# Black Country Blue Network 2

Project Reference: 01R19P03582 ERDF Assessment- Final Report – Appendix 1, Review of Sub Projects.

Report to Wolverhampton City Council and the BCBN 2 Partnership. June 2023.



Dredged lake at Fowlers Park with improved paths and access – Neil Wyatt.

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**European Union** 

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# **Appendix 1 – Review of Sub-Projects.**

The practical delivery of Black Country Blue Network 2 has been delivered through a series of 'subprojects'. Each section below covers the works carried out for each of the sub-projects. Unless otherwise noted, projects were carried out by each area's local authority.

Details are given of site visits to review the baseline condition of each site, and the works undertaken. The sites (grouped by delivery partner) are:

## Wolverhampton City Council

- Ward Street Cutting the only sub-project contributing to the remediation output.
- Fowler's Open Space.
- Pendeford Park Open Spaces (Blaydon Road).

## **Dudley Metropolitan Borough Council**

- Coseley Open Spaces including Cannon Drive and Clayton Parks.
- Sedgley Beacon.
- Castle Hill Woodland and Peggy's Meadow.
- Holloway Street Open Space.
- Turls Hill and Swanbrook Valley.

## Severn Rivers Trust

• Cradley and Bells Mill as part of Salmon in the Stour (Severn Rivers Trust project).

## Walsall Metropolitan Borough Council

- Victoria Park.
- Kings Hill Park.
- George Rose Park.
- Moorcroft Wood.
- Walsall Canal in Darlaston.

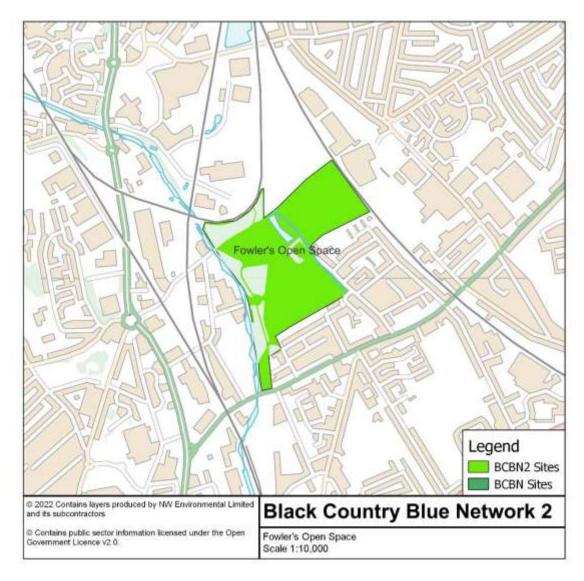
## **Canal and River Trust**

Coseley Canal



# Fowler's Open Space.

Fowlers Open Space, also known as Fowlers Park, is an area of greenspace adjacent to the canal north of Wolverhampton City Centre.



## **Original Proposal**

The project has improved 8 hectares through:

- Woodland management including tree thinning and underplanting of native species to improve the variety of habitat and increase the diversity of wildlife. Additional woodland planting involving the introduction of a selection of native trees, attracting a variety of insects vital to the first stages of the wildlife food-chain.
- Wildflower meadows replacing areas of poorly used mown grassland with a species mix to attract a variety of insects and improve diversity of wildlife.
- Wetland the site has a lake created 30 years ago where the coverage of water-lilies has expended so that daylight entering the water is severely limited threatening the health of



aquatic species of flora and fauna. The project dredged the lake and reduced the coverage of water lilies to rebalance the health of the lake.

Visitors to the park benefit with access signage and visibility improvements alongside the canal encouraging walkers and cyclists to visit the park. Increased use of the canal coupled with thinning out of dense woodland areas improves the perception of safety and encourages more usage by members of the local community. Disability friendly improvements to access points around the park, as requested in the consultation, encourage more usage from the local community.

## Work in progress

The site was visited on 26 November 2021. The weather was dull and overcast but dry.

Work had already commenced on the dredging of the pools. The need for dredging was clear with much of the pool still heavily clogged with mud. Dredged material was being moved to an area of low-grade grassland on adjacent land. The woodland where thinning is proposed was extremely dense plantation twenty to thirty years old and in need of thinning works. This will clearly benefit from management. The areas where meadow improvements are proposed are clearly amenity grassland of low ecological value at present.



Figure 1 - Dredging in progress and condition of woodland before thinning



Figure 2 - Amenity grassland before meadow creation works.



## **Post-Completion**

A second visit was made in April 2023, accompanied by the Project Manager and a representative of DLUHC. The weather was clear and fair.



*Figure 3 - The pool roughly eighteen months after dredging was completed.* 



Figure 4 - Another view of the pool.



Figure 5 - The new meadow area (not flowers not visible at this time of year).





*Figure 6 - Works to improve access included resurfaced paths and new steps.* 

#### **Baseline Assessment**

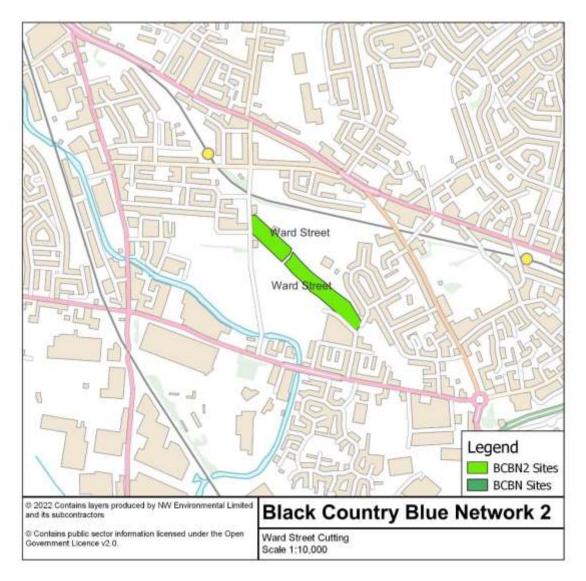
Dredging of the pond restored a considerable extent of open water, improving the habitat for many species. The grassland will be greatly increased in diversity, and the woodland will benefit greatly from thinning. The proposed works are appropriate for the site, and likely to bring significant benefits to its habitats and biodiversity. Bat and bird boxes that had been donated by a local firm were located within woodland.

The new access path, timber retaining wall and steps on the West side of the pond have improved access to the site for the local community.



# Ward Street Cutting.

Ward Street Cutting comprises 4.12 hectares in Ettingshall, west of Bilston Town Centre in Wolverhampton. This site has been closed off to the public for a few years whilst the developer filled the railway cutting as part of the neighbouring housing development. Hence, this project is for remediation of the cutting rather than improvement of existing habitats.



## **Original Proposal**

The project has reopened the site as a public open space with paths and seating as well as landscaping, benefiting local residents and visitors by improving access to green space and wildlife.

A total area of 4.12ha was remediated through:

• Creation of grassland and meadows attracting a variety of insects and improving biodiversity:



- Woodland creation and management improving the variety of habitat, tree, hedge and native species planting; and.
- Access improvements to and through the site and interpretation.

#### Work in progress

The site was visited on 26 November 2021. The weather was dull and overcast but dry. We were unable to access the northern part of the site due to security fencing, but we could clearly view the site, which was almost entirely bare earth, being prepared for the habitat creation works.



Figure 7 - Northern section of Ward Street Cutting, and right southern section looking north



Figure 8 - Southern section of Ward Street Cutting, looking south.

The southern part of the site was accessible, being rough grassland with some littering issues. Mature and semi-mature trees line much of the boundaries of both sections and are to retain. There was no obvious evidence of any features of nature conservation value, appearing to be a basic grass mix sown when the cutting beneath was landfilled.

A local resident expressed their frustration that the site had not been restored in the past and was pleased to hear about the proposed work.



## **Post Completion**

A second visit was made in April 2023, accompanied by the Project Manager and a representative of DLUHC. The weather was clear and fair.



Figure 9 - Typical view of the new Park with bulb planting and path.



Figure 10 - Fenced area with planting of whips and standard trees.



Figure 11 - New bench, note year cast into frame.



## Assessment

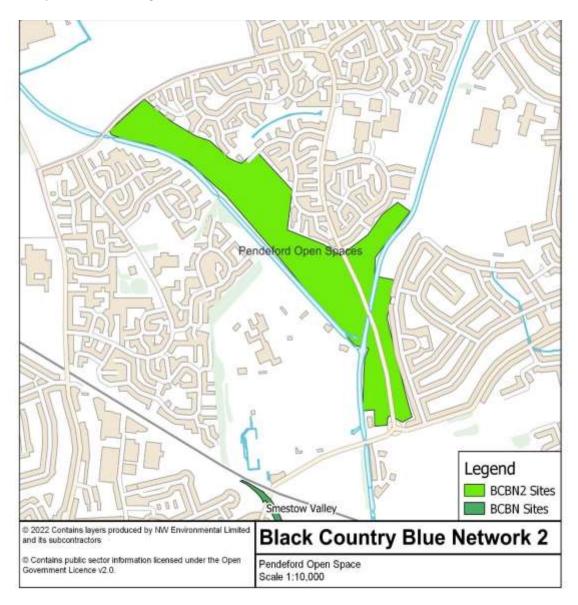
The site has benefited from remediation to create new linear habitats. These are establishing well, and the benefits will increase over coming years.

There are significant benefits to local communities from the site becoming a properly managed public open space, especially with much new housing already in place and under construction locally.



# Pendeford Park Open Spaces (Blaydon Road).

This is an area of public open spaces surrounded by residential housing development situated NNW of the city centre bordering Staffordshire.



## **Original Proposal**

The project improved 5.42 hectares through creation of 3.32 hectares of wildflower meadows, 1.1 hectares of woodland management, tree planting, 0.14 hectares daccess path improvements and 0.86 hectares of vegetation control.

