

Emily Mundy bequeathed Markeaton Park for the people of Derby in 1929. Derby Borough Council purchased more of the surrounding grounds and built a ring road there, as much to give employment during the Great Depression as for any need of the road at that time. Estates of houses were built in Sinfin, Littleover, Mickleover, Mackworth and Allestree. The ring road was extended to give all those people a way to get to work without having to criss-cross Derby City Centre. By the late 60s the Borough Council wanted to make it dual carriageway. The Highways Agency thought it would be a splendid idea to combine the Devon to A1, A38 Trunk Road, with Derby's ring road, making it dual carriageway. Once that was done it quickly became apparent that mingling freight traffic with local traffic delayed both sets of drivers. The Highways Agency assumed that the delays were caused at crossing points; *however that is not the case. To this day Derby people use the ring road to **avoid** going through the city centre.* Surveys conducted by Cycling Derby have revealed that at times of most congestion 70% of the traffic is local traffic.

Meanwhile Highways England has lost sight of the stated aim of the 3 junction project i.e. grade separation of local traffic from Trunk road traffic to reduce delays and congestion. The requirement set in 2015 to have a speed of 50 mph, with all the associated rules, has distorted the whole project. Closing Brackensdale Avenue and Raleigh Road forces local traffic to use the A52 Trunk Road, and closing the access and exit from Eurogarages and McDonalds **adds HGVs to local traffic.**

The exemptions granted to Highways England by the NPNNS have the unintended consequences of allowing it to dismiss the expertise and detailed knowledge of Local Authority officers and Derby citizens. Highways England completely disregards the promises that were made about the mitigation. It was going to be much better than what exists now. Instead it is what suits the purposes of HE i.e. translocation of protected wildlife into an unsuitable habitat elsewhere within HE working boundary. They want to disregard the rules about polluting the water courses. HE is offering land under the new curly footbridge as replacement Open Space land. I would like to hear what Emily Mundy herself had to say about that.

Far too many problems have been deferred to the "detailed design stage". The time schedule is not long enough to resolve all the conflicting issues. HE completely disregards the difficulties of Local Authorities whose loss of Revenue Support Grant means they have to prioritise Adult and Children's Care and statutory obligations, above all of their other services to council tax-payers. Highways Agency only fulfilled its promises on supplying maintenance money to the City Council when it wanted to proceed with further improvements to the trunk network to please the Freight-Goods companies. The silt was only cleared from the culvert under Queensway 32 years after the dualling despite repeated requests from Derby City Flood Defence team.

Since the cost estimates were done for the 3 junctions project the UK has left the EU, an event not envisaged in 2014 2015.

#### Costs of materials and labour

The Prime Minister is adamant that the UK is to Leave under WTO Deal terms, so materials which will need to be imported, including plants, could soon carry tariffs, plus extra administrative costs from Customs checks, plus extra fuel costs caused by waiting in long queues at the ports. The 3rd lane in both directions increases the amount of materials required for building the road, plus the amounts needed for mitigating the loss of biodiversity.

Extra cost of imported plants (from a short hunt on a gov.uk site on Statutory Instruments for Brexit, listing charges for inspection if imported from EU).

The numbers are £ sterling, but it is not clear if those prices are for time spent and or per kilo of plant. This is a Customs import list not a tariff. There would be tariff costs as well.

Shrubs, trees (other than cut Christmas trees), other woody nursery plants

including forest reproductive material (other than seed) 182.38

Bulbs, corms, rhizomes, tubers, intended for planting (other than tubers of potatoes) 205.04

#### Labour costs

CrossRail work is expected to continue for another two years. The Prime Minister has also promised to proceed with HS2 and with building 40 hospitals and millions of houses; that will result in an acute shortage of construction workers, which will lead to their pay having to rise. The job offer for earnings of immigrants has to be £25,600 pa as compared with the current basic pay of construction workers of £18,500pa.

The extra costs on the NHS of missed appointments at the Royal hospital or of long term care for patients who did not get emergency care in time to make a full recovery, (caused by the gridlock when Northbound drivers leave the A38 before they get to the roadworks), would not appear on the books of Highways England but they would be on our tax bills.

#### Loss of hard earned reputation and income

Friends of Markeaton Park work very hard to put on Festivals of Music and Flowers, and Craft Fairs. Before visiting that type of event people check where road works are taking place. The University of Derby has experienced a drop in student applications during work on the A52. Intu and other retailers in the city centre, and the City Council itself expect a severe long term, probably permanent, drop in footfall, thus in income, as people and potential students alter their habits and take their business elsewhere.

Allowing the Compulsory Aquisition of part of Markeaton Park and the removal of the trees will not be “*for the benefit of the Public...*” of Derby, but for the benefit of users of the trunk road system.

