



The Land Repair Helix

Site plan: Council park or estate

Site name: _____ Date: _____ Prepared by: _____

Compacted, tired soil → Feed the soil life (Soil)

Compacted soil with little organic matter holds less water, drains badly, and needs more fertiliser to grow anything.

- ☐ £ Stop heavy machinery and livestock on wet ground
- ☐ £ Add compost, farmyard manure or digestate to build organic matter
- ☐ ££ Sow deep-rooting cover crops or herbal leys (chicory, plantain) to break up compaction
- ☐ ££ Cut down on ploughing; direct drilling where it suits the soil

NI: Soil sampling is often supported through DAERA schemes. Check what's open before paying for testing.

Heavy artificial fertiliser use → Let plants make the nitrogen (Soil)

Bagged nitrogen is costly and energy-intensive to make, gives off nitrous oxide, and runs off into water.

- ☐ £ Test soil first: correct the pH with lime before adding nutrients
- ☐ £ Plan nutrients from the analysis: put slurry and digestate where the crop needs them
- ☐ ££ Sow clover into grassland; legumes fix nitrogen from the air
- ☐ ££ Use low-emission slurry spreading to keep more nitrogen in the soil

NI: Under the Nutrients Action Programme, apply nutrients only where the crop needs them, and respect the closed periods and buffer distances from waterways.

Flooding and fast runoff → Slow the flow (Water)

Hard surfaces and drained land send water downstream fast, causing floods and washing pollution off the land.

- ☐ £ Break up hard surfaces with gravel, grass-crete or permeable paving
- ☐ ££ Dig swales, rain gardens and small ponds to hold water back
- ☐ ££ Install leaky dams of logs or brash in ditches and small streams
- ☐ £££ Add sustainable drainage (SuDS) when sites are redeveloped

NI: Work in or near a watercourse may need consent from DfI Rivers. Check before building dams or culverts.

Dries out in summer → Hold water in (Water)

Dry soil cracks and stalls growth; plants and wildlife suffer in heatwaves.

- ☐ £ Build soil organic matter; healthier soil holds far more water
- ☐ £ Mulch beds and leave cut vegetation to protect the soil surface
- ☐ ££ Harvest rainwater from roofs into tanks for washing or irrigation
- ☐ ££ Restore ponds and wet hollows

NI: Taking more than a small amount of water from a river, lough or borehole may need an NIEA abstraction licence.

Blue-green algae (cyanobacteria) blooms → Starve the bloom of phosphorus (Water)

Too much phosphorus and nitrogen, plus warm still water, feeds toxic cyanobacteria. Lough Neagh is the clearest NI example.

- ☐ £ Test soil phosphorus and stop applying where the index is already high
- ☐ £ Fence livestock out of streams and provide drinking troughs
- ☐ £ Get septic tanks emptied and checked
- ☐ ££ Leave wide, ungrazed buffer strips of grass and trees along watercourses
- ☐ £££ Build constructed wetlands or reedbeds to catch nutrients from yards and drains

NI: Keep slurry and fertiliser off land next to waterways, and inside the buffer distances, especially in winter and before forecast rain.

Take care: Don't touch bloom scums, and keep dogs out of the water. Cyanobacteria can be toxic.

Metals in the soil (lead, zinc, copper) → Lock them in, or let plants lift them (Contamination)

Old industry, made ground, and lead from paint or fuel can leave metals that harm people, especially children, and wildlife.

- ☐ £ Test before growing food or creating play areas
- ☐ £ Keep a clean cover: a capping layer of clean soil or a membrane
- ☐ ££ Phytostabilisation: willows and grasses hold metals in place and stop dust
- ☐ ££ Phytoextraction: plants such as Indian mustard take up some metals. It's slow and the harvested plants need proper disposal
- ☐ £££ Remove the hotspots by excavation, under a remediation strategy

NI: NI's contaminated land regime (Part III) isn't in force, so land contamination is dealt with through planning, using LCRM.

Take care: Phytoremediation is slow and only partial. Use it as part of a plan agreed with the planning authority and environmental health, not on its own.

Mown-to-the-ground verges → Cut less, collect the cuttings (Rewilding)

Frequent mowing and leaving cuttings on the ground feeds coarse grass and kills wildflowers.

- ☐ £ Cut once or twice a year, in late summer, and remove the cuttings
- ☐ £ Leave strips or patches uncut over winter for insects
- ☐ £ Sow yellow rattle to weaken vigorous grasses
- ☐ ££ Use local-provenance wildflower seed, or let the seed bank recover by itself

NI: Many NI councils take part in 'Don't Mow, Let It Grow'. Keep visibility strips mown at junctions for road safety.

Gappy, flailed hedgerows → Lay, gap up and let them grow (Rewilding)

Hedges cut hard every year flower little, give poor shelter and slowly die out at the base.

- ☐ £ Cut in rotation every 2 to 3 years, in winter, never during the closed period
- ☐ £ Let some hedgerow trees grow up
- ☐ ££ Plant gaps with native hawthorn, blackthorn, hazel and holly
- ☐ ££ Lay overgrown hedges to thicken them at the base

NI: In NI, hedge cutting is not allowed from 1 March to 31 August, except for clear road-safety reasons.