Improvements include:



- Wildflower meadow creation: changing the mowing regimes to encourage the development of wildflower areas on the woodland edge. A new annual cutting regime was established over the life of the project, which involves cutting and collecting the long grass in late summer after the seeds have set.
- Woodland management: woodland management to diversify the woodland structure age classes and species diversity.
- Access path works improved the general appearance of the site and provides improved access to the areas of improved habitat.
- Installation of Bat and Bird Boxes: supports the local bat and bird populations by providing them bat and bird boxes.
- Tree planting: planting of approximately 114 trees improved the biodiversity of the site by providing a variety of habitats including woodland fringes.
- Invasive plants and trees were removed to support native species.

The project benefits the local community in several ways. The local area consists of high-density housing, the open space in this area is of poor quality, improvements to these areas can make a significant difference to people's health and wellbeing.

## Work in Progress

The site was visited on 26 January 2022.

There were several; areas where meadow enhancement is planned that had clearly been prepared by scarifying. Temporary signage was in place but did not include ERDF acknowledgement.



Figure 12 - Area prepared for meadow creation.

Work had commenced on improving access paths, with the old paths being scraped clear and prepared for the new surface.





Figure 13 - Path cleared and side boards fitted ready for resurfacing.

The woodlands proposed for management are overcrowded and in need of light thinning.



Figure 14 - Woodland in need of thinning.

## **Post-Completion**

A second visit was made in April 2023, accompanied by the Project Manager and a representative of DLUHC. The weather was clear and fair.

The capital works were all complete to a high standard. The positive impact of the biodiversity enhancements could be seen despite it being fairly early in the season.





Figure 15 - completed path (I) and Snakeshead Fritillaries in enhanced grassland.



Figure 16 - wildflowers establishing in enhanced sward.



## **Baseline Assessment**

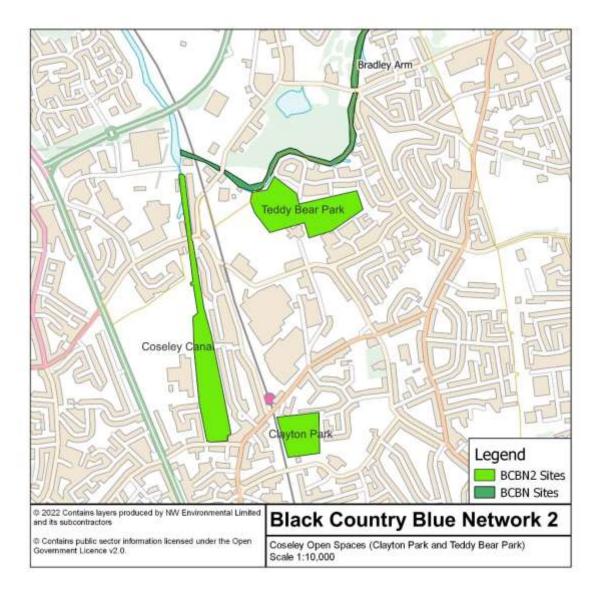
The new paths have been provided to a very high standard. The areas prepared for meadow enhancement were similar to the untouched areas of grassland, which were close mown speciespoor amenity grass. Establishment of wildflowers in these areas was clearly in evidence. The woodlands thinning has been significant and is likely to be of significant benefit to biodiversity. New signage clearly acknowledges ERDF support.



# Coseley Open Spaces.

This sub-project improved 4 hectares through creation of grassland and meadows attracting a variety of insects and improving biodiversity, woodland creation and management, tree, hedge and native species planting, access improvements and interpretation.

The project will take place in two parks in Coseley, Clayton Park and Cannon Drive/Teddy Bear Park, both in a considerably built-up area with a mix of light industry and high-density housing in the north of Dudley Borough, linked by wildlife corridors of canals and railway cuttings. The canal network links these corridors allowing wildlife to spread and biodiversity to increase. Coseley open spaces are relatively sterile areas of open mown grass with some boundary tree planting, planted for the millennium, plus avenue planting which is nearly 100 years old. The Millennium planting is now nearly 20 years old and in need of thinning with further expansion of woodland into the open space.



# Teddy Bear Park/Cannon Drive

## **Pre-Commencement**

The site was visited on 8 February 2022. The weather was dull but dry.

The project planned woodland creation: tree planting mainly using whips and small standards and the creation of wildflower meadows. This involved changing the mowing regimes to encourage the development of wildflower areas on the woodland edge. The areas of wildflower were planted with wildflowers and a new annual cutting regime established over the life of the project, which involves cutting and collecting the long grass in late summer after the seeds have set.

The project will benefit local residents of the Coseley area who live in very high-density housing. Areas which have a high ranking in the deprivation indices, the southern part of Coseley is in the top 10% most deprived areas in the country. Open space in this area is very sparse and of poor quality, improvements to these areas will make a significant difference to people's health and wellbeing. There will also be a benefit to wildlife using the very thin corridors along railways and canals.



Figure 17 - Elevated view over main space looking north-east from path coming from the school



Figure 18 - Southerly view of main space from northern boundary path



*Figure 19 - North-westerly view of secondary space from south-east corner* 





Figure 20 - View of immature woodland, damaged fence & dumping

The main and secondary linked spaces are surrounded predominantly by existing housing together with Rosewood School (SEMH for boys from year 5 to year 11) in the south-west corner. The spaces are broadly flat, although the land does rise to the south-west up to the school and then along a ridgeline that extends southwards to Coseley. On the low-lying ground the paths are either unlit and consist of bound grey gravel, or informal grass desire lines (mainly created by dog walkers). Whereas the path that rises up the hill to the school from the adjacent housing to the south-east (Greensand Drive) is wide, lit, and with a tarmac surface. Controlled access points have been formed using galvanised steel hooped chicanes. There are a number of modern red well-maintained dog bins. In addition, there are several older cast iron litter bins that appear to be emptied on a regular basis. They are functional but, due to having been set fire to in the past, they have lost their paint finish and look somewhat unsightly. There are significant volumes of litter and occasional dumping of larger waste within or on the edge of the woodland blocks. The timber post and galvanised steel stock fencing that once protected the woodland planting is intact in places but in others the wire has been cut, the panels flattened, and/or some of the posts have been removed (one also burnt). There are no benches, play equipment, shelters, signage, interpretation, or other hard landscape features.

From a soft landscape perspective the majority of the spaces are species-poor, closely mown, amenity grassland. Where this buts up to the woodland blocks there is longer grass and/or brambles as a transition. These blocks are only found around the boundaries of the park and appear to be approximately 20 years old. They contain native species like silver birch, rowan, field maple, and ash trees together with broom, dog rose, and dogwood shrubs. In places there are also non-native buddleia and symphoricarpos shrubs within these blocks. Towards the western side of the park, adjacent to the school, there are more mature species in the form of native cherries and hollies.

## Assessment

Detail proposals for this site were not produced until very late in the project, and we have not seen detailed plans. As of early 2023 Dudley council stated:



"There are exciting plans to improve the area known locally as 'Teddy Bear Park', the small open spaces off Cannon Drive and Anvil Crescent in Coseley. The smaller open space which borders the canal will have a number of trees planted with the intention to have a small woodland copse. The larger area will have native bulb planting such as snowdrops and wild daffodils. There will also be wildflower planting and further improvements to the planting on the perimeter of the site."

The works are expected to be completed by July 2023, but it will not be possible to review these works or assess their likely impact.

## **Clayton Park**

The site was visited on 8 February 2022. The weather was dull but dry.



Figure 21 - View from north-west corner looking south-east across the pitches



Figure 22 - View from north-east corner looking south-west to honeypot area



Figure 23 - Panoramic view from south-west corner looking north (left), east, & south(right)



Figure 24 - Park sign, bin, & fitness equipment

The mature urban park is located on flat but elevated ground close to Coseley railway station. It is broadly rectangular in shape with the heart of the space marked out for football use. Towards the southern end adjacent to Old Meeting Road there is a range of well laid out and used features that



include a securely fenced children's nursery, outdoor fitness equipment, a play area, lit MUGA, and a teen shelter. There is also a main noticeboard sign and a cast iron litter bin (although it has been set fire to at some point in the past). There are however no other signs at the other kissing gate entrance points. A tarmac-surfaced unlit path runs around the perimeter of the park, along which there are an occasional bench and/or litter bin. The park boundary is defined by black painted vertical pale fencing. In the south-east corner adjacent to the outdoor fitness equipment is a smaller square-shaped close mown open space which is fenced off from the main park, but which is accessible from the south. It is unclear whether this is part of the park or not.

The soft landscape treatment is largely species-poor amenity / sports field turf. Along the western and northern boundaries is a single-lined avenue of mature London planes. There are also scattered groups of mature trees along the eastern boundary and within the off-site verge associated with Old Meeting Road. There are a few shrubs that include laurel, sloe, and hawthorn.

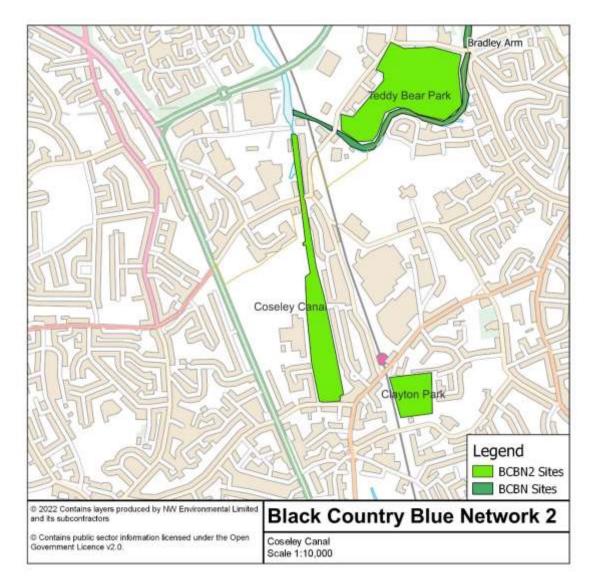
## Assessment

The proposals for Clayton Park included standard tree and native whip planting to the understorey of existing trees, and woodland wildflower seeding to shaded areas. These works should improve habitats and biodiversity.



