Via email to:
paul.lester@bromsgroveandredditch.gov.uk

Worcestershire Regulatory Services
Wyre Forest House
Finepoint Way
Kidderminster
Worcestershire
DY11 7WF
Tel: 01905 822799
Fax: 01905 617132
E-mail: wrsenquiries@worcsregservices.gov.uk

28th January 2022

Our ref: 22/01504/PLAN
Your ref: 21/01830/FUL

Dear Paul

Land West of Hither Green Lane Redditch Worcestershire
Residential development (Class C3) with a vehicular access point onto Hither Green Lane, play areas, public open space including footways and cycleways, sustainable urban drainage systems and all other ancillary and enabling infrastructure

Air Quality Consultation

Please find below comments made by Worcestershire Regulatory Services for the following document submitted in support of the above application:

- *BWB; BDW Trading Limited, Hither Green Lane, Redditch. Air Quality Assessment; Report ref: HGL-BWB-ZZ-ZZ-RP-LA-0001_AQA; Dated: September 2021*

The Air Quality Assessment is for a proposed development comprising 215 residential dwellings with associated car parking and includes a construction phase and operational phase risk assessment.

Construction Phase

The risk of dust soiling effects was assessed as Medium for Earthworks and Construction and Low for Trackout and the risk to Human Health was assessed as Low for Earthworks, Construction and Trackout. The report recommends that dust mitigation measures are implemented in accordance with IAQM guidance. With these in place the residual impacts from the construction phase are considered to be 'not significant'.

Operational Phase

Air dispersion model ADMS-Roads, version 5.0.0.1 was used for the assessment, model inputs included:

- Defra Emission Factor Toolkit (EFT), version 10.1
- Meteorological Data from the Pershore recording station
- Background pollutant concentrations for NO2, PM10 and PM2.5 from the Defra (2020) background pollutant concentration maps
- Traffic data were obtained from Mode Transport, the Transport Consultants for the project.
- Model verification was undertaken using 2018 diffusion tube monitoring data.

Three scenarios were modelled:

- 2021 Base Year
- 2022 Opening Year without development
- 2022 Opening Year with development

17 existing sensitive long-term receptors (R1 to R17) and 2 short term receptors (ST1 & ST2) were modelled. A cartesian grid was modelled across the proposed Site to predict the concentrations of NO_2, PM_{10} and $PM_{2.5}$.

Predicted changes in NO_2, PM_{10} and $PM_{2.5}$ concentrations were compared to their relevant assessment criteria and were considered to be negligible. Exceedance of the 1-hour mean objective for NO_2 is assumed to be unlikely and no exceedances were predicted for the 24-hour PM_{10} short term objective. The predicted NO_2, PM_{10} and $PM_{2.5}$ concentrations for 2022 Opening Year with development, indicate that pollutant concentrations at the proposed residential development will be below the respective air quality objectives in 2022 with the development in place.

Model verification was undertaken which gave an adjustment factor of 3.2458. Statistical analysis calculated a Root Mean Square (RMS) value of 4.3% which is considered to represent an acceptable level of average uncertainty within the air quality model.

A sensitivity analysis was undertaken to consider a scenario where pollutant background concentrations do not decrease with future years. Predicted annual mean NO_2, PM_{10} and $PM_{2.5}$. concentrations and development Impacts at existing receptor locations were negligible at all locations

The report concluded that the development was considered suitable for the proposed end use with regard to the current air quality objectives.

WRS Comments

The report is appropriate and WRS agree with the methodology and conclusions, therefore WRS have no adverse comments to make with respect to air quality. Given the size of the proposed development the following conditions are recommended:

Air Quality

The National Planning Policy Framework (NPPF) Paragraph 181 states: '*Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas*.'

It is recommended that the applicant incorporate mitigation measures as part of the development to minimise impact from the development on local areas of poor air quality and assist in alleviating pollution creep arising in the general area. WRS therefore make the

following recommendations in accordance with NPPF Paragraphs 102, 103, 105, 110, 170, 180, 181:

Secure Cycle Parking

It is recommended that secure cycle parking facilities are incorporated into the design of commercial developments and domestic plots without sufficient exterior space to allow for secure cycle storage. Full details of the location, type of rack, spacing, numbers, method of installation and access to cycle parking should be provided.

Condition - Secure Cycle Parking

Secure cycle parking facilities should be provided at the development as determined by Worcestershire County Council Design Guidance. Full details of the location, type of rack, spacing, numbers, method of installation and access to cycle parking should be submitted to and approved by the local planning authority prior to the first occupation of the development.

Reason:

NPPF Paragraph 102 and 103 state; '*Transport issues should be considered from the earliest stages of plan-making and development proposals, so that opportunities to promote walking, cycling and public transport use are identified and pursued*' and '*Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health*.'

Electric Vehicle Charging - Domestic Development

The provision of more sustainable transport modes will help to reduce CO_2, NOx and particulate emissions from transport. In order to make the properties ready for EV charging point installation, appropriate cable provision and isolation switches must be in place so that future occupiers are able to easily fit the necessary socket for electrical vehicles to be charged in the garage, driveway or allocated car parking space. For developments with unallocated parking i.e. flats/apartments 1 EV charging point per 10 spaces (as a minimum) should be provided by the developer to be operational at commencement of development.

Condition - Electric Vehicle Charging Points for Domestic Properties

Appropriate cabling and an outside electrical socket must be supplied for each property to enable ease of installation of an electric vehicle charging point (houses with dedicated parking). The charging point must comply with BS7671. The socket should comply with BS1363 and must be provided with a locking weatherproof cover if located externally to the building.

For developments with unallocated parking i.e. flats/apartments 1 EV charging point per 10 spaces (as a minimum) should be provided by the developer to be operational at commencement of development. The charging point must comply with BS EN 62196 Mode 3 or 4 charging and BS EN 61851. As a minimum, charge points should comply with Worcestershire County Council Design Guide which requires 7kw charging points for residential developments.

Reason:

NPPF Paragraphs 105 and 110 of the NPPF state; *'If setting local parking standards for residential and non-residential development, policies should take into account the need to*

ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles' and '*Applications for development should be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations*.'

Low Emission Boilers

Boiler NOx emissions from building heating systems contribute to background NOx concentrations and the following condition is recommended to alleviate impact from new buildings.

Low Emission Boilers Condition

Details shall be submitted to and approved by the local planning authority prior to the first occupation of the development for the installation of Ultra-Low NOx boilers with maximum NOx Emissions less than 40 mg/kWh. The details as approved shall be implemented prior to the first occupation of the development and shall thereafter be permanently retained.

Reason:

In the interests of the living conditions of occupiers of nearby properties and future occupiers of the site.

If you have any further queries regarding this matter or information provided in support of the application requiring comment by the Land and Air Quality Team, please do not hesitate to contact us via wrsenquiries@worcsregservices.gov.uk or 01905 822799 quoting the above reference number.

Yours sincerely

Land and Air Quality Team
Technical Services
Worcestershire Regulatory Services