Markeaton Park gives more and more to its beneficiaries, the citizens of Derby. There are around 100 events that take place in the park every year, attracting over 1.6m visitors to the park from the city and across the region. The park caters for the young and the old. The facilities reflect both the Heritage of the park and new upgrades for the needs of physically or mentally disabled, families, and exercisers who need open space for recreation.

After the new paths suitable for wheelchairs and pushchairs were funded by the Heritage Lottery, lots more folk in Derby began to go to the park to enjoy being outside. There are cyclists before breakfast and joggers there at night (confirmed during the Bat Walks). The A38 traffic is hardly noticeable because it is shielded by a band of trees, some of those are hundreds of years old. **Jogging alongside juggernaut lorries travelling at 50mph won't be so enjoyable once trees are replaced by an extra lane of trunk road.**

Highways England want to *close the entrance and exits for McDonalds and Eurogarages. HGVs are to be added to local traffic not separated from it*, and HE wants to *close the Markeaton Park entrance off the A38 too*, so a traffic-light controlled Right Turn Lane in Ashbourne Road will be needed. Thus the possibility exists that an extra long low-loader lorry carrying 60ft long rail could be attempting to perform a U-turn left into Euro-garages simultaneously with a wide fairground vehicle turning right into Markeaton Park.

There are no toilets at that end of Markeaton Park. Everyone who needs those facilities has to cross to McDonalds. Those pedestrians will have to fit in with the sequence of the traffic lights, they won't be able to fully cross the road in one walk. Will there be a big central island for pedestrians to wait safely at the right-turn traffic light? It will have to accommodate pushchairs and Non-Motorised-Units used by Physically disabled people.

How far back to Ashbourne will the combined extra local traffic and the HGV A52 Trunk Road queue become, as it is held up by the vehicles and people activating the red light so they can enter Markeaton Park or cross to use the toilets?

DCiC's Linsig computer model and HE's own TRANSYT computer model have not shown any problems with queues. A computer does not understand that drivers need to excrete and rest, or that hospitals get more emergency vehicles when roads are icy. The inputs to the computer models do not reflect the variability of seasons, day and night, or road works in other parts of the road system.

*The computers are not aware of the interconnected complexity of real life.*

**The City Council often has to deploy a human to manually over-ride traffic-light computer controls.**

*Austropotamobius pallipes* live upstream of the Markeaton Lake at Kedleston Hall National Trust lake; these seriously endangered White clawed Crayfish in the lake are on the Natural Environment and Rural Communities Act species list, they are a “Species of principal importance for the purpose of conserving biodiversity” covered under section 41 (England) of the NERC Act (2006) and **therefore need to be taken into consideration by a public body when performing any of its functions.**

The Climate Change droughts and floods of recent years have further decimated populations in rivers with Special Area Conservation status, making the species even more endangered than it was fifteen years ago. Markeaton Lake is known to house a population of Invasive Non-Native Signal Crayfish. The Signal crayfish carry a fungal disease which is lethal to our native White Clawed Crayfish. Natural England, the Environment Agency, the University of Derby, Nottingham Trent University, student volunteers, Derby City Parks department, Derbyshire Wildlife Trust and the National Trust have been co-operating and last year they trapped more than 2000 of them. It is possible that the noise and especially the vibration of the 3 junction work will cause them to migrate away from Markeaton Park. They can travel some distance overland. Highways England must be asked to watch day and night. It will have to obtain a licence from Natural England to intercept any that do seek a quieter life.

**It would be unlawful to allow any of them to move upstream to spread the disease to what is one of the last thriving colonies of White clawed crayfish.**

The Local Flood Authority have raised concerns about the disruption of the flows of ground water by Secant walls that could cause back-up of flood risk on Markeaton Park. The amount of ground water is also certain to rise if the trees and other vegetation is removed as proposed. Those mature trees abstract water from the ground during their transpiration, carrying as they do millions of leaves.

[https://www.ewra.net/ew/pdf/EW\\_2017\\_59\\_34.pdf](https://www.ewra.net/ew/pdf/EW_2017_59_34.pdf)

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Abstract: Transpiration is calculated as a component of evapotranspiration for planning water resources in watershed scale. To present this fact, water consumption of a single full grown sessile oak (*Quercus petraea* (Matt.) Liebl.) was determined in daily basis by the tissue heat balance method in Belgrad Forest, Istanbul. Study period covered one growing season in 2016. The sample tree was 18.5 m in height, 34.5 cm in diameter at breast height. Mean air temperature, humidity, and precipitation were 17.4°C, 76.6 (%) and 368 mm respectively, during the study period. The maximum transpiration was 162.4 kg day<sup>-1</sup> in July and the minimum was 0.78 kg day<sup>-1</sup> in the first day of April. Total amount of water consumption by this single tree in the whole growing season was 18325 kg. Results of this study revealed that water consumption of the vegetation cover should be taken into account for effective water management.

