

To **Jeff Eaton**

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Dept. Planning

Ref **23/00018/FUL**

From Highway Authority
Andrew Blackburn

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Proposed filling station with ancillary convenience store (325 sq m GIA), forecourt with 4, 2 sided, pump islands , canopy, electric vehicle charging points and associated car parking, a drive thru fast food restaurant (349 sq m GIA)(Use Class E(b)/sui generis hot food takeaway use) with associated car parking, new site access road, new electricity substation, firewall to valve compound and associated works at The Woodyard, Cholmondeley Road Runcorn WA7 4XU.

Highway Objection

The proposed development is for Roadside Uses at Cholmondeley Road (also named in other sources as Weaver View or Clifton Road), Clifton, about the Weston Expressway Junction 12 (Rocksavage) Roundabout.

The proposal includes a Petrol Filling Station, with Retail shop element, and a Fast Food Restaurant, with Drive Thru, associated parking and infrastructure.

In highway terms, when reviewing such a submission, consideration is given, but not limited to, the following; **traffic generation, distribution and capacity impact, access to the site for all modes, adequacy of parking, manoeuvring and servicing arrangements, levels, and impact on Highway safety** which will be reviewed in separate sections, below.

To summarise, the overriding reasons for the objection are the levels and gradients, servicing provision and inadequacies of off-site impacts and accessibility by modes other than private car.

Traffic Generation, Distribution and Capacity

Changes of movement patterns (trip distribution and flow patterns), attributable to the development, about the roundabout intersection(s), that may be detrimental to its use and functioning of the junction and adjacent network, would need to be mitigated, once clearly demonstrated, to maintain optimal operational efficiency of the junction, approaches and connecting infrastructure.

As well as macro modelling, microsimulation should be considered e.g. Aimsum/Vissum.

A narrative should be provided to ensure impact of the past few years, with regards to the Covid pandemic, is accounted for. This would likely include a review of historic data against surveyed movements and may require sensitivity testing

Mitigation will be required; for any queue length that is long enough to block another junction, or traffic stream, or increases RFC above 0.85, or increases DoS to above 90% or, an unacceptable Mean Maximum Queue (MMQ) or, a negative PRC value or, an unacceptable increase in average delay per vehicle or, road safety problems arising from the development including accessibility issues.

Once comments regarding base counts, trip generation and distribution, and model comparison (for queue limits) have been undertaken to satisfactorily the above may be more apparent.

Turning count and queue surveys have been carried out in a neutral month; however the Friday traffic survey data could be uplifted to reflect the flows on a neutral mid-week day as per TAG guidance.

It is important to ensure any traffic queues are formed on the approach arms and not on the circulating links.

Alternatively, background traffic data, from approved studies, could be utilised, provided the data has not been measured during periods of Covid restrictions, is no older than 4 years and subject to growth factors to establish the current base year.

Traffic growth figures should be clearly identified and should be adjusted using NRTF central growth factors, although TEMPRO adjustments may be made to derive future traffic flows on the network.

Analysis should be carried out for the identified opening year of the development and +5 years will be required for junction assessments on the local network, whereas a +10 year assessment will be required for any junctions pertaining to the strategic network (National Highways) i.e. M56. National Highways should be consulted for agreement on these timeframes.

Therefore, revisiting the original Mersey Gateway modelling (Transyt) with the opening year 2015, extrapolating this information and comparing it with the current situation, 2023 - about halfway through the model cycle, given the future year 2030 projections - to better understand if there will be any detriment to the network with development is required and/or mitigation.

Commentary regarding whether the Mersey Gateway operational analysis is still valid is welcomed, with cross comparison of the Transyt modelling at the time and current Linsig and Picady offered.

HBC believes that queue limits, due to stacking space between nodes can be directly compared i.e. vehicle mean and maximum at critical links can be determined to be satisfactory or otherwise

This assumptions/data regarding trip distribution and assignment is not supported.

Southbound pass-by trips are significantly lower than northbound which is not understood, or agreed.

Also, regarding the % of divert rips, and overall amount of trips, from the M56 – is this with signage on the mainline motorway, or otherwise?

Also, will signage/totem or suchlike make the facilities visible from the motorway, regardless or in addition to such signage, and effect the number of such trips?