# Coseley Canal.

The Coseley Canal sub-project improved 4.1 hectares of the area surrounding the Birmingham Canal between Coseley Tunnel and Anchor Bridge. Fly tipping, anti-social behaviour and graffiti had impacted the site significantly and damage to the meadow and a lack of native flora has led to a lack of biodiversity. Although there was existing public access to the site, due to the poor-quality environment and facilities, the site had declined, and it was underutilised by local communities and visitors.



## **Original Proposal**

The activities will:

• Address fly tipping and graffiti: removing hazardous waste to improve the environment for wildlife and the quality of experience for visitors. Reducing the amount of litter in the future will be addressed by working with the local community to encourage a sense of pride in the location. Other measures such as signs will be used to discourage further anti-social



behaviour. The graffiti will also be removed to improve the perception of the site to visitors. We will be working closely with East Coseley Big Local who are also providing funding towards the project.

- Biodiversity improvements: planting an estimated 200 trees, 450 shrubs and improvements to the meadow. These improvements will provide a variety of habitats, including waterside banks and woodland fringes, as well as improving the views along the canal. Invasive plants and trees will be removed to support native species.
- Tree thinning and other vegetation works access to the site has been encroached upon by overgrown vegetation which needs to be cut back, so it doesn't not become a trip hazard to potential visitors. Another issue identified by the local community is that.

## **Pre-Commencement**

A site visit was made on 9 December 2021. The weather was dry and clear.



Figure 25 - Graffiti near northern end of site.



*Figure 26 - Access point from Bridgewater Drive where works are proposed.* 





Figure 27 - Woodland area before interventions.



Figure 28 - Possible location for Orchard.



Figure 29 - Southern end of site at Coseley Tunnel entrance.



## **Post -Completion**

The site was revisited on 4 April 2023. The weather was fine and clear.



Figure 30 - Improved access route with signage.



Figure 31 - Improved path down slope into site.





Figure 32 - Scrub clearance and wildflower/bush planting north of Coseley Tunnel.



Figure 33 - Habitat improvements (left bank) and towpath improvements (right bank)



*Figure 34 - wildflower/orchard area and establishment of whips and flowers.* 



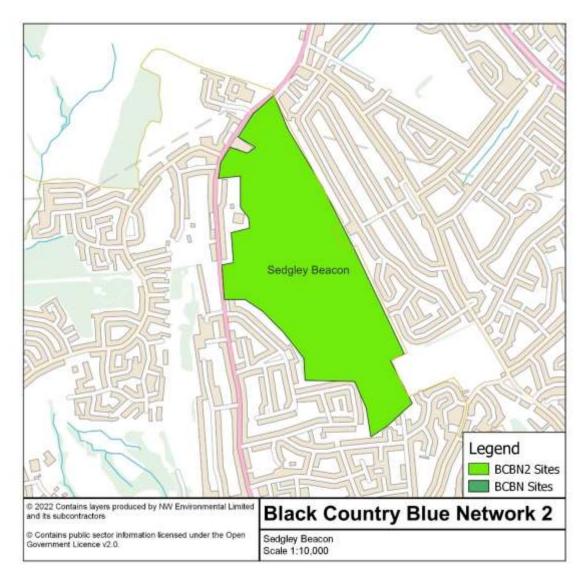
## **Baseline Assessment**

Various locations at which works are proposed were visited. It is clear that much of the woodland and joining the canal will benefit from the positive management, and the grassland management and new woodland appear effective. Access improvement works were in evidence. Overall, the works have brought benefits to biodiversity and community access.



# Sedgley Beacon.

Sedgley Beacon is a prominent landscape limestone feature at the northern tip of the Dudley borough, this sub-project improved 25.5 hectares of the site. The topography of the site has been heavily influenced by limestone extraction resulting in a habitat of mainly scrub and grassland. It is designated as a Local Wildlife Site being one of the largest and best areas of calcareous grassland in the region - only 0.04% of the West Midlands is made up of this type of habitat, of which one third is at Sedgley Beacon. The site is also a Geosite within the Black Country Geopark and forms part of the 'Limestone Way' which includes the Wrens Nest NNR and Castle Hill.



## **Original Proposal**

A reactive approach to managing the landscape led to many of the important aspects of the site becoming degraded and devalued. The formerly species-rich neutral grassland decreased significantly both in terms of area and diversity resulting a reduction of species. This in turn had an impact on floral diversity, thereby causing a reduction in invertebrate and bird populations. In the latter part of the 20th century, significant tree planting took place on Sedgley Beacon. This reduced



the areas of grassland and due to a lack of maintenance the new plantations are of limited ecological value.

The scope of works included:

- Eradication of Japanese knotweed.
- Removal of topsoil and creation of new calcareous grassland.
- Restoration of historic field-boundaries by gapping up and laying, and/or replanted in sections.
- Scrub clearance on calcareous grassland, along with meadow management of areas of species-rich grassland.
- Scrub clearance within the old limestone quarry. This area supports the most wildlife-rich habitat on the site being identified as a priority Habitat Lowland Calcareous Grassland in the UK Biodiversity Action Plan (UKBAP). However, the scrub colonisation has been to the detriment of the biodiversity in the quarry as well as its unique geodiversity. The clearance work will open up the site to enable the rich calcareous grassland to recolonise.
- Plantation thinning and underplanting to increase species diversity.
- Creation of a footpath network to manage pedestrian movement though the site.
- Formation of new steps into the old quarry to allow safe access in a controlled manner.
- Improving biodiversity as well as adding visual interest to the watercourse.
- Install stockproof fencing to protect the watercourse from grazing livestock.

Since 2012, partnership working between Dudley Council and the Birmingham and Black County Wildlife Trust (BBCWT), has enabled the Trust to undertake ongoing maintenance and management work on parts of the site. The long-term involvement of the Trust at Sedgley Beacon has enabled it to build up a level of unique and specialist knowledge of the site, which could not be found elsewhere. The project was delivered by BBCWT who have a proven track record in delivering such work on similar sites within the West Midlands.

This is a strongly community led project driven by the Friends of Sedgley Beacon. Whilst the Friends of Sedgley Beacon and the BBCWT had done much to reach out and engage with the local communities in the work they undertake on site, a survey undertaken by the BBCWT evidenced that the majority of visitors are dog walkers. The habitat improvements along with better access infrastructure, interpretation and active promotion will be a direct benefit to the immediate local community. BBCWT will extend their engagement to local schools and community groups to develop their understanding of this important local asset, and to encourage physical participation in the longer-term maintenance of the habitats.

In addition, the council and the BBCWT have also been recently successful in securing approval for an EOI from the Heritage Fund to undertake complementary work to the heritage elements of the site, including the Grade II Listed Sedgley Beacon tower. This will also fully complement and support the ERDF funded habitat creation works to deliver a comprehensive programme of improvements to this important site.



## **Pre-Commencement**

The site was visited on 8 February 2022. The weather was dull but dry.



Figure 35 - View near southern corner looking south-east towards horse paddocks



Figure 36 - View near the northern corner looking south-east across the horse paddocks



Figure 37 - View at southern corner looking towards the boundary plantation





*Figure 38 - Current water course, fly-tipping, drain, and dilapidated stables* 

## **Post-Completion**



Figure 39 - Improved access and paths and (right) thinned woodland.



Figure 40 - Scrub clearance to open up wildflower-rich limestone grassland.







Figure 41 - Significant areas of wildflower grassland creation



Figure 42 - Further scrub removal.



*Figure 43 - Scrapes to intercept surface water and create damp habitat.* 

Located on the west side of the Beacon adjacent to the Wolverhampton Road (A459), the site lies within Compartment 9: Big Paddock. To the south there is the housing associated with Gibbons Hill and to the north and west by the Wolverhampton Road housing. The Compartment is owned by Dudley MBC and there is no public access across it. The western side of the compartment has been subdivided into three closely grazed horse paddocks. Adjacent to the main road are some dilapidated timber stables. Since the main road is set at a higher level than the Big Paddock, the western boundary is defined by a coursed and dressed stone retaining wall complete with triangular stone copings. Surface water that comes off the Beacon flows in a stone channel / culvert along the



southern boundary of the compartment before coming up against the barrier of the retaining wall where it flows parallel to and at the base of it in a northerly direction before disappearing out of sight in the bottom north-west corner (by a metal field gate). The paddocks are divided up using a mixture of aged timber post and rail fencing and more modern post and line wire / taped fencing. Whilst the majority of the paddock land appears reasonably well kept, on the eastern downhill side of the stone retaining wall, and because the lower ground there cannot be readily seen, there has been a significant amount of fly-tipping refuse bags and other items.

With regards soft landscape the heavily grazed paddocks do not appear to be floristically-rich. A few hawthorn shrubs are situated along the edge of some of the paddock boundaries. In the north-west corner there is a patch of scrub. The visually dominant vegetation however is an ash plantation belt along the full length of the southern boundary, which needs thinning. Although not appearing to be of great nature conservation value Compartment 9 does however have SLINC status (probably due in the main because almost the entire Beacon has that status).

## **Baseline Assessment**

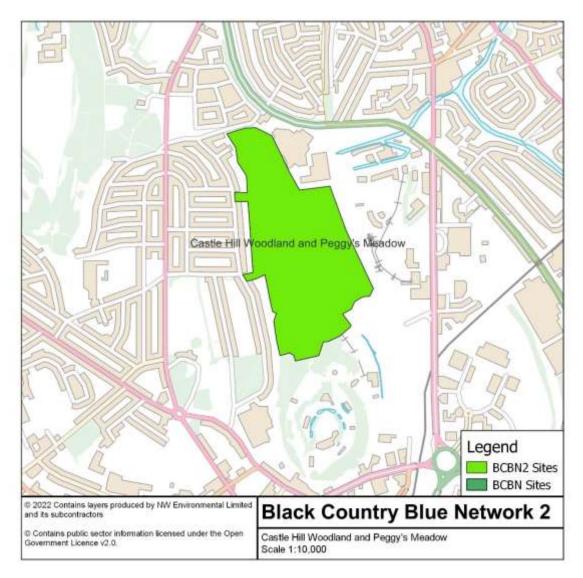
Overall the project has had a huge positive impact on the biodiversity of the site by opening up and improving a considerable area of the limestone grassland habitat. The local community has also benefited from the improved access.



