rhizome/crown fragments

Soil excavated from within 2 m of a Salmonberry plant may contain rhizomes. As for Japanese Knotweed, soil containing live fragments of Salmonberry requires special provision for its disposal.

Controlled waste producers are bound by duty of care to ensure that plant material and soil contaminated with root and rhizome fragments, be either treated or disposed of correctly on site, or sent to a landfill site licensed to accept controlled waste. The site must be informed in advance that the material is soil containing live Salmonberry material, and this must be clear on the waste transfer documentation.

Within Northern Ireland, all landfill sites and transfer stations licensed to accept controlled waste can legally accept soil contaminated with Salmonberry, their capacity to deal with it varies between sites and at different times, so arrangements for disposal must be negotiated well in advance. Transport of waste from the development site to the landfill site must be by a registered carrier.

From experience with Japanese Knotweed, it is clear that off-site disposal is a very expensive option (also uses up land fill capacity). Alternative options are likely to be preferred.

Alternative Option 1 – Kill it off before excavating:

Cutting of Salmonberry encourages new and vigorous growth. Grubbing out will not kill it, and may transfer it to another site. Burning does not kill it.

A single season of weedkiller application is unlikely to suffice - even when top-killed, underground portions frequently survive and sprout again.

Triclopyr is the normal herbicide of choice to control woody shrubs, but it has been shown to be less effective at controlling Salmonberry than Glyphosate. Control at The Argory in Armagh by the National Trust is by Glyphosate which kills most stems and rhizomes, however, follow-up treatments are necessary as large numbers of shoots re-appear the following year as may new seedlings.

Alternative Option 2 Burial on site:

On many developments the interval between identifying the plant and the site preparation phase is not adequate to allow the 2 seasons of treatment required. Another option is deep burial on site (site derived disposal). There are currently no official guidelines for safe burial depth (which would be undertaken on an ‘at risk’ basis).

Burial 2m deep (or less depending upon finished surface) should suffice. This must be in an area that can be guaranteed will not be disturbed by building work or by excavation for underground services. The risk of regeneration is reduced if a root barrier membrane is spread over the buried soil (Terram would be OK). There may need to be some sort of padding, e.g. soil, concrete or pea gravel, to prevent the backfill material from damaging the membrane when it is laid.

Alternative Option 3 Stockpile on-site for subsequent treatment:

If there is space, contaminated soil can be spread and shallow buried on an annexed area of the site for subsequent treatment of regenerative growth - the maximum depth of spread infested soil must be 100cm, and this must be capped with a shallow (<50cm) layer of uncontaminated soil to contain it.

The stockpile should be fenced to prevent traffic across this area. It should be clearly levelled to prevent inadvertent use by operatives unaware of its status. Subsequent weed control treatments should continue until the Salmonberry is eliminated. Once the Salmonberry has been killed off, this soil can be re-used in landscaping, or disposed of in an ordinary fill site.

The movement of ‘site derived' waste material to another location on the same site falls outside the waste management legislation, so no licence or special dispensation is required.