These plans date back to the 80s; they take no account of the current climate emergency. Highways England continue with them, despite the fact that carbon dioxide emissions and air pollution (nitrogen dioxide) will be significantly increased, by the generated traffic. It is as though time has stood still and there was no climate crisis. The UK Government will not meet carbon targets with such schemes.COP26 is to be held in the UK this year. It does not bode well for future generations, and their rights, under the Human Rights Act and the **Aarhus Convention's** twin protections for environmental and human rights, Article 1 "the right of every person of present and future generations to live in an environment adequate to his or her health and well-being"

Derby is one of the UK Government 6 designated Clean Air Zones, for nitrogen dioxide (NO2). Derby is not meeting NO2 Air Quality Standards, and will not, especially with such plans to induce more traffic.

The plans are estimated to significantly INCREASE NO2 air pollution.

HUMAN RIGHTS

Air pollution is leading to 7 million premature deaths a year around the world, including 600,000 among children, David Boyd (UN expert March 4 2019 Thomson Reuters Foundation)"To put that 7 million figure in context, that's more deaths every year than the combined total of war, murder, tuberculosis, HIV, Aids and malaria"...It's a global health crisis that really needs to be addressed. Air pollution violates the rights to life, to health, the rights of the child and also violates the right to live in a healthy and sustainable environment"

The United Nations accused the UK Government of being 'laggards' when it came to air pollution (The Times June 5th 2019)

Another indicator that the plans are outdated, is that younger present generations are not buying new cars and sales are dropping. It may be economic, or that they know that the petrol/diesel engine is unsustainable and are using mass transit/waiting for more sustainable mass transit. This is not accounted for.

FLOODS AND CONGESTION

Derby inner city ring road completion was claimed to reduce congestion/pollution. This has not occurred, as evidenced by high nitrogen dioxide levels. On November 8th, the entire inner ring road system ground to a halt, for over two hours, as the River Derwent burst its banks and flooded several roads, leading to closures and tailbacks of traffic, including on the A38. People were trapped in their cars/buses. Since then, the Derwent river levels were high again last week, due to Storm Ciara and this week because of Storm Dennis. Tributary brooks including Markeaton and Amber brook overflowed. Storms and rainfall are increasing in intensity. Yet HE has only modelled for ONE extreme rainfall event, not several occurring daily or spread out over a number of weeks/months. Their predictions are thus out of date.

MARKEATON PARK AND PUBLIC OPEN SPACE

This is a city park; people come here from all over the city, especially from wards which are lacking in Public Open Space standards, namely Rosehill, Peartree and Normanton, These wards are also amongst the most deprived. A campaign and petition to save Markeaton Park from similar unsustainable development was organised in the late 80s, garnering over 17000 signatures, mostly collected in the park, against loss of open space and tree felling. Approximately quarter of the signatories came from these wards. It is not helpful to claim there is an 'oversupply of open space' when such issues have not been examined. The petition will be available for viewing at the inquiry.

PUBLIC SAFETY/AIR POLLUTION

During the A6 Bypass inquiry we asked the Highways Agency (HA) (known then) if they had taken into account the children who might run across the carriageway to Elvaston Castle park (their access previously unfettered) HA said yes and were dismissive. Within a few months of opening the bypass, a little boy was killed. HA response was to make some of the fences higher. Many people and children run across the current Markeaton Park island layout, as the traffic light system timings allow it. We have seen them. Q1. How can HE guarantee public safety when HE have acknowledged greater traffic increases, faster speeds and increased air pollution?

Kingsway Island contains the Royal Derby Hospital. This is the most polluted site in the East Midlands. (See Derby FOE ENC 1) At the inquiry Day 2, HE said they would be putting more traffic onto the A38 Kingsway, thus this island, and speeding up that traffic. It is ironic that people come here to improve their health.