# Castle Hill and Peggy's Meadow.

This sub-project improved 16 hectares of Castle Hill Woodland and 5 hectares of Peggy's Meadow.

Castle Hill woodland is a publicly accessible woodland located close to Dudley town centre. It is strategically placed, forming the backdrop to the three main visitor attractions - Dudley Zoological Gardens, Black Country Living Museum and the Dudley Canal & Tunnel Trust. It is also adjacent to an area of significant urban regeneration with the forthcoming delivery of Metro, Very Light Rail National Innovation Centre and the Institute of Transformational Technology. Peggy's Meadow adjacent to the woodland also offers full public access. The site forms part of the multifunctional green infrastructure made up of a number of important green open spaces, the canal network, footpaths and cycle routes. It is one of the 45 Geosites across the Black Country; part of the emerging UNESCO Black Country Geopark, within walking distance from Wrens Nest NNR, the hub of the Geopark.



The semi natural woodland that covers most of the area carries a diverse ecology, with a SINC designation. It is an important site for bat populations and is a large and significant stepping-stone of



woodland habitat to surrounding wildlife corridors; also being directly linked to the adjacent Peggy's Meadow SINC.

## **Original Proposal**

The project will improve 16 hectares of Castle Hill woodland through:

- Tree and Protected Species Surveys providing a better understanding of the existing flora and fauna as well as the conditions of the trees, particularly those close to footpaths.
- Boundary protection: the woodland suffers from high levels of damage by off road vehicles with significant negative impact on the biodiversity and enjoyment of the site. Enhanced pedestrian entrances will make them more welcoming whilst vehicle restrictions will control unauthorised access by off road vehicles and motor bikes.
- Removal of extensive areas of fly tipping with works to the boundaries should help to reduce this problem in the future.
- Interpretation mainly at the site entrances will identify walking routes and raise awareness of the important biodiversity, history and geology of the site.
- Woodland management: the woodland is in a generally poor condition with the majority made up of mature or over-mature ash or sycamore, some with stability (and disease) problems; the high presence of ash in the woodland mix represents the risk of future loss of tree cover through Chalara (Ash Dieback). In order to maintain the landscape character, the trees most at risk or dangerous will be identified and a programme undertaken of felling small groups. The removal will also include opportunities to open up longer distance views. Felled trees will be retained on site as this will directly support the woodland biodiversity.
- Woodland creation: tree replanting will be required to prevent cleared areas from
  regenerating with ash, which may then become infected with ash dieback. Replanting will
  include a wider range of tree species for landscape, biodiversity and tree health reasons.
  Tree replanting will be in the form of whips or transplants, which are less susceptible to
  vandalism.
- Enhancement of the dark bat corridor: the project will support and increase the site's existing bat population. Bats require a continuous belt of trees to follow for their foraging.
- However, in some areas, the project will partially open up the tree canopy to encourage light to penetrate to the woodland floor, which in turn will encourage a more diverse woodland flora.
- Path improvements will direct visitor access around the site encouraging more ground flora growth. A better control of public access will assist with the management of the site for increased biodiversity by encouraging greater recreational use in some sections, whilst restricting access in the more ecologically sensitive parts of the woodland. Where appropriate, new paths will include cell web root protection to reduce compaction over tree roots. Shrub planting will also help to contain public access in some areas.

The project will improve 5 hectares of Peggy's Meadow through a programme of:

• Shrub clearance to re-open up the area as a meadow.



• Grassland management will then take place over the course of the 3 years. This will improve the diversification of grassland species within Peggy's Meadow.

The project will be of benefit to neighbouring residential communities, visitors to neighbouring visitor attractions, local employees, those interested in the geology of the area and the swelling student population, becoming an increasingly important recreational resource. The value of this unique natural landscape in the very heart of the urban environment brings opportunities to local residents for informal recreation, along with the clear health and well- being benefit that access to nature can bring. The use of interpretation will help to develop a greater understanding how significant the site is in our local and national history.

## **Works in Progress**

A site visit was undertaken on 29 January 2021. The weather was dry and bright with scattered cloud and fairly high winds.



Figure 44 - View inside Castle Wood.



Figure 45 - Castle Wood, showing undulating relief left by former industrial activity.





Figure 46- View across Peggy's Meadow from the south, showing scrub encroachment



Figure 47 - poor condition of path between Castle Wood and Peggy's Meadow



Figure 48 - Peggy's meadow showing extensive areas of bramble.



The condition of Castle Wood and Peggy's Meadow were found to be consistent with the client's descriptions. Peggy's Meadow is clearly popular with dog walkers and there were also areas where lots of rubbish such as drinks cans had accumulated suggesting a level of anti-social behaviour. There was less rubbish in the wood In one place what was clearly a shrine or memorial had been created. There was a recently blown down tree blocking the main path, and other trees looked in relatively poor condition. We noted that many trees were spray marked presumably in relation to a survey in preparation for project work. The paths were generally in fair condition but very poor in a few places. Access for a wider range of people could be gained by improving path surfaces and in some areas widening the paths.

There was little signage, aside from a finger post at the southern end of Peggy's meadow.



Figure 49 - Castle Hill Blue Green Masterplan



# **Post-Completion**



Figure 50 - Access point with barriers to reduce anti-social behaviour.



Figure 51 - Improved path with thinned woodland.



*Figure 52 - Peggy's Meadow after scrub clearance and fencing for grazing.* 



### Assessment

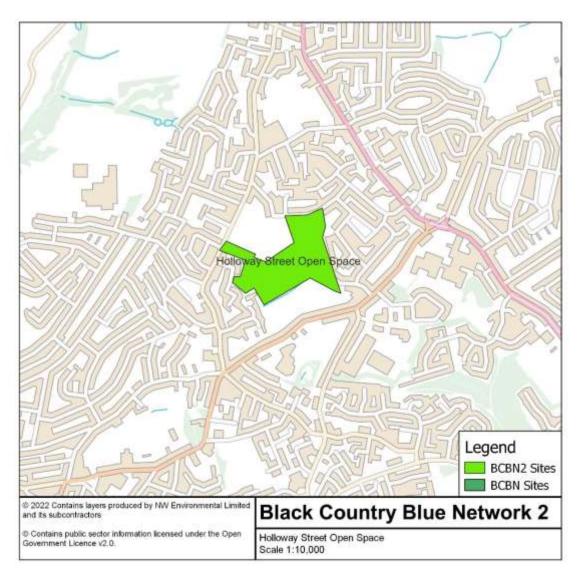
The wood will benefit from the more active management. A concern was that wholesale removal of sycamore may be inappropriate as ash dieback could have a major impact on the woodland, and this was considered. Extensive thinning works have been undertaken as well as access improvements and the wood appear in much better condition.

Peggy's Meadow has suffered very badly from lack of management leading to the spread of scrub and brambles in the past. The clearance of these areas and the introduction of meadow management by the project should bring major benefits.



# Holloway Street Open Space.

This is an area of council owned open space in the north of Dudley borough, also known to locals as 'Gornal Fields'. The land was a former quarry however has remained as informal open space for many years. The site is well loved by local residents and is supported by a recently formed friend's group who have named the site Gornal Field and who undertake some maintenance activities on the site, including litter picks. Part of the site is leased out for grazing, there is a small pond in the middle of the site which is in third partly ownership, and the council is in regular communications with the owner of this land. 5.6 hectares of improvement works were undertaken.



## **Original Proposal**

The majority of the site is a SLINC (site of local important to nature conservation) and part of it is designated as a SINC (site important to nature conservation). However, natural scrub regeneration had taken place across large section of the site obscuring views and made the site less accessible for users. The site suffered from antisocial behaviour and fly tipping. It was mainly used informally by dog walkers, with a network of unsurfaced desire lines cross the site and these are well used by



children walking between home and the local school. Natural drainage exacerbated by the topography of the site have in the past resulted in localised flooding on the site and to directly adjacent properties to the south of the site.

The site has been designated as one of the 45 Geosites across the Black Country - part of the emerging UNESCO Black Country Geopark - due to its unique geology and a major rock face, which was created through the previous quarrying activity. However, this quarry face has now been largely obscured by regenerated vegetation.

Following community consultation in June 2019, the friends' group and local residents wanted to increase the biodiversity of the site, improve access to and across the site by improved entry points and footpaths, encouraging greater use of the site whilst retaining and improving the nature and semi-natural qualities. Ecological surveys in 2016/17 confirmed ecological value is relatively limited but there is considerable potential to increase the biodiversity by the creation of a wider range of habitats across the site as well as improving the existing habitats.

The project delivered 5.6 hectares of habitat improvement and creation through a comprehensive programme of works developed to protect and enhance the biodiversity of the site including:

- Creation of areas of wildflower grassland, including a programme of ongoing maintenance to encourage species diversification.
- Thinning, clearance and replanting the blocks of regenerated scrub.
- SuDS (sustainable drainage system) scheme to address the current drainage issues on the site and deliver a diverse range of wetland habitats with the inclusion of swales, balancing pools and scrapes. The existing watercourse that crosses the site also has the potential for introduction of aquatic and marginal planting along the riverbanks.
- Path improvements along the existing desire lines will increase safe access through the site.
- The council will continue its ongoing engagement with the friends group supporting them throughout the project to ensure that they remain an integral part of the process.
   Community activities will be built into the delivery programme to enable the group and local residents to be activity involved in the project.

The project was delivered by a landscape contractor appointed by Dudley MBC.