An application should identify if off-site signage will be sought e.g. on the mainline motorway, or elsewhere, and what will the impact of this in terms of attraction on generation of trips due to diverted traffic.

Justification of assumptions regarding modal split and the trips already on the network ie pass by/diverted trips should be clearly outlined and supporting evidence regarding relevancy offered.

With the proximity to the large residential areas e.g. the adjacent Beechwood area, and further afield, as well as the more local Cholmondeley Road residents, Rowing Club and Rock Savage site users we do not agree with the assumptions and therefore conclusions regarding trips.

Halton Highways does not have access to the TRICS database but the number of sites and location, the most influential factors in terms of trip generation, do not appear robust. A minimum of half a dozen sites was stated at a previous training session held by TRICS to be the minimum number that should be offered for robust comparison and analysis.

For 85th Percentile Trip Generation, requested, a minimum of 20 sites will be required. Any reduction from the 85th Percentile rate proposed should be accompanied by robust justification and/or sensitivity analysis using both average (50th percentile) and 85th percentile trip rates should be presented.

We have noted that the PFS has a retail/shop element yet as National Highways states only a PFS TRICS type was offered, this needs addressing.

Any further analysis must clearly demonstrate that the numbers of vehicle movements generated in the relevant time periods match the trip rates per unit from which they are derived.

Freestanding locations should also be considered, as an alternative (or in addition) to Edge of Town, given the relatively isolated site and situation, with similarities to a motorway service station.

Comparison with the other McDonald sites, Newport and Coldra Redhouse, is useful but again the sites offered appear somewhat incomparable in terms of situation as well the limited number restricting the usefulness and validity of the information presented.

It should be noted that the nearest McDonalds, in Runcorn, listed, is a location where queuing and congestion present amenity and safety issues, considered attributable to the arrangement, layout and volume of traffic attracted, particularly the drive-thru at local peak times.

Other sites are then used for different comparisons/metrics e.g. Appendix 9, and 10; this inconsistency is not understood.

A more extensive number of comparable sites should be offered and comparatives should extend to Drive Thru information e.g. maximum vehicle numbers, queue length, times etc. to ensure the arrangement offered is satisfactory and will also not detrimentally effect parking and circulation of the site which could lead to congestion on the local network, access and gyratory approach and present a Highway Safety concern, see below.

The following statement requires explanation.

5.1.5 ADL have undertaken research which has proven that there is no statistically significant relationship between McDonald's traffic and either; floor area, dining area, number of seats or parking provision, as shown on the graphs included in Appendix 9.0. Therefore, the averaged surveyed traffic has not been adjusted for any variable.

What value and/or information does offering the various comparative analyses offered provide, given the above and how then is parking, traffic etc. reliably predicted?

Access for All Modes

The existing access is proposed to be modified.

Whilst it is stated likely only one vehicle may be waiting to turn right into the site from Weaver View, this turning movement, queue length etc. should be revisited as part of the aforementioned trips and traffic generation re-analysis and any subsequent mitigation offered.

There are concerns regarding vehicle speed coming off the roundabout to Weaver View (as called by HBC) and the potential for rear end shunts with traffic queuing to enter the site – regardless of RSA – see comment below re signage.

Concerns regarding the access are exacerbated by the level difference between the proposed site entrance and the circulatory junction.

The gradient does not appear to have been taken into consideration, as per MfS 7.5.9, and therefore intervisibility in the vertical and horizontal plane is required to be presented

A non-motorised user (NMU) audit is requested to be undertaken to consider existing routes and connections to employment and residential areas clearly identifying any barriers to movement and potential mitigation and/or improvements. Sustainable access links, for visitors and/or staff, should be identified and demonstrated.

The aforementioned junction, of the roundabout with Weaver View, requires further consideration and assessment, in terms of pedestrian and cycling movements, from all directions given the attraction of the site facilities proposed will increase such movements (35% new trips) with the proximity to the large residential Beechwood area adjacent as well as the more local Cholmondeley Road residents, Rowing Club and Rock Savage site users.

The suitability of the wide uncontrolled pedestrian crossing, and potential increased footfall, where vehicles are exiting the circulatory, a free-flowing arm, and shown to be carrying excess speed, requires careful consideration and potential mitigation.