BIODIVERSITY

The UK is on target to miss international commitments under the Global Convention on Biodiversity Directive, to which it is a signatory. The loss of over 100 trees and valuable areas of wetland/washland and biodiversity at Markeaton Park is an indicator that nothing is changing. The UK is one of the most nature-depleted countries in the world (State of Nature

INCREASED RAINFALL EFFECTS & RUN-OFF DUE TO CLIMATE CHANGE/car parks

The brooks in Allestree, (ward next to Markeaton Park) including Markeaton brook and Amber brook, are already at over-capacity and often flood gardens and homes. The A38 junctions, especially Markeaton, will increase run-off and flooding. In addition to this, hundreds of homes across Allestree have added to Amber Brook run-off by concreting their front gardens, to enable car parking. We believe this is not in the remit of the A38 Behavioural Change Group.

At time of writing there has been another week of extreme rainfall and river levels cross the country are high, with over 150 flood alerts (down from over 600 last week) Markeaton Park is flooded (20 February 2020) Another storm, -Storm Ellen, is forecast for next week and heavy rainfall continues.

The A38 has been closed at Burton-on-Trent because of flooding, for 2 days (20/2/10)

The Environment Agency (EA) has stated that the rainfall so far, in February, is at 141% of the average February rainfall. (John Curtin, Flood Mgr, Metro 20 Feb 2020)

The East Midlands agricultural sector has reported that wheat harvests will be at the their lowest since 1947,as weather conditions have been too wet to sow seed. Arable land in the East Midlands is the worst affected, in England. (East Midlands Today 21/2/20)

We support other objectors.

Questions and observations arising from Feb 18/19 Hearings and further questions here included, to save time at the inquiry. We will also be submitting further responses to the HE submission on 28th February

We are dismayed at the lack of care regarding procedure from HE; the omission to inform the public about the hearings, through Public Notices in the local newspaper, the Derby Evening Telegraph. This is a breach of the Aarhus Convention.

AIR QUALITY 1

- Q2. Regarding air quality, Highways England (HE) has acknowledged that air pollution nitrogen dioxide levels will worsen because of the roadworks, including Markeaton Park flyover, slip roads, widening. HE stated that they would be putting more traffic onto the A38, which includes Kingsway island, on which the Royal Derby Hospital is situated. This is the most polluted site in the East Midlands for nitrogen dioxide, (See Derby FOE ENC 1) HE, through the extra capacity building, will thus be increasing the amount of traffic and pollution at this island, in trying to make traffic flow faster. How does this assist with the main intention of the NHS to help sick people improve their health?
- Q3. The NHS has estimated that the beneficial nature of London parks alone, has saved the NHS £370 MILLION pounds a year. We ask HE to provide the cost benefit savings of Derby parks and especially the main city park, Markeaton Park?
- Q4. Air pollution is a material consideration and the UK Government has declared Derby a designated 'Clean Air Zone' how do these plans, which increase pollution, assist that designation?
- Q5. Derby has no Air Quality Action Plan (AQAP) and is currently consulting on one. Particulates are estimated to be reduced if nitrogen dioxide is reduced. Diesel vehicles are the main PM emission sources. As HE claim they want to separate out the lorries, will these lorries, vans etc be the main source of the 'significantly increased emissions'?

CLIMATE, CARBON & FACTORS INDICATING OUTDATEDNESS/OBSOLESCENCE OF PLANS

- Q6. Does HE agree that there is a current climate emergency?
- Q7. How does HE envisage assisting the UK Government with declared carbon targets?
- Q8. Derby City Council and the UK Government have declared a climate emergency; how do these plans, which increase carbon dioxide emissions by thousands of tonnes, fit with that declaration and what is are the estimated CO2 emissions from an extra 15000 vehicles daily?
- Q9. What is the total amount of CO2 produced by the cement and steel, to be used in the Markeaton junctions plan and the other schemes?
- Q10. We believe HE is downplaying the effects of the climate emergency, especially as these plans date back to the late 80s and there is no acknowledgment of their obsolescence. We ask if HE is really serious about climate change?
- Q11. In the real world, the global economy is entering recession, younger generations are not buying cars and car sales are dropping. Younger generations have no chance to reach the stability that their parents had and their standard of living is dropping, compared to that of their parents. This is another factor that has not been examined by HE and we ask why?
- Q12. In 2016/2017 there were 929 MILLION local bus journeys made by older and disabled concessionary pass holders (Transport Statistics summary, Great Britain, 2018 pg 15) In 2018/19 there were 4.8 billion local bus passenger journeys

in Great Britain, 58% of all public transport journeys. (Transport Statistics summary 2019 pg13) There was no figure for concessionary journeys in the 2019 Transport Statistics. As the population grows older and increases - we know that this figure is increasing as older people reach the age of the concessionary pass holder and use sustainable mass transit more often - how is HE encouraging the use of public transport?