The project will benefit local residents through opening up of the site with a matrix of wildflower grassland as well as shrubs and trees, diversifying and enhancing biodiversity. It will also give the community better access to the site by the addition of a path network enabling local residents to use and enjoy the open spaces and support safer routes to school for pupils of the local secondary school. The Geopark status will bring raised awareness of the geological value of the site. The exposed quarry face offers an excellent and unique educational resource. Improved and safe access to this part of the site will create opportunities for local school visits. Improvements to this important area of natural and semi natural landscape located in a predominantly residential community will offer greater local access to informal recreation; bringing the well-documented health and well-being benefits that access to nature can deliver.



## **Pre-Commencement**

The site was visited on 18 October 2021. The weather was overcast and wet.



Figure 53- Looking North, the steep bank below the houses has exposures of geological significance



Figure 54- A general view looking west across Holloway Street Open Space





Figure 55 - Path across site (picture - Dudley MBC)

The initial impression of this site is that it is largely unmanaged, with the result that the grassland areas have badly overgrown with scrub and tall herb. Paths are narrow and rough, accessibility for less mobile people is poor. There is minimal signage but there are some litter bins. Most use seems to be by dog walkers at present. There were some volunteers undertaking strimming of the verge when we first arrived, and it is apparent that there is significant enthusiasm for improving the site among the local community.

The 'grassland' areas of the site are heavily affected by scrub, brambles and tall herb, and would greatly benefit from active management. Hedge restoration will also benefit the site. The areas with geological interest are heavily vegetated and sympathetic work to open up the exposures would be beneficial. Access is poor with surprisingly few established paths so creating new access will be positive.

## **Post-Completion**



Figure 56 - New pathway into site.





Figure 57 - New paths and grassland restored by removal of invasive scrub.



Figure 58 - Restored watercourse.



Figure 59 - Tree planting.





Figure 60 - Small ponds restored.

#### Assessment

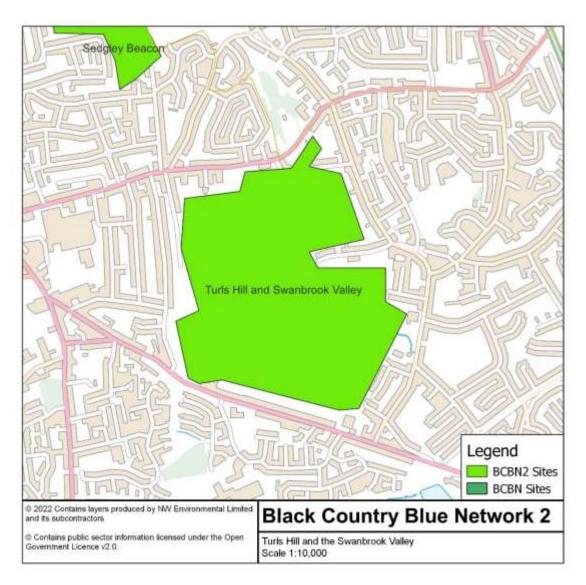
The works on the site had generally been a carried out to a high standard although some snagging works on path edging remained outstanding. Public access throughout the site had been greatly improved by the works.

Management of bramble and scrub had been very effective and restored large areas of open grassland habitat and a there were some areas of targeted tree planting in evidence. There had also been works to better manage drainage and improve the quality of some ponds on site. The overall impact of these works should result in significant benefits for biodiversity.



# Turls Hill and Swanbrook Valley.

This sub-project will improve 21 hectares. The Valley is a green wedge regarded as one of the last major areas of open space in the built-up part of the Black Country. It lies between various conservation areas – Rowley Hills, Wrens Nest and Sedgley Beacon. Turls Hill is approximately 47 hectares and is separated from Swanbrook Valley (14 hectares) by the Tipton Road area. The area also forms part of a major bat migration area, providing links between Castle Hill and the wider countryside and supports birds and butterflies – 6 RSPB red listed species, 10 RSPB amber species and 2 species of bat. Badgers are also present in the area.



## **Original Proposal**

The proposals include the establishment/enhancement of the following habitat features within a significant habitat corridor through these sites, which will benefit the wider community of this urban area. Turls Hill includes a medieval highway, now a bridle way, which link the west part of Coseley and Sedgley together. The rural fields and hedge patterns that have not changed for hundreds of years, meandering streams and pools, overgrown limestone quarry, and a rural bird population.



These areas include Sites of Importance for Nature Conservation and Sites of Local importance for Nature Conservation. Enhancement of habitat features within a significant habitat corridor will benefit the wider community of this urban area.

The project will establish/enhance the following habitat features within a significant wildlife corridor:

- Maintain and enhance wooded brook corridor to protect and buffer the woodland features and mature hedges.
- Expand and enhance woodland habitat through new planting, promoting natural regeneration whilst maintaining mature hedges and tree features:
- Expand and enhance grassland habitats, maintain areas for grazing and management of smaller grassland areas within woodlands to provide a range of grassland structures and types:
- Introduce wildflower meadows and habitats to link wildlife corridors together:
- Diversify site habitats through grassland management, scrub coppicing and hedge laying.
- Maintain, enhance and monitor species on sites e.g., breeding birds, and bats:
- Maintain intrinsic appeal and natural appearance through sensitive habitat creation and enhancement works:
- Improve access through new paths and links through/adjacent to the habitat corridor:
- The long-term aspiration is a SLINC (sites of local importance to nature conservation) destination based on woodland and grassland mosaics that support important species including birds and bats.

The project will be delivered by Dudley MBC with specialist contractors delivering tree thinning, hedgerow management, woodland/scrubland creation, watercourse management, wildflower meadow creation and habitat creations procured through EU compliant procurement.

### **Pre-commencement**



Figure 61 - views across the Swan Brook Valley





Figure 62 - pre-existing signage and grazing land.

We visited the site on 26 February 2022, to record the existing state of the valley.

#### Assessment

Detail proposals for this site were not produced until late in the project, and we have not seen detailed plans. As of early 2023 Dudley council stated:

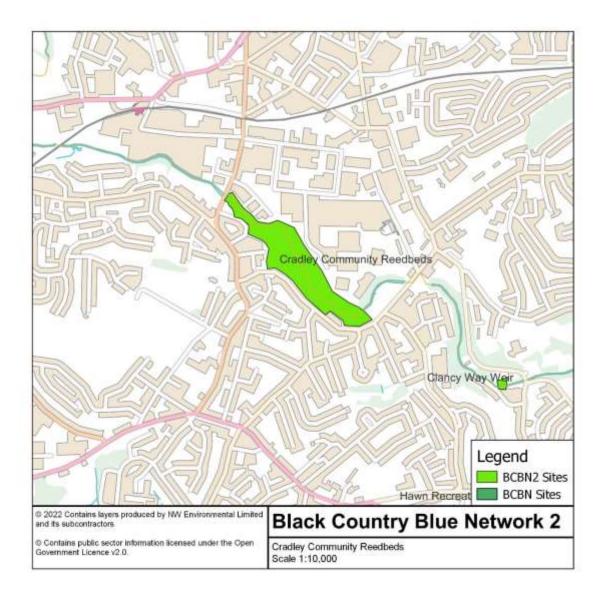
"Plans are to bring the existing grazing land on Turls Hill in Sedgley back in to use. Works will include agricultural fencing and new hedgerows. The land will be low intensely grazed to encourage traditional meadow plants to re-establish. Turls Hill Road will have areas of invasive species treated and the long-term aspiration is for hedging to be laid and the improvement of signage and waymarking."

The works were completed by July 2023 and should bring improvements to habitat variety and biodiversity.



# Cradley Community Reedbed.

The Cradley Community Reedbeds Project will improve 1 hectare through installing reedbed wetland filtration systems, interconnected swales and settling ponds reducing pollution and improved access through raised boardwalks forming wetland walk and habitat improvements. The project aims to reduce pollution in the Stour Valley through Cradley Heath working with local communities and volunteers.



# **Original Proposal**

The project will deliver environmental improvements to the River Stour through a vital area of green space in the heart of the urbanised Black Country. It will see the following:

• Install reedbeds to improve river water quality along a stretch where zinc is a significant pollutant and a cause of the watercourse failing WFD (Water Framework Directive). The reedbeds will filter the water as it passes through the system. These reedbeds will be



installed along the downstream end of the site (see map) where there are 6 major outfalls releasing effluent from both residential and business properties and roads. This stretch is ~140 metres in length, where the pH levels of the river increase from 8.0 to.

- A raised boardwalk will be installed along the stretch where the existing footpath currently lies. It will replace the footpath and meander through the reedbeds creating a wetland walkway. This will be made from recycled plastic boards which last longer than timber boards and are easier to maintain long-term.
- On the left-hand bank floodplain near the start of the reedbeds and boardwalk (upstream end), a public orchard will be planted and settling ponds are to be excavated to aid the retention of overland flowing water and help filter it into the soil before it reaches the river.
- Upstream of the reedbeds, the river has been historically straightened, though potential habitat gravels are present for spawning fish and invertebrates. Installing low-cost woody debris here will increase flow diversity and in-stream habitats returning the river to a more natural form.
- Improvements to the local terrestrial environment will also take place with the help of volunteer groups. These will be in the form of tree planting, installing bird boxes and "bug hotels", as well as improving the remaining footpath for access.

The project will be delivered by the Severn Rivers Trust using external contractors and consultants which will be chosen by the standard tendering process. SRT will manage the project and advise on deliverables, timetables and funding. A final design will be drawn by the chosen consultant/contractor before any capital works are begun.

The project work proposed already has the support of the local community and local wildlife groups who use the site but are keen to see improvements to the area. The project has already successfully gained funding from the Greggs Foundation, Postcode Lottery and Environment Agency, which will be able to deliver some elements of the project. Funding through the BCBN would allow the entire programme to be delivered.

## **Post Completion**

We visited the site on 18 October 2021. The weather was damp and overcast.



Figure 63 - Phragmites reed plugs have been plated throughout the area between the revetment wall and the path.





Figure 64 - The green shoots are sprouting reed plugs.



