From:
To:
A38 Derby Junctions

Subject: TRO written submission flooding Markeaton Park

Date: 17 March 2020 17:51:07

Attachments: biodiversity water environment Markeaton Park A38.pdf

I attach a written submission on topics that were due to be considered ar the Hearing on March 19th.

Real life intervenes; living organisms don't conform to government processes or to computer models.

I hope to meet you in due course once we are all well.

Anne Morgan

For attention of Stuart Cowperthwaite

Development Consent Order for HE project TR0 10022

Water environment

The Local Flood Authority have raised concerns about the secant walls' disruption of the flows of ground water in the underpass of Markeaton island 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. At least 35 trees much larger than the one measured for this research will be removed from the A38 at Markeaton Park. TPO loss Markeaton junction map HE514503

 $35 \times 18325 = 641,375$ kg of water, which normally has been dispersed throughout the embankment, which has been stabilised by the tree roots, could destabilise the ground.

The embankment will be destabilised by

- a) felling of trees and removing roots as necessary for
- b) digging a trench to divert utilities
- c) planting mitigation saplings
- d) periodic inspection of utilities

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?

Research references

https://www.ewra.net/ew/pdf/EW 2017 59 34.pdf

M.S. Ozcelik Istanbul University, Faculty of Forestry, Department of Watershed Management, 34473, Istanbul, Turkey e-mail: msaid.ozcelik@istanbul.edu.tr
Abstract: Transpiration is calculated as a component of evapotranspiration for planning water resources in watershed scale. 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.

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.

Biodiversity

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 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 **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. 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 the repair when one of the trees turned into a totem pole there is successfully used as maternity bat roost, what a dilemma as the penalties per bat disturbed clash against penalties for loss of the service of that utility.

I hope the additional information supplied and referenced herein is useful to the Examining panel.

Anne Morgan

Carbon storage by habitat: Review of the evidence of the impacts of management decisions and condition of carbon stores and sources



From:
To:
A38 Derby Junctions
Subject:
TR010022 written submission
Date:
17 March 2020 12:35:53

Attachments: A38 TRO 10022 fails to improce Air quality.pdf

This is a late submission; I hope the inspector Stuart Cowperthwaite will accept it.

I have avoided new information, taking evidence from the documents in the Examination Library, except for the 3 photos at the end, which are my own photos of the results of the previous Highways Agency work on the A38).

Anne Morgan



For attention of Stuart Cowperthwaite

Development Consent Order for H E project TRO 10022

1. The cost / benefit ratio no longer holds true.

Under the present circumstances, the costings of TRO 10022 need a complete reassessment. Highways England has not proved that the Scheme Objective is achieved by these proposals.

"Public Accounts: • To be affordable and represent High Value for Money according to Department for Transport (DfT) appraisal criteria."

Since the cost estimates were done the UK has left the EU, an event not envisaged at that time.

Costs of materials and labour

Materials which will need to be imported, including plants, could soon carry <u>tariffs</u> plus extra administrative costs from <u>Customs checks</u>, and <u>extra fuel</u> used in long queues at the ports, because the Prime Minister is adamant that the UK is to Leave under WTO Deal terms. The 3rd lane in both directions increases the amount of <u>materials</u> required for building the road, plus the amounts needed for mitigating the loss of biodiversity. The Derby City Council and UK government have declared a Climate Emergency. Costs could be incurred dealing with the opposition attracted by felling loved trees, woods and hedges.

Extra cost of imported plants from a short hunt of .gov.uk Brexit preparation

From a gov.uk site on recent 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 tariffs costs as well.

Shrubs, trees (other than cut Christmas trees), other woody nursery plants including forest reproductive material (other than seed)

Bulbs, corms, rhizomes, tubers, intended for planting (other than tubers of potatoes)¹

205.04

1

¹ Anne Morgan TR0 10022 grade separation not achieved No Benefit

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.

