

Coton In the Elms, Pessall Brook Restoration Project.

**Information for South Derbyshire District Council
and Coton Parish Council regarding management.**

Trent Rivers Trust

August 2023.

Dear SDDC/CPC,

Trent Rivers Trust will supply the management plan for the Coton Brook restoration works before Christmas 2023, date chosen to ensure a full season of establishment and management has taken place so we fully understand the requirements before handing management over. The plan will outline the management requirements moving forward after works completion in September 2022 and one year of establishment. This can be considered a working document for the next year or 2; as the site develops, more management takes place and more issues arise, Trent Rivers Trust are available to make further changes to the document upon consultation with both landowners, South Derbyshire District Council (SDDC), and Coton in the Elms Parish Council (CPC).

Up to now the vegetation has been allowed to establish and grow relatively unmanaged to encourage root development of the plant species to secure the banks. It is through a strong root structure to stabilise the banks that the design of the project has been based on, as a nature based solution to the issue of bank slumping and degradation of previous bank supports. The management plan is based around maintaining this good root structure, creating benefits for wildlife and river habitat, whilst keeping the amenity use of the village green.

Trent Rivers Trust intend to undertake the following work up to the end of spring 2024 before management responsibility is officially handed over to the landowners; the two landowners SDDC and CPC:

Management

- Mowing of the grass and wildflower banks in September 2023 – cuttings will be left for 3 days to allow seeds to drop before being removed. Currently scheduled for 11th September but exact date subject to change as good weather is needed on day of cutting and for the 3 days after. This will be the first of annual cuttings. Pre works checks will be undertaken to prevent disturbance to bank voles, amphibians, birds and pollinators.
- Thinning out the in channel vegetation which is covering the channel – cuttings will be left on the bank adjacent to the channel for 3 days to allow any fish or invertebrates to get back into the water before removal. This work will take place at the same time as the grass cutting mentioned above. Little management of these plants have been able to be undertaken up to now, firstly to encourage plant root growth, and secondly to prevent disturbance to the fish in the channel that breed between March and June and rely on the vegetation for shelter, shade and egg laying. Moving forward these plants can be managed once a month outside of the fish breeding period with designated access areas to be identified on the brook which can be kept clear of vegetation at all times.
- Localised spraying of the areas infected with bindweed where needed – including obtaining the associated permissions from the EA and undertaking risk assessments. This method is only ever applied as a last resort, where other management options have been employed but are unsuccessful.
- Liaison with resident who needs to trim laurel hedge after strimming has taken place.

Registered Office:
The Old Police Station
Wharcliffe Road,
Ilkeston
Derbyshire DE7 5GF

e: enquiries@trentrivertrust.org
w: www.trentrivertrust.org

- Further seed sowing and plug planting as follows:
 - liaising with Coton Parish Council regarding their £200 contribution towards plug planting
 - Arranging and funding further plug planting and seeding of the bare areas on the banks
 - Planting shade tolerant flowers at the downstream / SDDC owned end under the weeping willows and on far bank
 - Weeding and re-seeding the strip alongside Mill Street with grass as this has been taken over by unwanted weed species. This area will then be incorporated into the increased management amenity area to keep weeds at bay.
- Continued site visits to monitor the establishment and identify any further issues
- Continued liaison and guidance regarding handing over the management.

Monitoring

The following surveys were undertaken pre works as a baseline and will be repeated annually by Trent Rivers Trust or contractors, to monitor the improvements to the site:

- **Aquatic invertebrates** – first post works survey scheduled for 31st August 2023. Aquatic invertebrate communities, like freshwater shrimp and mayfly larvae, are indicators of river health and water quality; the presence or absence or quantities of certain species can inform us whether there is good water quality and good river habitat as certain species will only survive in certain conditions. Undertaking this monitoring once or twice a year over time can allow to assess the improvements to the watercourse as a result of restoration work
- **Fixed point photography** – Having photographic records from a fixed spot over time allow visual record and assessment of changes to river condition and vegetation communities
- **River morphology survey** – An assessment of the physical structure of the river and its margins using an established scoring system to measure river condition.
- **Pollinator surveys** – Not yet undertaken as habitat needed to establish first but will occur annually from summer 2024. Counts of pollinators utilising the wildflowers to assess the health of the habitat for pollinator species such as bees, hoverflies, birds and butterflies. There are several citizen science methods that can be used, and training can be given to any interested residents on how they can undertake these surveys to build the evidence base on these benefits for the village.

If there are local residents interested in volunteering their time to help manage the brook – undertake monitoring, weeding, surveys - this would be hugely beneficial to the project and to the brook. Full training and supervision can be given and equipment can be supplied by Trent Rivers Trust.

Trent Rivers Trust are available to advise and answer any concerns or questions during the handover process and after handover has taken place.

Kind Regards

Emma Smail, Landscape Recovery Manager, Trent Rivers Trust

Please contact Amy Wheelton if further information is required before issue of the management plan **Tel: 07973 909 509 email: amy.wheelton@southderbyshire.gov.uk**