*Figure 65 - In a change to the original proposals, a bound gravel path was chosen over a boardwalk* 



Figure 66 - woodland area proposed for management



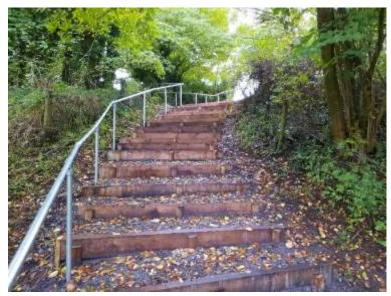


Figure 67 - new access works

#### Assessment

Significant changes have been made to this project, due to a range of issues that have arisen during the planning phase. Nonetheless, this site is the one where most work had already taken place and the works were effectively complete aside from the Community Orchard.

The reed bed location is along the base of a tall brick revetment wall. This is in order to mitigate diffuse pollution in the groundwater seeping from the ground above. The chief concern is that the area is quite shaded, and although reed beds can establish in semi-shade it would be beneficial if the overhanging trees could be reduced by coppicing or pollarding.

For practical and budgetary reasons, the original proposal for a boardwalk has been replaced by the upgrading of the existing path with a bound gravel surfaced path two metres wide. Additional access works include the installation of a long set of steps to provide improved pedestrian access into the woodland.

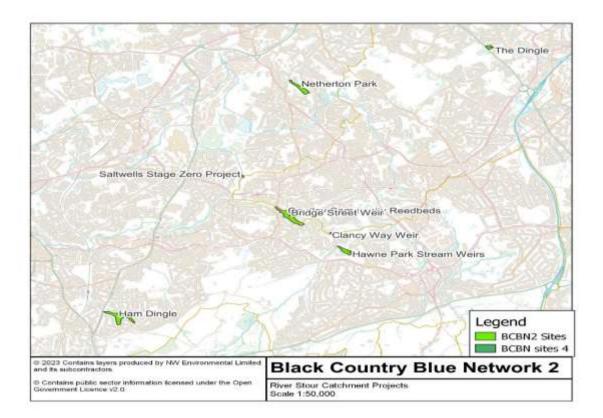
Further to our original visit, the creation of a community orchard and additional woodland management was undertaken.

Overall these works have brought improvements for access and community use as well as material improvements for biodiversity and the quality of the river Stour.



# **River Stour Catchment.**

The River Stour sub-project will directly improve 2 hectares of the River Stour riparian corridor whilst indirectly benefitting a further 3 ha through improved instream connectivity and reduced invasive species from upstream. Artificial barriers, fly tipping, anti-social behaviour, invasive non-native species and poor instream habitat diversity have impacted the river between Halesowen and Cradley leading to a lack of biodiversity. There is public access throughout the area but due to the poor condition of the river corridor it is underutilised by local communities and visitors.



## **Original Proposal**

• Biodiversity improvements: The complete removal of Bridge Street Weir and Clancy Way Weir, and the installation of a technical fish pass on Furnace Hill Weir will directly open up more than 4km (approximately 2 ha) of the River Stour for all fish species. These



improvements will also help the wider morphology of the river by allowing sediments to naturally move in the system, increasing in-stream diversity and benefiting native species. Installation of tied-in woody debris in key locations as well as bird and bat boxes at key locations will assist local species utilising the river corridor.

- Address fly tipping: Led by Severn Rivers Trust officers, the project shall remove waste, rubble and other unnatural materials from the river and its banks to improve the environment for wildlife and the quality of experience for visitors. The direct removal will improve water quality, reduce pollution and increase the diversity of habitat in the river.
- Reducing the amount of litter entering the river in future will be addressed by working with local communities to encourage a sense of pride in their location.
- Invasive non-native species removal: Giant Hogweed and Japanese Knotweed are both
  prevalent in the River Stour. The highest point the two species are found is just upstream of
  Halesowen and work will take place from the highest point and work downstream. Over two
  seasons (summer) every plant located will be removed from site and destroyed responsibly.
  This will increase access to the river, improve native biodiversity and reduce potential health
  and well-being impacts on local people through these harmful species.

The project will be delivered by the Severn Rivers Trust's officers using external contractors and volunteers. The project work will benefit proposals by the local community to see an ecological improvement to the area. Match funding has been secured by the Trust and from the Environment Agency.

## Changes

Several amendments have been agreed for some elements of this sub-project, so the proposed work is now at an amended list of sites and the work plan has changed. The elements pertaining to control of invasive species have not changed. The new project elements are detailed below.

### **Site Visits**

Site visits were undertaken on 9 December 2021, aside from Coseley Weir which was visited on 18 October 2021. The weather was overcast with occasional showers. The sites are a weir at Saltwells Nature Reserve, a weir at Coseley, a weir at Clancy Way Weir and a stretch of stream with several damaged weirs in a stream at Hawne Park.

## **Clancy Way Weir**

### **Pre-commencement**

This was one of the original projects. It was a small wooden weir that created an obstacle to fish passage and its removal will bring significant benefits. Removal should be straightforward but appropriate permissions needed to be secured.





Figure 68 - The wooden weir at Clancy Way.

#### **Post-Completion**



*Figure 69 - The river at Clancy Way after the weir was removed. The second picture shows an eel benefiting from easier access upriver.* 

Severn Rivers Trust have worked with staff at Severn Tent Water to remove a full channel width barrier from the River Stour at Clancy way near Corngreaves nature reserve. This barrier at first appearance seemed small and insignificant. However as it was causing water to cascade over it, it was acting as a full channel width barrier to many species of fish and macroinvertebrates causing significant longitudinal habitat fragmentation. This barrier has now been completely removed and has unlocked another 1.8km of river channel to the next significant barrier located at Furnace Hill. This is huge success for the health of the River Stour.



# Saltwells National Nature Reserve Zero Channel Restoration

### **Pre-Commencement**

This was a partly collapsed weir at Saltwells Nature Reserve together with a wooden dam blocking an old channel. The aim was to clear the obstructions, and open both channels to flow, restoring a significant area of wet habitats. Additional work will include repairing bank reinforcement to prevent erosion and damage to an existing footbridge.



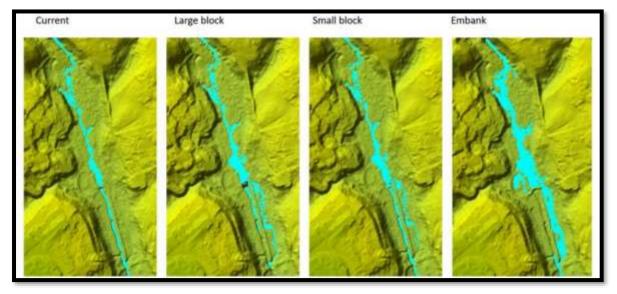
Figure 70 - Weirs and old channel at Saltwells



Figure 71 - Another view of the project area



## **Post-completion**



*Figure 72 - Predicted flow of water following three different styles of blockage used in channel.* 



*Figure 73 - Steel wire leashing on chop and drop in line with specifications outlined within the Ordinary Water Course consent. With the bund in place the greater flow can be seen on the lefthand channel.* 





*Figure 74 - New wet woodland created on the true lefthand bank. In time this flow will erode and create its own channel advancing into the other stages of channel form.* 

The work was focused upstream of two weirs acting as complete barriers making movement up or downstream for fish impossible. Working closely with Dudley Council and Dynamic Rivers to develop a solution, a Stage Zero Channel restoration was selected.

'Stage Zero' is the concept of returning a watercourse or section of watercourse to its condition before any human modification of the channel. It is novel to attempt this course of action on an urban site. This type of restoration allows the brook to forge a new flow pathway from where it was blocked. At Saltwells this was achieved with some prudent flood modelling, given the urban nature of the site. These models predicted the adjacent floodplain would be its path of least resistance and the flow of the brook would re-joining its original confines 200m downstream. If you are to visit the site and look from the pedestrian bridge upstream you will now notice most of the flow is coming in from the right-hand channel as you look at it. Once more connected without barriers, allowing fish to utilise this wonderful nature reserve once more.

A notable aspect of this innovative sub-project was the production of a document by the Severn Rivers Trust detailing the works that could usefully be adapted as a formal case study.

# **Bridge Street Weir**

### Pre-commencement

The weir falls within the area of the Coseley Community Reedbeds project but is part of this subproject.

This is a weir in the Stour about half-way along the site, removal or notching of this would improve fish access along the river and help encourage better, more turbulent flow increasing oxygenation, reducing silt and generally improving the river habit for fish. The expected impacts from removal could directly benefit up to a 100m stretch of the river, with wider benefits to the whole river section between other weirs,





Figure 75 - Weir upstream of the reedbed, proposed for removal

### **Post-Completion**



Figure 76 - The weir with central portion removed and (right) riffles created upstream as a result of removal.

The project allowed the Severn Rivers Trust to oversee a contractor in the notching of the weir. This allows all species that live within the river to move freely once more. Removing the impoundment has also allowed riffles to flow across gravel in this stretch of the River Stour.

## Hawne Park Stream Weirs

#### **Pre-commencement**

This apparently un-named stream flows down a narrow, wooded and steep valley from Hawne Park Recreation Ground. It is a tributary of the Stour.

Four artificial weirs made from galvanised steel gabion baskets, filled with stone, lined in plastic, and topped in concrete are causing habitat fragmentation is this hidden gem of a site have now all been



removed. Although they are breaking up, they cause significant erosion and create obstacles to fish passage. The proposal was to use a small excavator to remove the weirs and repair the river channel allowing it to adopt a more natural flow and profile.



Figure 77 - More or less intact weir near the end of the stream.



Figure 78 - Almost completely broken up weir.





Figure 79 - Despite undercutting, this weir is a major barrier to fish passage.

## **Post-completion**



Figure 80 - Work in progress on removal of two of the weirs.





Figure 81 - Stream channel after weir removal

The Severn Rivers Trust have worked with the local authority Dudley Council and local friends of group to remove these weirs and enrich the habitat with some large woody debris. The large woody debris added to the river offers a wealth of habitat for macroinvertebrates and shall slow down the flow of water. This has already helped to reduce flooding in a process of Natural Flood Management (NFM). Four months after the works SRT were already recording an increase in biodiversity and abundance within the channel, reduced debris blocking the culvert which passes under the road which in turn will reduce ongoing maintenance costs for the council.