A single tree studied as described in this European Water research used “**water consumption by this single tree in the whole growing season was 18325 kg.**”

A tree of that size lives inside the curl of the footbridge. The vegetation on the area of Queensway to be cleared covers at least 155 times the area of the sample tree, evapotranspiration maybe 2,840,375kg water over a year.

TPO loss Markeaton junction map HE514503.



The houses of Broadway and traffic on Queensway can be seen near the top of the photo.



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The white dots on the left are vehicles on Queensway. These stems have more suction than one tree. Most of the area to be cleared has this type of wooded cover. These plants have established over years, before the extreme rainfall rising from Climate Change. In dry summer times this soil becomes solid. Mitigation plants are not likely to survive, and they would not perform the benefits provided by the existing trees and scrub.

The embankment will be destabilised by

- a) felling of trees and removing roots as necessary for
- b) digging a trench for the diverted utilities corridor
- c) planting mitigation saplings
- d) periodic inspection and upgrading of utilities

There could be 2,803,725 extra kg of water there when the plants are not transpiring the water into the atmosphere. Will Highways England have to bear the costs if the wet embankment suffered a mud slide or saucering in the years it took the new trees to develop root systems comparable to the ones stabilising it at present? Highways England has not divulged how much vegetation will be killed. It has not said how much mitigation planting will be done.

Semi-mature disease-resistant Elms are to be planted very close to the newly dug diverted utilities corridor. Won't they be disturbed if the any of the diverted utilities have to be inspected for preventative maintenance or for upgrade or repair? If one of the utilities in that corridor needs a repair when one of the trees turned into a totem pole there is successfully being used as Maternity Bat Roost, what a dilemma as the penalties per bat disturbed clash against penalties for loss of service of that utility.

Carbon Storage of the irreplaceable trees

Natural England <http://publications.naturalengland.org.uk/file/94024>

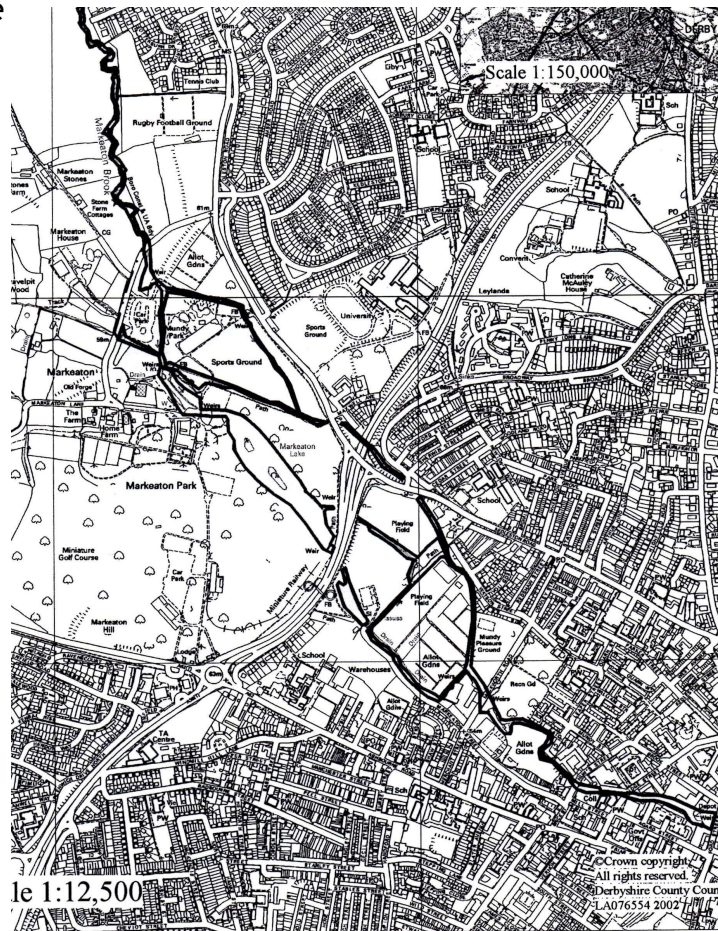
EcoServ-GIS v3.3 Technical Report: "Carbon Storage Service"

Descriptive text: storing carbon within vegetation and soils, ultimately benefiting people.

The Friends of Markeaton Park manage the Walled Garden. That has been flooded several times in the past. Each time the level of the water has risen, and the damage caused has been worse. The floods of February 2020 reached a depth never reached before, and reached areas that had never been flooded in the past. There was a lot of damage to the contents of the polytunnels, and to the Victorian Bothy. Removing the trees increases the risk of floods; thus it harms the beneficiaries of the Mundy covenant in all corners of the remaining park, not only those enjoying the new paths.

