

Marcham Road and Ock Street (A415) proposed pedestrian crossings -Air Quality Impact

I understand this proposal forms part of the requirements for the housing development east of Drayton Road P12/V2266/FUL which was approved on appeal and the alterations to the pedestrian crossings are conditions placed by the planning inspector following consideration of the traffic assessments.

The Ock St roundabouts are prone to traffic congestion and this does have an impact on air quality in this area. As I understand it the proposal is to relocate the existing Marcham Road crossing westwards and install a new crossing at Ock St near the roundabout.

We monitor air quality in the vicinity of these roundabouts and nitrogen dioxide levels are close to the air quality objective near the roundabouts and have been recorded at levels above the objective at Marcham Road. The council is considering declaring an Air Quality Management Area because of these high levels and we are awaiting confirmation of our findings before we make a formal decision.

With regard to the specific impact of these crossings it is difficult to quantify the potential air quality impacts as any impacts will be dependant upon factors which can only be speculated upon at this stage. I refer specifically to the extent and frequency of use of the crossings by pedestrians, crossing times, the type of crossing control system and the degree to which they will hold up traffic. The greater the traffic delay, the greater will be the impact upon congestion and air pollution.

Moving the Marcham Road crossing westwards could improve the flow westward from Drayton Road to Marcham Road to a degree, however as traffic along this link is frequently backed up from the Colwell Drive roundabout particularly at peak times any benefit may be limited. It is possible that this re-located crossing point may be used less by pedestrians in favour of the new pedestrian crossing proposed over Ock St. This proposed crossing is very close to the roundabout and there is not much space for traffic travelling east between the roundabout exit and the proposed crossing. Any additional traffic hold up at this point is likely to have an immediate impact, by backing up traffic onto the roundabouts and exacerbating any congestion on the roundabouts and the feeder roads.

It is difficult to assess the likely impacts on congestion or air quality without any empirical data. We do not know if the impacts on air quality will be capable of being measured and attributed to the crossings. It is likely that they will not be quantifiable in the mix of normal seasonal variations in air quality measurements due to changes in traffic, traffic flow and weather conditions. It is however likely that the addition of a further crossing in this area will have the effect of further impeding traffic flow and hence congestion and will not have a positive impact on air quality.

The only way to quantify the impacts empirically would require modelling of air quality impacts. Such modelling would require detailed information on traffic make up and traffic speeds and queue lengths. It would also require a best guess assessment of the likely future use and traffic delay resulting from usage of the crossings. Modelling can be a useful tool where traffic is free flowing and speeds can be accurately assessed, however it is a very expensive process and might not be appropriate given the potential impacts. In scenarios such as the Ock St roundabouts where traffic is not free flowing and the junction is a complex one, modelling will generally be less accurate and less reliable.

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