

## Appendix 1: Alternative methods of weed control

Method	Description	Issues	Councils using this	Cost
Foam treatment	Application of a hot foam containing natural products	Slow, labour intensive, expensive for large-scale use.	Lewes DC, as part of a grounds maintenance contract. Fareham BC use around play equipment and a small airport but not on the public highway.	£0.200m-0.300m initial outlay, plus £0.230m annual running costs. Lewes quote cost per m2 = 66p compared to 3p for Glyphosate
Hot water treatment	Boiling water emitted from a lance.	Aims to kill roots however operators are reporting limited success, with it having little effect on broad leaf weeds and high rates of regrowth.	Hammersmith and Fulham	Hammersmith and Fulham report that 3 treatments per year are £0.200m more expensive than the equivalent treatment with Glyphosate.
Electric shock	Inserting an probe into the soil to apply an electric current to the root.	Better for ornamental flower beds but not practical on a wider scale.	Not known	Not known, but impractical to carry out on Highways weeds.
Propane / flame gun	A flame is used to burn the weed growth.	Can only be used on hard surfaces; H&S risks; banned on the domestic market.	Not known.	Not known but health and safety implications will prohibit this method.
Manual Removal	Includes hand weeding, brushing / hoeing, strimming and pressure washing	Labour intensive and often results in ripping plant at stem, encouraging a faster rate of regrowth.	Westminster Council. However, all roads are swept at least 3 times per week so weeds are less established and easier to pull.	Not known, however the size of the Borough would likely render this method impractical.
Strimming	Weeds are mechanically cut at the stem.	20+ operatives on a 6-weekly cut; substantial regrowth likely.	Unknown, however Havering is trialling this as part of its integrated approach to highways weed management.	£0.350m+ if operated Borough-wide.
Natural herbicides	Pelargonic acid (soap-based) or acetic acid (vinegar-based) can be used effectively, especially on hard surfaces on small plants.	No risk of bio-accumulation. However, unpleasant smell, less effective on larger weeds. Can corrode metal street furniture, and pose risk of burns and eye injuries where not spread in a controlled manner.	Trialled by SH Goss.	Whilst the price per litre is much lower than Glyphosate, overall it requires a much higher amount to achieve the equivalent level of dieback, The current contractor has quoted a price between £0.800m and £.900m per annum.