The on slip road from Kedleston Road is the place likely to have an accident, adjacent to the Mill Pond. Highways England has not guaranteed that runoff from the widened A38 will have all available means to trap debris and remove pollutants before it is discharged into the local waterways, that are designated Wildlife sites. The water quality was good enough to host the Jensen Button triathlon charity swim run cycle in 2017.

DE 003 Wildlife Site



**003 Markeaton Brook System**



Derby City Flood Authority We are particularly concerned that the cumulative effects of silt and other pollutants for the existing and proposed outfalls into Mill Pond will cause significant issues.

## Derby City Flood Authority response to Examiner questions

Any increase in water discharge to Mill Ponds is a significant concern.

These are impounded water features. It forms part of the Markeaton Lake/Mill pond reservoir complex. It is our view that the reservoir panel inspector should be consulted on the outfalls proposed in this water feature. It should also be noted that part of the dam forming the Mill Ponds breached in 1977.

Water Quality In the drainage strategy not all outfalls are proposed to have any treatment. The method used in the ES to assess the requirement for treatment is the HAWRAT a Highway England assessment tool. However this does not accord well with the requirement of NPSNN and NPPF, which is to use SuDS where possible. This implied that all outfalls should have some water treatment. Our view is the SuDS Manual (C753) Published by Ciria should be used to determine the level of treatment that should be provided.

We are particularly concerned that the cumulative effects of silt and other pollutants for the existing and proposed outfalls into Mill Pond will cause significant issues. The Mill ponds are impounded water feature with very low flow during dry periods, as such this is a very sensitive water feature. The fishing club that fish the ponds have previously complained about a build-up of silt and lack of oxygen for the fish in the water body.

The **Proposed mitigation** has not been shown to have equal environmental value, and is unlikely to show any net gain. The mitigation saplings cannot absorb the same amounts of Carbon dioxide as trees and hedging that grow millions of leaves. More rain, storms, and drought make the saplings unlikely to survive. Above a utility corridor in land where the HE retains rights of access they will always be at risk of being dug up even if they do manage to grow. Highways England has not divulged how much vegetation will be killed. It has not said how much mitigation planting will be done.

If the right turn from Ashbourne Road onto the A38 is to be removed from the Markeaton roundabout in the TR0 10022 scheme, all the Northbound traffic will be forced to go through the 5 Lamps junction, which does not have enough capacity for the local traffic using it now. That is a residential area.

The inhabitants will suffer worse Air Quality all day if that is the only route available for Northbound trunk road traffic. The citizens of Derby who live nearest to Markeaton Park, who are in most need of its open space and recreation, will suffer a permanent loss from the Compulsory Acquisition by Highways England of land from the park. They will get worse Air Quality where they live and will no longer be able to escape from the noise and fumes in Markeaton Park when trees no longer grow all the way along the edge, screening the trunk road.

The inhabitants of Mackworth will also suffer worse air pollution as traffic travelling to join the A38 or to enter Derby is constantly stopped by the Right Turn Lane red traffic light when people need to cross to McDonalds to use the toilets. Hundreds of vehicles enter the park on sunny days, and days when there are big events, or Open Days for the University of Derby. Even more traffic delays will arise from these alterations.



Derby City Council has been subjected to punitive cuts in funding from Central Government. It has been able to use the income from Markeaton Park to fund the provision of support for Friends of Parks voluntary groups who provide activities, nature walks, sport, exercise, fishing, a model boat club, art classes and big events such as Dog Shows and Classic car shows.

With Derbyshire Wildlife Trust the Parks department collected seeds from Veteran trees to grow them to preserve a diverse gene pool. The Walled Garden in Markeaton Park was used as a nursery for the seedlings until they were grown enough to be planted.

Charles Clark Maxwell attended the steering group meetings that founded Friends of Markeaton Park. He loved to walk to the park to listen to the sounds of children playing in the Mundy play centre. He said it was a loud sound when the paddling pool was full each summer. He would have particularly enjoyed the popular History Walks.

Had he lived he would have been the Patron of Friends of Markeaton Park.

There is No benefit from the A38 3 junctions scheme for the beneficiaries of Emily Mundy's bequest. There is only harm for Derby's residents. The people of Derby will have endure worse traffic jams on the inner city roads, worse pollution in the air, and worse pollution in the water courses. Derby City Council will have to carry more maintenance costs.

For years to come there will be a loss of income from businesses that used to get custom from the people attracted to Derby by events in Markeaton Park. There will be a loss of income from events on Markeaton Park. Who chooses to spend a day at the side of a trunk road, with lorries thundering past?