The carriageway arrangement has hatching, to reduce the effective running width, and also has a merge arrow, suggesting two lanes exiting the circulatory, this may require revision.

Service markings approaching and through the gyratory should be revised to improve route finding information/lane choice (highlighting the new services) and lane discipline, preventing sideswipe type collisions due to traffic merging (hap) hazardly.

It should be noted that Weaver View is subject to a 30mph speed limit, though signage has only recently been installed (Dec 2022) about the junction. The installation omission was highlighted when the site was visited following the Pre-App and subsequent consultation response groundwork.

It is hoped that speeds coming off the Expressway onto Weaver View may now reduce – see speed survey results. These speeds impact the visibility splay requirements, potential for rear end shunts/collisions with vehicles queueing to enter (and exit) the site and other highway safety matters.

There are errors on the signage regarding the HGVs, the lorry graphics facing the wrong way – see TSRGD.

Furthermore, the development should provide pedestrian routes into and throughout the site to facilitate safe pedestrian access and circulation. Alternative and additional access points for DDA compliance should be considered e.g. linking the north of the site

A footway on the west of the access bellmouth is requested, with a crossing point where the carriageway narrows to provide a shorter and safer crossing point for pedestrian users accessing the site. Dropped kerbs and tactile arrangements for crossing points should be demonstrated.

There is also a lack of direct route from the access junction to the PFS/shop for pedestrians; a desire line would doubtless form and therefore a formal route offering a shorter more commodious connection should be offered for customer (and staff) accessibility and convenience.

It should be noted that priority to walking, cycling and p[public transport is not considered to be offered, due to reasons sets out above, and aslo that the development is not located within 400m walking distance of a bus stop and a lack of mitigation measures, at the developers expense have to been forthcoming. See Policy C1.

Contributions, in the form of S106 monies, would be required for off-site improvements identified as part of the any revised Transport Assessment and/or Travel Plan.

Parking, Manoeuvring and Servicing Arrangements

Parking accumulation and parking capacity within TRICS, with maximum car park usage (as % of available spaces taken) and car park occupancy detail and trip rates per parking space are also requested for robust understanding of the site's requirements and potential impact on the local network.

Overprovision, to policy C2 Parking Standards of the Halton Delivery and Allocations Local Plan, is offered in terms of car parking spaces, for "operational demand" reasons. Further understanding of parking needs should be offered, especially in light of the comment regarding no statistical relationship between various site factors, above

Was parking for a PFS +shop, or PFS only offered, see comment regarding TRICS use type above?

Clearer understanding of staff numbers/shifts is requested with 6-15 staff at anyone time offered yet 120 overall employees. 25 in the PFS with 2-4 at any one time. These numbers seem incongruous.

However, no oversize parking spaces are offered (vans and suchlike) and therefore the effective parking spaces will be reduced should such vehicles visit the site as they would occupy more than a car space and potentially obstruct the circulation aisles and movement and manoeuvring within.

How will HGC traffic be restricted other than signage?

No vertical information has been offered in terms of kerbing etc.

The banjo turn of the HGV delivery vehicle passes over the motorcycle spaces and several car parking spaces, about the one way access to the drive thru, as well as then parking over the accessible spaces and other car parking spaces, in front of the main pedestrian access route into the restaurant – for up to 75minutes at a time.

This is not clearly understood, in terms of ensuring the space is clear, nor considered acceptable nor a viable operation, regardless of the submission information stating in it is commonplace and occurs without issue.

The tracking shows very tight margins for error for what is a complicated manoeuvre to be done safely, because the trailer swings out behind the tractive unit, visibility of which is lost in the performance of the turn. Is a banksman part of the operational procedure?

Similarly the HGV and tanker manoeuvring show passing over what is considered kerblines and close to other elements e.g. pumps.

In the instance of the shop delivery the staff parking spaces are shown required to be utilised for the loading/unloading (displacement of staff vehicles?) and vehicles in the EV spaces and other parking spaces effectively blocked in for the duration of the servicing. Again, clarification and understanding is required, notwithstanding the assertion that such operations will take place during quiet times. All elements of the site are state to be 24/7.

