Weed Control	
Committee name	Residents' Services Select Committee
Officer reporting	Stuart Hunt – Head of Green Spaces
Papers with report	Appendix A – Cardiff Council Weed Control Trial 2021 Appendix B - Approval Extension for Glyphosate
Ward	All

HEADLINES

The purpose of this report is to provide Members of the Select Committee with an update on our recent and future Boroughwide Hard Surface Weed Control

RECOMMENDATIONS

To note the contents of this report and the update on weed control measures going forward for the next 12 months.

INFORMATION ON SUMMER 2023 WEED CONTROL

Following on from issues with performance during the 2nd application, the term contractor made significant changes to the organisational structure of the business. Machinery issues were also highlighted, and changes made to ensure that machinery was available. We have since audited the Borough and are now happy with results following the completion of 3rd application. We are confident that Complete Weed Control will continue to provide the expected standard when commencing the 1st application in April of this year.

SUPPORTING INFORMATION

Glyphosate has been fully tested and approved to be used as specified and as such is not a risk to human and animal health. The chemical has undergone a thorough review in Europe and been re-approved for use in amenity situations as a safe chemical. This review, conducted by the Expert committee of scientists in Europe and approved by a vote of member states, considered some concerns expressed about the active ingredient possibly having carcinogenic effects. Based on all the science and evidence available, it was concluded that these were unfounded, and it was safe to use. This has been our stance when asked.

Glyphosate is currently approved for use until December 2025, so further testing and assessment will be conducted to see if this period is extended. As this is not far away it is prudent to look at alternatives in the event that our use of glyphosate is further controlled within public spaces or removed altogether, as a result of public opinion rather than based on pure science.

We have looked at alternatives, which are currently on the market, one of these is the use of hot foam. The outcome was to review and seek learnings from others rather than funding the outlay for our own trials. A review and trial carried out in Cardiff* has found that these have been proven

to be very labour intensive, use a great deal of fuel, emit high levels of C02 in heating the water and are very expensive, therefore are not an appropriate replacement for chemical control.

*The research found that:

- Across 18 different environmental impact categories, hot foam had the highest impact in all but one category, with the environmental impact of glyphosate being lowest in all but two categories.
- Total product usage per season km was lowest, at 1.05 litres for glyphosate, compared to 16.25 litres of acetic acid (16 times more herbicide), and 22.9 litres of hot foam (22 times more than glyphosate).
- Hot foam required 2671 litres of water per kilometre 65 times more water than glyphosate, which required 41 litres per season kilometre. Acetic acid required 33.75 litres per kilometre.
- Applying glyphosate used less fuel just 0.18 litres of diesel per km treated, compared to 0.19 litres for acetic acid, and 12.33 litres of diesel, plus 2.13 litres of petrol for hot foam that's 63 times more diesel and 100% more petrol than required for glyphosate.
- It took 0.16 hours of labour to treat one kilometre with glyphosate, compared to 0.23 hours for acetic acid, and 4.89 hours for hot foam.
- Glyphosate was also the product that worked best generating only four complaints, compared to 22 for acetic acid, and 29 for hot foam.

The Amenity Forum* have been developing an integrated approach in how we address the issue of weeds on hard surfaces. This work is to develop a management document, which will aid local authorities in best practice and to look at all the options before reaching for the bottle of chemical.

*The Amenity Forum is a UK Initiative which works with Government and industry promoting best practice in maintaining safe and healthy public spaces fit for purpose.

What is an integrated approach to weed management?

Integrated weed management (IWM) is the control of weeds through a long-term management approach, using several weed management techniques such as:

Toleration of weeds ("weediness") - public perception of 'attractiveness' is gradually changing, especially if such features have colour and diversity - so reviewing where and when control is required.

Designing out weed problems - use curved rather than right angles in town centre designs to aid mechanical sweeping, reduce the number of potential "traps" for silt and detritus. To consider impermeable sealed hard surfaces to prevent weed growth in joints when selecting paving.