## Ham Dingle

### **Pre-commencement**

Works were permitted and agreed with Dudley Council to undertake some woodland management of the Ham Dingle woodland and construction of some in-channel large woody debris to help reduce high water flows and increase the biodiversity within the riparian corridor.



Figure 82 - Riparian corridor at Ham Dingle before works.



## **Post-completion**

SRT worked alongside Dudley Rangers Service over the last winter, contractors undertook a graduated thinning program upon the right-arm of the site. The aim of this work was to kickstart a varied age structure within the seminatural plantation, whilst supporting flood resilience by installing several trees within the channel to slow the flow of water within this small urban nature reserve. Additional work was undertaken including carving in some habitat for bats within the canopy of trees alongside the felling operations.



*Figure 83 - Example of large Woodie debris with the main brash removed from the truncated stems to reduce wash down.* 

# **Netherton Park**

### **Pre-commencement**

Permitting was granted to undertake a bank reprofiling of the Lynbrook that flows through the park, it was planned to undertake the works before December 2022.



Figure 84 - Netherton Park: proposals map.



## **Post-completion**

150m of bankside reprofiling has helped open up and allow local people to see the Lyn Brook. Hidden by its steep bankside it is now visible. SRT staff worked over a number of days to plug plant the bankside of this brook to help enrich it for wildlife and people.

## Other sites

The following four sites had works agreed very late in the programme, therefore all we have been able to do is summarise the works undertaken.

# The Dingle

# Ludgbridge brook

Severn Rivers Trust entered discussions with Dudley council to undertake works on the Ludgbridge Brook which flows through Woollcott and the Dingle upstream of this in mid-2022. These works were looking at barrier removal and large woody debris in channel.

SRT undertook a series of slow the flow measures across these two sites. Multiple trees were dropped into the channel to reduce the speed at which flood waters rush to the river Stour to achieve this. The project also removed a barrier from the Ludgbridge brook helping to restore its connectivity. Within the Dingle arm of the site a back water pool was created, this not only increased the storage of water in high flow events, but when fish return to this arm of the brook it will also offer shelter from weather events and provide a rich nursery habitat for rearing young.

## **Buck Pool**

SRT have installed a number of Large Woody Debris features into the channel that shall help provide flood resilience but crucially shall also provide an abundance of food for small macro invertebrates that live within our watercourses. Some areas of the river have a heavily modified stream bed, this is a result of trying to reduce erosion in high flow. In an attempt to address the poor quality of habitat found at these points we have undertaken boulder inclusion onto the beds surface to alter the flow.

# **Barrow Hill**

A collection of pools that have either been expanded or created to develop the site into a stepping stone heaven for wildlife, but especially focusing on the Great Crested Newt. The borders of the pools have been planted with several different species of marginal wetland flora



### Assessment

Although major changes had to be made to the Severn River Trust's original proposals, they were still able to deliver a programme that incorporated many significant actions.

In particular the works to removes barriers to fish movement (i.e. weirs) on several watercourses has already had a profound impact on the connectivity of the river habitat and on improving the structure of the rivers. By increasing riffles and oxygenation the works also impact positively on water quality by making the habitats more resistant to pollution episodes and better able to self-clean.

The SRT are particularly proud of the river restoration works at Saltwells National Nature Reserve as they believe this is possibly the first example of an urban watercourse in the UK being re-naturalised in this way rather than simply having a channel restoration.

The other works on habitats along rivers and streams have also made an important contribution to improving habitat quality and supporting eth recovery of biodiversity.

In addition, several of the projects have improved public access to the river corridors.



# Walsall Parks and Local Nature Reserves

Walsall's Parks and Local Nature Reserves works aimed to improve 16.85 hectares at several sites that are connected by greenways, canal network and public rights of way including Victoria Park, Kings Hill Park, George Rose Park, Moorcroft Wood and Walsall Canal in Darlaston.

## **Original Proposal**

Improvements will include:

- Woodland management to diversify the woodland structure age classes, species diversity and ground flora enhancements:
- Creating wildflower meadows through more sustainable and diverse grassland management regime in parks and along greenways:
- Increase cover of linear habitat features to benefit local bat and bird population:
- Increase area and season of nectar sources by tree and hedge planting and wildflower meadow creation.

It will also improve the knowledge and understand of the natural environment by introducing new management techniques and by providing interpretation to explain to site users the work being undertaken, providing new facilities for use as resource for education and promoting usage through sign posting, upgrading access routes and installing a pond dipping platform.

The project will be delivered by the inhouse parks maintenance environmental operatives and countryside estate team. Contractors will deliver installation/upgrade of pond dipping platform; upgrade of footpaths and some ground maintenance works for wildflower meadow creation. Interpretation works will be led by a project officer – Public Health Programme Development Officer, and designs produced by inhouse print and design team. Site habitat works and contractor works will be overseen by the Parks and Countryside Operators manager.

The project will benefit visitors and residents of Darlaston and the wider Walsall population through enhancement of biodiversity in the parks and nature reserves.

## Site Visits

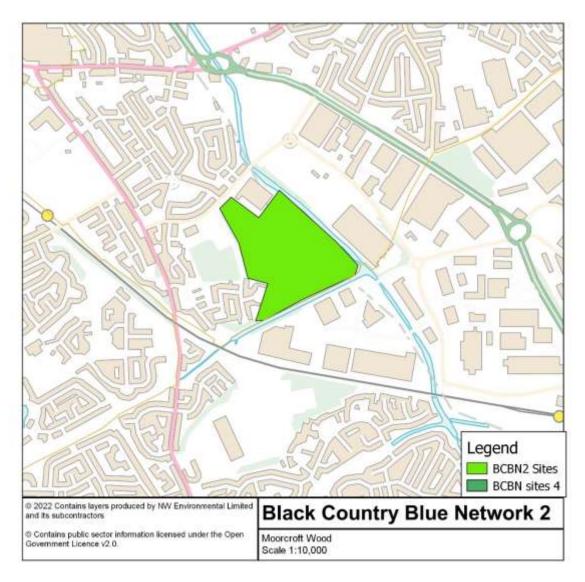
All the sites featured as part of this project lie in the Darlaston area of the borough. Darlaston sits on the south-western edge of Walsall and borders both Sandwell and Wolverhampton. It is a key location in terms of linking the Black Country Blue Network. All five sites were visited on 22 November 2021. Moorcroft Wood was also visited on 18 October 2021.



# Moorcroft Wood Local Nature Reserve

Hawkswood Drive, Darlaston, WS10 8GA

Moorcroft Wood has Local Nature Reserve designation. It covers 27 acres and features a number of wildlife habitats including a large pool, wetland areas, woodland, and wildflower meadow. It is bordered on its eastern boundary by the Walsall Canal and on its southern edge by a disused section of the Bradley Branch Canal.



Much of the site is formed from an abandoned industrial landscape, which is of great significance in terms of the overall industrial heritage of the Black Country. It also provides a valuable historical and educational site, and the area is designated as a Site of Importance for Nature Conservation (SINC).



### **Pre-commencement**

The site was partially planted in 1904 with sycamore and false acacia trees, this woodland is forming a dense canopy and suppressing the once rich flora that was abundant on the site and there is little shrub understory or natural regeneration of the woodland. The works being carried out will restore these features and improve access into the woodland.



Figure 85 - Thinning of canopy and understorey



Figure 86 - Wildflower meadow and footpath



# **Post-Completion**



Figure 87 - Thinned woodland with underplanting of woodland flowers



Figure 88 - Establishment of planted wildflowers



Figure 89 - Improved path and thinned woodland.



### Assessment

A 30% to 40% thin of the woodland was carried out. The thinning will focus on ash trees affected by ash dieback together with non-native false acacia.

The understorey was also be thinned and planted with woodland wildflower species such as bluebell and wild garlic. New shrubs and trees were planted. Species included hawthorn, hazel, and some oaks.

The wildflower meadow benefited scrub clearance from around its perimeter and additional wildflower seeding.

A new hard-surfaced footpath allows improved pedestrian access across the meadow and through the section of thinned woodland. This links up to the site's main footpath network.

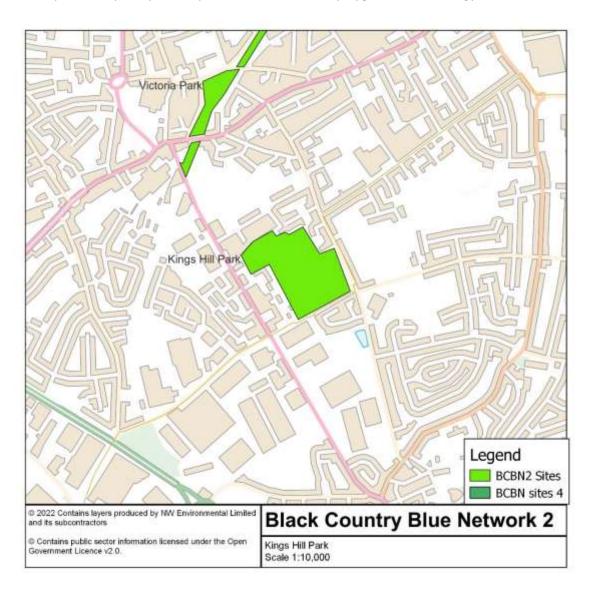
These works have resulted in significant benefits for biodiversity and improved access.



# Kings Hill Park

### Forge Street, Wednesbury, WS10 7TP

Located less than a mile from Darlaston town centre and bordering Wednesbury in the neighbouring borough of Sandwell, the park has a mixture of amenity grassland and wildlife habitats. Facilities include a pavilion, sports pitches, picnic areas, children's playground, outdoor gym, and trim trail.



There are small, wooded areas, two wildflower meadows and open grassland. The park has a Green Flag award recognising excellence for its maintenance and provision.