Few pollinators → Flowers from spring to autumn (Rewilding)

Bees and hoverflies need food from March to October, and nesting spots.

- ☐ £ Leave dandelions and clover in amenity grass
- ☐ £ Plant spring-flowering willow, hawthorn and blackthorn, and late-flowering ivy
- ☐ £ Leave bare south-facing banks for mining bees
- ☐ £ Cut pesticide use

NI: The All-Ireland Pollinator Plan has free guides for farms, councils, businesses and schools.

Drained or damaged peat → Rewet and protect (Air and carbon)

Drained peat releases carbon dioxide year after year. Intact wet bog stores carbon and water.

- ☐ £ Never use peat-based compost or peat as a sorbent
- ☐ ££ Block drains on peat to raise the water table
- ☐ ££ Avoid planting trees on deep peat

NI: NI's peatland strategy aims to protect and restore bogs.

Trees in the wrong place → Right tree, right place (Air and carbon)

Trees planted on species-rich grassland, peat or nesting habitat can do more harm than good.

- ☐ £ Plant native broadleaves along watercourses for shade; cooler water helps reduce algal blooms
- ☐ £ Plant hedgerow trees and shelterbelts rather than blocks on good habitat
- ☐ ££ Let woodland regenerate naturally where there are seed sources

NI: Check for priority habitat and protected sites before planting.

Invasive plants spreading → Catch them early, treat properly (Rewilding)

Japanese knotweed, Himalayan balsam and rhododendron crowd out native plants, damage structures and spread along rivers and roads.

- ☐ £ Learn to recognise them and map where they are
- ☐ £ Pull Himalayan balsam before it sets seed (June to July), and repeat each year
- ☐ ££ Treat knotweed with a specialist herbicide programme over several seasons
- ☐ £££ Excavate knotweed where development needs it, under a management plan

NI: It's an offence in NI to plant certain invasive species, or cause them to grow, in the wild. Knotweed waste is controlled waste and must go to an authorised site.

Take care: Never strim or flail knotweed: tiny fragments regrow.

Litter and fly-tipping → Design it out, report it fast (Rewilding)

Litter and dumped waste blight places, harm wildlife and signal neglect, which draws more dumping.

- ☐ £ Report fly-tipping to the council quickly; most NI councils take reports online
- ☐ £ Organise or support community clean-ups, such as Live Here Love Here
- ☐ ££ Fix lighting, fencing and sightlines at dumping hotspots
- ☐ ££ Use a registered waste carrier and keep transfer notes: your duty of care doesn't end at the gate

NI: Councils enforce litter and fly-tipping law, and NIEA deals with larger illegal waste sites.

Take care: Don't move dumped waste that may be hazardous, such as asbestos or drums. Report it instead.

Misconnected drains → Right pipe, right place (Water)

Washing machines, sinks or yard drains plumbed into surface water drains send dirty water straight to rivers.

- ☐ £ Check where every drain on your site goes: surface water or foul sewer
- ☐ £ Dye-test suspect connections
- ☐ ££ Reconnect misconnected appliances to the foul sewer
- ☐ ££ Fit oil interceptors on yard drains where vehicles park or refuel

NI: Discharging trade effluent to the foul sewer needs NI Water consent. Polluting a waterway is an offence.

Light pollution → Light only what you need (Rewilding)

Unnecessary night lighting disrupts bats, insects and birds, and wastes energy.

- ☐ £ Switch off or dim lights when they aren't needed; use timers and motion sensors
- ☐ £ Point lights down and shield them; avoid lighting hedges, trees and water
- ☐ ££ Use warm-white LEDs (3000 K or lower)

NI: New lighting can need planning permission, and excessive artificial light can be a statutory nuisance.

Take care: Keep safety lighting where people need it.

Low soil carbon → Build carbon back in (Soil)

Soils low in carbon hold less water and fewer nutrients, and lose their structure.

- ☐ £ Keep the soil covered and growing for as much of the year as possible
- ☐ ££ Add compost and well-made digestate
- ☐ ££ Trial biochar from clean wood waste, mixed with compost
- ☐ ££ Turn some arable ground into grassland or herbal leys

NI: Spreading biochar on land may need a waste exemption or permit, depending on what it's made from.

Take care: Biochar quality varies. Buy certified material and don't expect results in one season.

Important. For contaminated land, forever chemicals (PFAS) or any spill reaching a drain, watercourse or groundwater, get specialist advice and involve the regulator. In NI, report pollution to the NIEA Incident Hotline on **0800 80 70 60** (24 hours). Contaminated-land remediation normally goes through planning, using the Land Contamination: Risk Management (LCRM) framework.

Sources. DAERA and CAFRE guidance on the Nutrients Action Programme and the hedge-cutting closed period (1 March to 31 August); NIEA incident reporting (nidirect); LCRM (Environment Agency, used by NIEA); UK and EU work on PFAS (Defra PFAS Plan 2026, ECHA); the All-Ireland Pollinator Plan; the "Don't Mow, Let It Grow" initiative run by NI councils and partners.

Position at 16 October 2026. For information, not legal or engineering advice. Robert J. Park · [linkedin.com/in/robertparkuk](https://www.linkedin.com/in/robertparkuk) · WhatsApp @robertjpark