Removal of detritus - as plants need a growing medium to survive, keeping areas well swept and clear of the build-up of organic matter will prevent weed growth and reduce the need for chemical control.

Biological control - Biological weed control aims to utilise insects, pathogens or even other plants to do the work of weed management.

Chemical methods of managing weeds chemical - are seen as the last resort but are acknowledged as a useful management tool; application needs to be targeted i.e. only treating the plants present rather than a 'blanket' application of the footpath etc.

What next for Hillingdon

Our proposal is that officers in Green Spaces work closer with colleagues in both Street Cleansing and Highways in adopting an integrated weed management programme approach for Hillingdon. This will have the desired affect for Hillingdon to reduce further the requirement in chemicals for the control of weeds on its pavements etc.

Our current contractor uses the most recent innovations in 'artificial intelligence' equipment '**WEED it**' to apply the chemicals, only treating the weeds rather than a 'blanket application' approach. This is achieved with equipment that picks up the chlorophyll (green pigment) in the plant and only targets this with its application of chemical, therefore only treating the weed and not the whole environment.

WEED it

WEEDit technology, exclusive to Complete Weed Control, is a computer-controlled herbicide application system specifically designed for use on footpaths and other hard surfaces. The system consists of a shrouded spraying head mounted on the front of the carrier vehicle. The shrouded head contains sensor units and spray nozzles.

The sensor units detect the presence of weeds and trigger the appropriate spray nozzles to apply accurately the correct amount of herbicide to the weeds. This technology results in high levels of weed control, with greatly reduced herbicide input.

WEEDit, with its unique optic sensors, launched by Complete Weed Control in 1997, has become the most environmentally efficient method of weed control, with a typical herbicide reduction of up to 80%. Many local authorities have not only been able to achieve their environmental objectives of reducing glyphosate use but have seen improvements in their overall weed control programmes.

Cited as a "major advance in the field of weed control", WEEDit uses infrared technology to intelligently detect and automatically spot-treat weeds resulting in:

- Vastly reduced (up to 80%) herbicide usage
- Minimised off-target spray drift
- Increased operator productivity
- Reduced number of complaints by the public
- Enables local authorities to meet the objectives of their environmental policies

Since its introduction, WEEDit technology has been used to treat hundreds of thousands of kilometres of street pavements nationwide whilst using only a fraction of the herbicide compared to traditional application methods. This has enabled local authorities to meet – and surpass – the objectives of their environmental and social policies.

Example of a Schedule of Application

Weed treatment is extremely weather dependent. When weather is particularly bad (wet and windy weather), this will cause delays.

It takes 7 to 10 days for weeds to die back once treated.

Ward	ESTIMATED HIGHWAYS	ACTUAL START DATE	COMPLETION DATE	ESTIMATES ESTATES	ACTUAL START DATE	COMPLETION DATE
	Start date	HIGHWAYS	HIGHWAYS	START DATE	ESTATES	ESTATES
Heathrow Villages	20th April			20th April		
West Drayton	24th April			22nd April		
Pinkwell	26th April			25th April		
Yiewsley	28th April			28th April		
Hayes Town	2nd May			3rd May		
Wood End	4th May			5th May		
Uxbridge	9th May			10th May		
Colham/ Cowley	11th May			15th May		
Charville	15th May			18th May		
Belmore	18th May			22nd May		
Yeading	24th May			25th May		
Hillingdon West	25th May			30th May		
Hillingdon East	30th May			23rd May		
Ickenham/ S Harefield	26th May			19th May		
South Ruislip	23rd May			16th May		
Harefield Village	19th May			12th May		
Ruislip	16th May			9th May		
Ruislip Manor	10th May			4th May		
Eastcote	5th May			2nd May		
Northwood	3rd May			27th April		
Northwood Hills	2nd May			21st April		

The schedule will be published and updated on the Council web site throughout the three applications

Financial Implications

None at this stage.

Legal Implications

None at this stage.

BACKGROUND PAPERS

Nil.