

MEMORANDUM



From:	Chief Officer, Environment & Technical	To:	Chief Officer Planning & Regulatory
Our Ref:	ET/DC/MM/P/2020/0649	FAO:	Mared Rees-Jones
		Your Ref:	P/2020/0649
Date:	7 th May 2021		

Former Brymbo Steelworks.

Outline application for 300 dwellings, school, 1394 sq.m of retail, 372 sq.m A3, 465 sq.m D1.

Further to your consultation dated 07/05/2021 in respect of the Transport Assessment Addendum submitted in support of the above, I comment as follows:-

A Transport Assessment Addendum (TAA) has been produced in response to the decision by Welsh Government to direct refusal of this application, due to the traffic impact on the A483 Junction 4. The TAA has reassessed the impact of this development on Junction 4, removing the conservative assumptions previously made, accounting for intercepted trips and using signal optimisation to relieve pressure on the A483 at Junction 4.

Trip Generation

The updated analysis has reduced the estimated traffic impact on A483 junction 4 by making a number of changes to the assumptions used previously. It is agreed that basing the updated analysis on the 300 proposed dwellings, provides a more accurate assessment than the 350 previously assessed.

The TAA highlights that with the expected background traffic growth, a delay of 10 minutes per vehicle is predicted in the AM peak travelling towards Wrexham and 15 minutes per vehicle travelling towards the development site in the PM peak. For this reason it assumes that a higher proportion of development trips would use the two longer alternative routes, so that where previously 50% of trips were assumed to use Junction 4, this will now be reduced to 20%. This level of delay is not acceptable and suggests that further development should not take place until improvements at Junction 4 are complete. The A483 Junction 5 is also known to already experience capacity problems resulting from traffic displaced from Junction 4. Allowing development traffic on the grounds that it will divert onto a route through Junction 5 is therefore not an acceptable approach.

The TAA notes that no allowance had been made for the potential benefits of diverting existing trips from Brymbo to schools and retail stores in Wrexham to the school and retail provision on the development site. It also notes that no allowance was made for working from home, which it is agreed has increased since the initial TA was undertaken, and remote working is now supported by Welsh Government policy.

A483 Junction 4

Analysis presented in the TAA confirms that in the 2020 base year the A483 Junction 4 is operating above capacity in both the AM and PM peak (PRC of -17% in the AM peak and -23% in the PM peak). The situation is expected to worsen in future years.

The Linsig model of Junction 4 has been optimised to prioritise the A483 slip roads. The modelling has shown that it is possible to maintain a maximum Degree of Saturation (DoS) of 97% on the A483 arms in 2030, without the Brymbo development. This is a high level of saturation, but the A483 arms should function adequately most of the time. In order to achieve this, however, DoS values of up to 220% are recorded on the A525 arms, which will result in unacceptable delays. The addition of

development traffic worsens an already unacceptable situation and the TAA states that delays of 10 - 18 minutes would be expected on the A525. Wrexham County Borough Council could not accept this level of delay and in reality the optimum signal timings would create a delay on both the A483 and the surrounding local highway network.

The proposed WG offline improvements at junction 4 still need to go through the due statutory processes, so there is a risk that the A483 Junction 4 upgrade could be delayed, in which case the existing junction will not be able to support any new development in the vicinity.

Conclusion

The TAA concludes that the impact of the development traffic on the A483 Junction 4 will be limited by the rerouting of traffic to other routes, including through Junction 5, due to the expected severe queues at Junction 4. As Junction 5 is already experiencing problems caused by displaced traffic from Junction 4, this is not an acceptable situation.

The signal configuration proposed for the A483 Junction 4 while, seeking to address the risk of delays on the trunk road has a very detrimental impact on the local road network. Wrexham County Borough Council Highways Section therefore cannot support this approach.

A handwritten signature in black ink, appearing to be 'R. Owen', written on a light blue background.

Chief Officer, Environment & Technical