Time and driver stress

The scheme was supposed to deliver separation of local traffic from trunk road freight traffic, thus reducing congestion and improving the air quality.

Unfortunately that is no longer the case, because to qualify as a "Nationally Significant Infrastructure" the speed limit on the A38 trunk road must be 50mph or above; that gave rise to the perverse need to close the existing alternatives for local traffic junctions at Enfield Road, Brackensdale Avenue, and Raleigh Street, thus forcing more local traffic along Ashbourne Road into Derby and onto the A38/A52 traffic light controlled roundabout.

Highways England also want to close the entrance and exits for Eurogarages and McDonalds HGVs are to be added to local traffic not separated from it.

Highways England want to close the entrance off the A38 to Markeaton Park, so the entrance to Markeaton Park is to be moved, requiring a traffic-light controlled Right Turn Lane in Ashbourne Road. 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 Eurogarages simultaneously with a wide fairground vehicle turning right into Markeaton Park.

That does not achieve the Objective "· To improve the safety for all road users" I cannot find Work 16b 16d 16f 16h 22b Works maps but doubt there is a big central island for pedestrians to wait safely at the right-turn traffic light. There are no toilets at that end of Markeaton Park. People including NMUs needing those facilities have 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.

I cannot find Work 16b 16d 16f 16h 22b Works maps but doubt there is a big central island for pedestrians to wait safely at the right-turn traffic light.

Linsig computer model and HE's own TRANSYT computer model do not understand that drivers need to excrete and rest, or that hospitals get more emergency vehicles when roads are icy.

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 the traffic-light computers to keep traffic flowing.

Social Impact costs

All traffic to the Royal Hospital from East and West has to use the Derby Ring Road. Highways England is not able to provide a dedicated passage for emergency vehicles, instead it relies on vehicles moving aside to allow room for ambulances to pass. The width of some vehicles of 2020 makes it impossible for the ambulance get past them; *I have seen an ambulance unable to proceed although all the vehicles had moved aside.* If people who have had a stroke or heart attack are delivered to hospital quickly they can make a full recovery; if they do not arrive in time they can be left severely disabled needing long term costly Social Care.

There is certain to be additional gridlock at the A38 roundabout at the front entrance to the Royal Hospital when Northbound vehicle drivers, aware of the roadworks delays at the Kingsway roundabout, choose to leave at the earlier junctions instead.

Highways England has not proved that the Scheme Objectives

- "· To reduce delays and increase reliability of journeys on the strategic corridor." and
- "· Assist in bringing forward development and regeneration opportunities in the surrounding area and immediately adjacent to the Scheme." will be achieved. Loss of hard earned reputation and income

The University of Derby, 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 take their business elsewhere. They are not satisfied that the Objective

"Facilitate regional development and growth in Derby City and its surrounding areas and increase capacity of the strategic road network to absorb growth." will be achieved.

Past experience has shown that any reduction of congestion from highways alteration is short-lived. Local Authority Plans allocated land to build housing outside the boundary of Derby City Council, and several estates have been built. The residents of that housing add thousands more cars as they access the work, schools etc. in other areas of the city, NOT the city centre.

The Derby Ring Road had to be built in the 1930s so that people could get from where they lived to the regions of the city where they worked without criss-crossing the city centre, and that continues to be a necessary function of that road. Travel surveys have found that 70% of the vehicles at the most congested times arise from local traffic using the ring road, not local traffic that is crossing the ring road to get into the city centre.

Benefits NONE Congestion will not be reduced, Air Quality will not improve.

Anne Morgan

Previous experience of Highways England funding does not give confidence that the government would allow them to ring fence money for the costs of clearing drains that become the responsibility of Derby City Council.



Curve identifies this as the culvert built when Queensway was widened in the early eighties. Then a tall man could not reach the bridge when clearing under the culvert.



Anne Morgan
photos June 22nd 2016

the silt has reached a level such that there is barely head room for the moorhens



4 Anne Morgan TR0 10022 grade separation not achieved No Benefit