Q13.Total fuel duty revenue almost tripled between 1990 and 2010, then flattened off in period up to 2017.(Transport Statistics Great Britain 2018pg 27) and dropped again in 2019(Transport Statistics Great Britain 2019 pg 26) These duties are used to fund Highways England. So it will be in HE's interest to INCREASE the number of car journeys, in order to maintain, perversely, funding for HE. Therefore, we ask is it one of HE's main purposes - to make car journeys 'seem' quicker and faster, so that more people will use more fuel and increase their car journeys/drive?

Q14. In doing this, does HE agree that if these roads are built, HE funding can be maintained?

Q15. How can this be claimed as HE promoting 'sustainable' transport?

WATER

SUSTAINABLE URBAN DRAINAGE/FLOODING

Q16. Do HE agree that the wetlands/biodiversity and over 100 trees to be destroyed, at Markeaton Park, constitute 'Sustainable Urban Drainage'?

- Q17. Do HE agree that wetlands/biodiversity and over 100 trees to be destroyed, at Markeaton Park, constitute upriver/stream flood risk management?
- Q18. Derby city centre flooded in November 2019, leading to gross pollution of floodwaters, by petrol, diesel, sewage, blood etc from urban areas upriver/industrial sites/construction. Who has the responsibility of clearing up the increased water/pollution from the road schemes, entering our river/streams, because of increased and intensive daily/weekly/monthly/combined climate emergency rainfall events?
- Q19. The UK Government have stated that extreme rainfall events are to increase because of the climate emergency. Why has HE not carried out modelling for DAILY extreme rainfall events for a week or WEEKLY extreme rainfall events for a month/many months, and the expected provisional flows from such events eg combined November 2019 storm/Storm Ciara Feb 2020/Storm Dennis Feb 2020?
- Q20.On November 8th 2019, over 200 personnel at the Rolls-Royce nuclear reactor on Raynesway (see Alvaston flood map) were evacuated, as the River Derwent river levels rose to threaten the safety of workers/residents. Markeaton Brook (see Allestree flood map) is the main tributary stream into the River Derwent, which has been constantly high since November 2019 flooding of the city. The trees/wetland at Markeaton Park form valuable water retaining areas. As HE has only modelled 40% extreme rainfall event, not daily extreme rainfall events,eg for a week or weekly extreme rainfall events for a month, how can HE claim that there will be no knock-on effects downstream, of loss of upstream trees/wetland providing rainfall/water run-off absorption, emanating from the combined A38 junctions works/flyover/widening concretisation?
- Q21. EA has stated that rainfall is at 141% of February rainfall (20 Feb EA) and HE have only modelled for 40%, we ask that HE produces revised 141% figures, as their 40% estimate is outdated and does not take account of worsening weather systems, due to the climate emergency, especially the excessive rainfall in the East Midlands. This is of particular importance regarding the knock-on effects, downstream. (see Q20)

AIR QUALITY 2 – TRAFFIC, STAFFORD ST

Q22.HE has taken air pollution figures from 2016, yet traffic figures from 2018. Why? Is it because the traffic figures were similar for 2018/19, but pollution was lower?

- Q23. Regarding APP A43 Air Quality -5.10.52 Stafford St is the decrease in predicted PM10 concentrations imperceptible, with the scheme?
- Q24. APP A43 Air Quality 5.10.62 Are reduced emissions of NOX and PM10 expected between baseline situation (2015) and opening year (2024) WITHOUT the scheme?