No tracking for the 9.6m refuse collection vehicle of either element of the site was offered and is required.

The TA must demonstrate that parking capacity is in proportion to the parking accumulation predicated by the production and attraction of vehicle trips throughout the day in order to ensure that the development does not lead to problems of off-site parking due to inadequate provision.

EV charging, for both elements of the site, will be required to meet policy and standards. We would request that the latest +150kw ultra-rapid chargers are the minimum standard to be installed.

There is likely to be patronage by customers utilising oversized vehicle (LGV/van) and therefore we would recommend consideration be given to this specific demand and suitable provision made, within the car parking layout, and in terms of manoeuvring and circulation, to accommodate these larger vehicles.

Parking standards extend to cycle provision to enable and encourage sustainable journeys; long-term cycle parking for staff (secure and covered) necessitates associated provision of showers, lockers and changing facilities. These should be clearly demonstrated on subsequent plans. See LCR CA Cycle Parking Guidance, 2022

Details regarding tracking for all delivery, servicing and refuse manoeuvres should be presented, including swept path of the largest vehicles anticipated to utilise the site,

including at the site access, to demonstrate safe and acceptable circulation and flow during such times given the 24/7 proposed operations.

We note an electric substation and electric cabinet are proposed; the practicalities regarding servicing and maintenance should be considered and presented accordingly in terms of vehicle space for parking and manoeuvring.

It should be noted there are discrepancies in details between the various documents submitted eg 15-75min and 15-45 mins dwell time for McDonald's delivery depending on the source.

Levels

The site presents challenges with levels and gradients given the c10m difference in height between the north and south extremes and whilst level access to buildings is stated to be a design driver it appears that there are instances, notably about the access and approach road where the gradient is not in accordance with requirements for 1:20 and crossfalls of 1:40..

Roads and or footways steeper than 1 in 20, and crossfalls 1 in 40, will result in an environment that will be difficult to move around without motorised methods of travel and does not in our opinion represent good design nor comply with policies CS(R)7 Infrastructure Provision, CS(R)15 Sustainable Travel, CS(R)18 High Quality Design, CS(R)22 Health and Well-Being, C1 Transport Network and Accessibility, GR1 Design of Development or GR2 Amenity.

Excessively steep, or slack, gradients disproportionately affect disabled, elderly people and those accompanied by children, as well as potential issues for vehicles and non-motorised unites e.g. cycles.

Discriminating against such groups in this way without a sound reason can be unlawful under the Equality Act.

This standard is clearly set out within MfS, and the DMRB, which both refer to the guidance set out in the DFT's Inclusive Mobility document. Access and plot level parking spaces steeper than prescribed may lead to issues meeting the guidance set out in Approved Document M.

Provision shall be made within the site for the disposal of surface water so that no run-off drains on to any highway.

Crossfall on footways and footpaths are necessary to provide good drainage, but if too great, can make it difficult for wheelchair users. Variable crossfall can be problematic for wheelchair users and mobility issues.

It is an accepted standard that a gradient of 5 percent or 1:20 should be borne in mind when designing new footpaths and pedestrian areas. Steeper gradients should be treated as ramps

and therefore would be subject to the requirements for fixed lengths before rest areas and associated infrastructure.

Highway Safety

Collision Stats should be presented within the maximum queue length plus stopping sight distance in all directions at all intersections, including on/off ramps, and mainline motorway.

The extent of the area for consideration should be agreed with the Highway Officer and National Highways, in advance.

Informatives

- A Construction Management Plan (CMP) will be required that will cover, but not be limited to, the management of vehicle movement on the public highway, time of working and the management and cleaning of debris on the highway.

In order to avoid pre-commencement conditions it is recommended that a CMP is offered at time of application.

- Notwithstanding LFFA response, provision shall be made within the site for the disposal of surface water such that none runs onto the highway. The applicant should ensure they have met their obligations under NPPF particularly regarding discharge rates.
- The developer will be responsible for paying for the installation and/or relocation of any existing signs/columns/statutory undertakers' equipment, which must be agreed in advance.
- A S278 highway agreement would be required prior to the commencement of any construction work to undertake works on the existing adopted highway about the access.