### **Pre-commencement**

The Council's aspiration for the park was to create a more naturalistic and informal feeling to the park and to manage some areas that are difficult to maintain due to subsidence, in a way that promotes biodiversity.

This project was planned to build upon work that has already begun in the park to meet these aims.



Figure 90 - Wildflower meadows



Figure 91 - Location for pictorial meadows turf



# **Post-Completion**



Figure 92 - The new 'Tiny Forest'.



Figure 93 - Bulb and wildflower area below the car park off Old Park Road



Figure 94 - Squill and daffodil flower early.

The improvements covered 1.7 ha of biodiversity improvements. These comprised:

The two wildflower meadows were joined to create one large patch. The mown grass between them was harrowed and seeded with a wildflower mix.



Another area of mown grass adjacent to the pavilion was transformed into a Tiny Forest. A Tiny Forest is a small patch of dense fast-growing native woodland. It is based on a method of forest management developed in the 1970s by Dr Akira Miyawaki.

A south-west facing embankment, below the car park off Old Park Road, saw additional bulb planting with crocus and a Pollinator wildflower seed mix.

Pictorial meadow turf was laid on a high point, accessed via the Darlaston Road entrance. This is currently another area of mown amenity grass. Pictorial meadow turf provides an instant wildflower meadow. It has been used extensively in another West Midland borough, Solihull, as part of their ERDF project, Wildlife Ways.

Elsewhere, a small woodland strip running along the park's eastern boundary was thinned and planted with woodland bulb species – snowdrops, bluebells, and wild garlic.

## Assessment

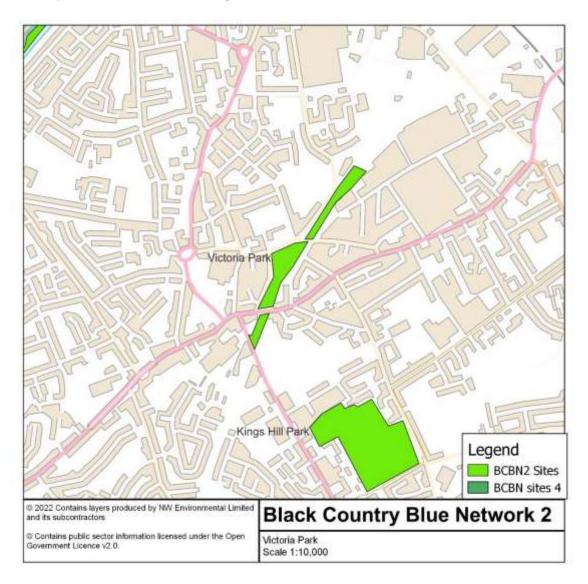
This has been a comprehensive programme of habitat improvement works across the park which have replaced old formal planting and created a positive environment for wildlife and visitors. The 'tiny forest' is an example of volunteer/community participation that would make a good case study for a relatively small scale but very positive intervention.

The works have brought multiple biodiversity benefits to the site.



# Victoria Park

This is a 400m stretch of green space running between Darlaston Road and Bull Street. It is a former railway line and now has a hard-surfaced footpath offering cyclists and pedestrians a traffic-free route away from the main roads through Darlaston town centre.



The site is also less than 400m from Kings Hill Park's Darlaston Road entrance. Thus, affording another opportunity to link more greenspace sites via green corridors.



# **Pre-commencement**



Figure 95 - Main footpath and embankments



Figure 96 - Path running through wetland area

A large amount of litter and fly-tipping, including vehicle tyres, needed to be removed before any improvements to the pond and wetland area can be undertaken. Simply removing this rubbish provided an instant benefit.



## **Post-Completion**



*Figure 97 - Embankments (\*right and left) seeded with wildflowers, wetland area in distance.* 



Figure 98 - Coppiced holly.

#### Assessment

The park has benefited from wildflower seeding on the embankments and the re-establishment of a pond and wetland area close to its junction with Darlaston Road.

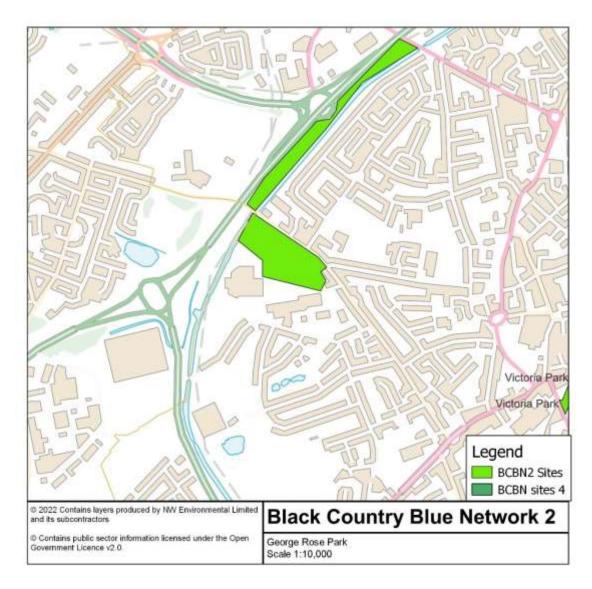
The 0.6ha of habitat improvement works will enhance the park's value for biodiversity.



# George Rose Park

## Wolverhampton Street, Darlaston, WS10 8UB

Another of the borough's Victorian formal urban parks. Although still relatively large, it did lose a large section to the development of the adjacent Grace Academy secondary school. The park's entrance is marked by a lodge house and nearby sculpture recognising Darlaston's industrial past. The Walsall Canal runs parallel with its western boundary.



### **Pre-commencement**

The park has a number of features which include a bandstand, play area, outdoor gym, skate park, multi-use games area (MUGA), picnic benches, and sports pitches. There are small number of formal planting beds, together with some tree cover around the play area and close to the skate park and MUGA. The majority of the perimeter is bordered by a relatively young hedge. There are a small number of mature trees dotted throughout the park. A hard-surfaced path allows full access around the entire site.





Figure 99 - Hedge planting with hawthorn whips



Figure 100 - Location for tree avenue and some wildflower seeding

Other than the existing tree cover and recently planted hedgerow, there was little intended provision for wildlife. Additional hedge planting with hawthorn whips (2 to 3 years old) has already taken place. Further planting will be undertaken along the park's boundaries.

A central avenue of silver birch will be planted down the path dividing the two large main areas of mown grass. Formal mown areas of grass will be turned over to the creation of wildflower meadows through the use of seed mixes. These works should bring significant increases in biodiversity.



# **Post-Completion**



Figure 101 - New avenue of trees.



Figure 102 - New meadow area (wildflowers not visible in April)

### Assessment

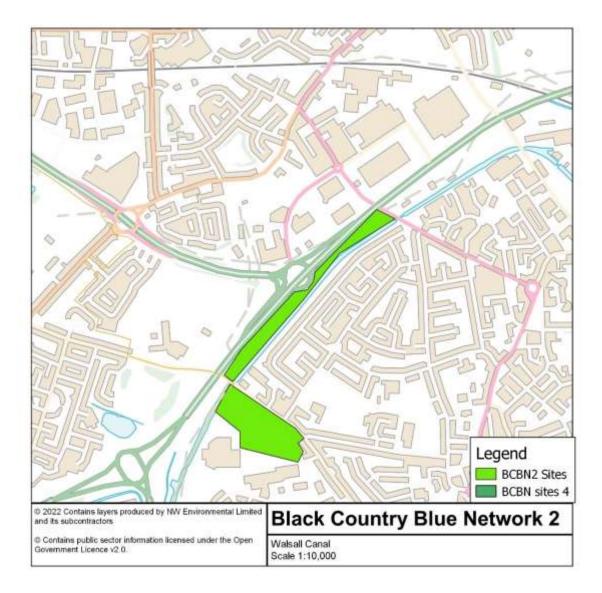
The 1.2ha of works have included planting a native hedgerow to create a linear habitat to benefit birds and mammals; creation of wildflower meadow to prolong the availability of nectar for invertebrates; and planting of an avenue of trees of different species to those already present to improve tree resilience and to create a linear feature to improve bat habitat.

These works should all help increase the biodiversity within the park.



# Walsall Canal

This is a 750m stretch of green space running between the Black Country Route and the Walsall Canal. It provides a pedestrian link between Darlaston's Wolverhampton Street and Midland Road. The hard-surfaced path allows pedestrians to access Midland Road from Wolverhampton Street. This is not possible via the towpath as there is no access off Midland Road. The path is well used by pupils at Grace Academy and workers accessing the retail park and parcel distribution depot.



Situated opposite George Rose Park, it offers another reduced traffic link between other green space sites. Having the potential to join Victoria Park and on to Kings Hill, as well as Moorcroft Wood, via the Walsall Canal's towpath.

The site is a planning gain arising from the construction of the Black Country Route. Whilst the canal and towpath on the opposite side are the responsibility of the Canal and River Trust, maintenance and management of this area lies with Walsall Council.



It currently has a high shrub layer and open areas of mown grass. Both entrance points needed attention, with vegetation requiring cutting back. Shrubs are also enclosing the paths for a large part of the route. Scrub and reeds were obscuring clear views of the canal. These would be cleared to create improved access which could then allow for educational activities such as pond-dipping.

#### **Pre-Commencement**



Figure 103 - Wolverhampton Street entrance



Figure 104 - Shrub overgrowth across path





Figure 105 - Vegetation to be cleared to improve view of canal

#### **Post Completion**



Figure 106 - Walsall Canal after scrub clearance and tree planting, also path improvements.

Improvements to this site totalled 2 ha of habitat improvement. Habitat works comprised:

- Creation of a wildflower meadow to prolong the availability of nectar for invertebrates.
- Thinning of woodland and under sowing with woodland flora to enhance biodiversity.
- Tree planting.



In addition there3 was an upgrade of the footpath and improved access points were installed.

### Assessment

The habitat works have brought benefits for biodiversity by enhancing the wildlife corridor along the canal. The access and footpath improvements make the site easier to access and better to use for local communities.