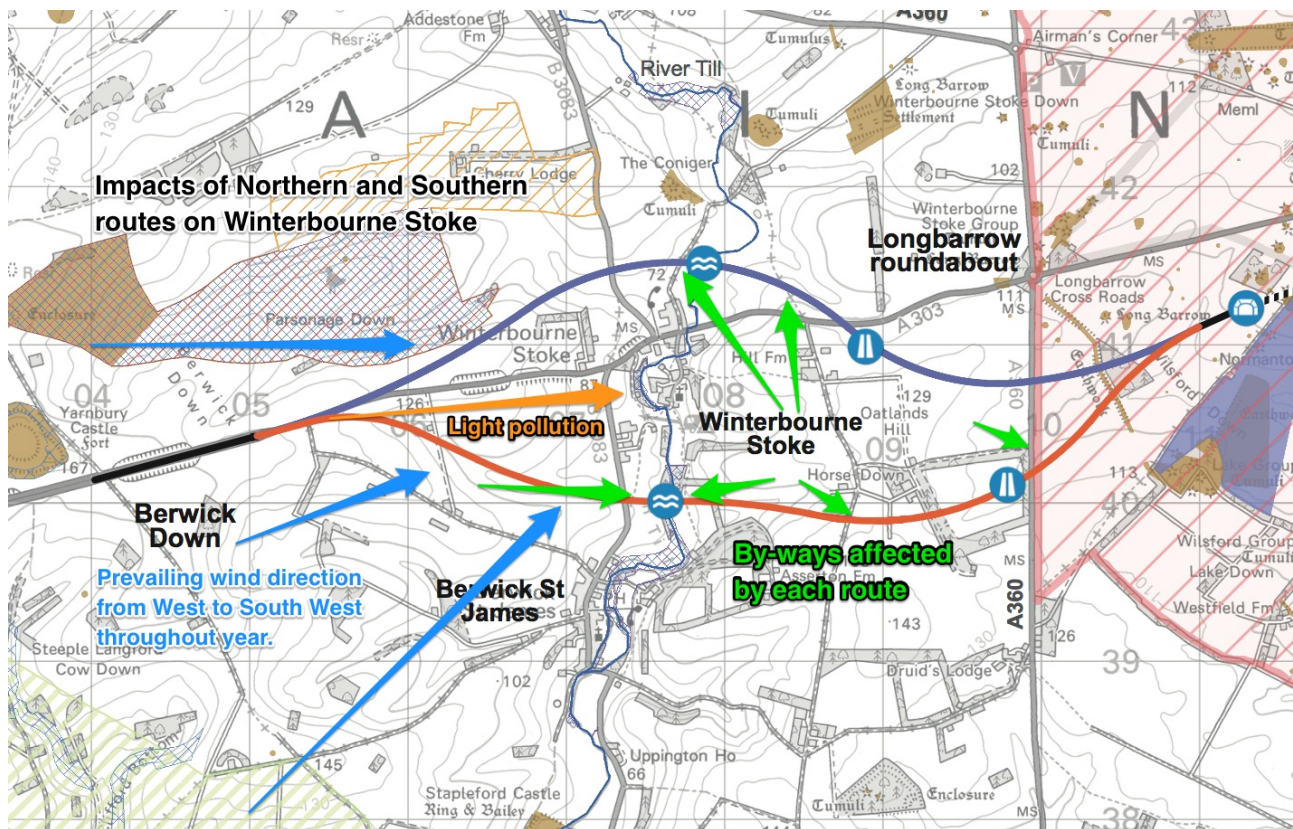


Additional Material for A303 Consultation Response:

The map intended for use with the written submission above, is shown below:



The prevailing wind direction is that derived from simple observation of the mesoscale (1,000 km to 1 km) meteorology in the area since 1985.

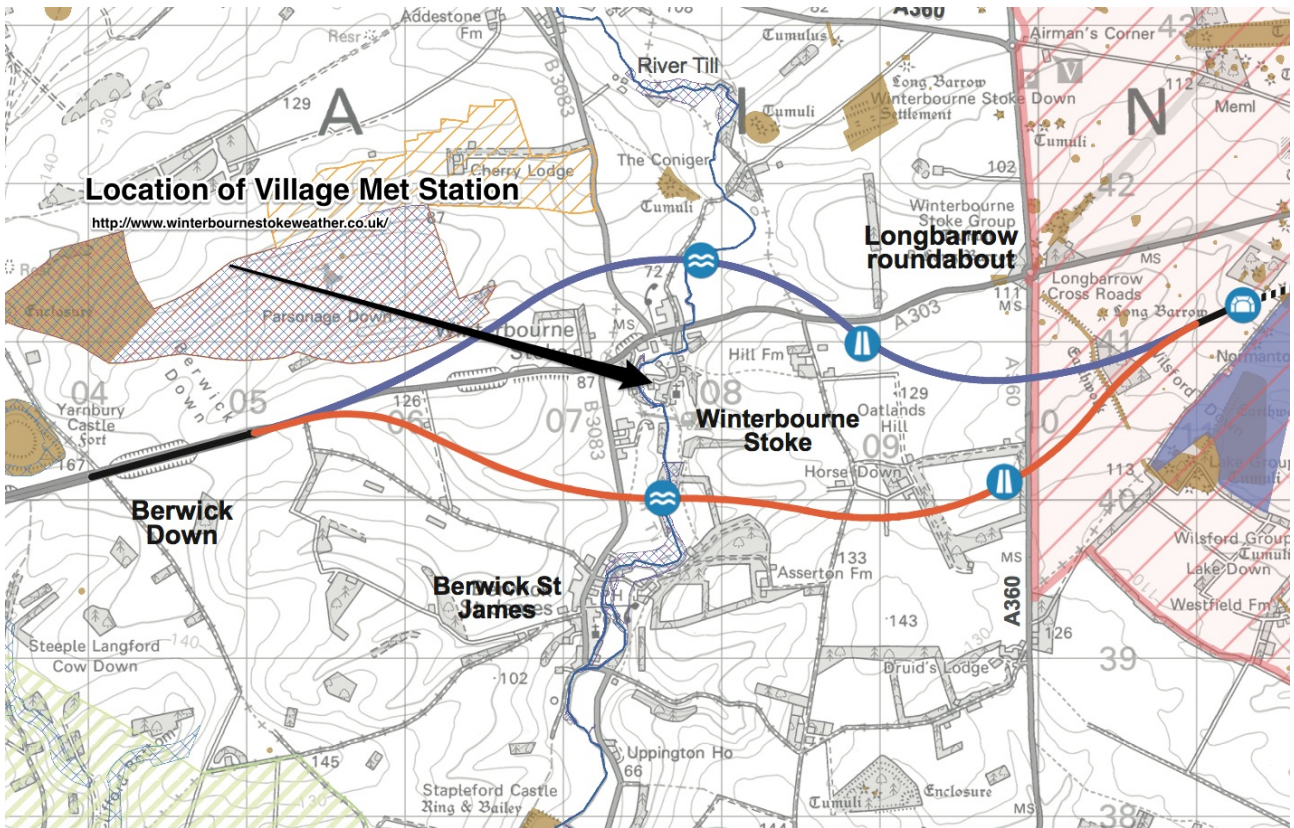
New Material

However, the microscale (Below 1 km) meteorology within the village is slightly different to this, due to the impact of the ridge-line running north south immediately to the east. A villager has been collecting meteorological data for over 5 years with a resolution of one reading every 15 seconds or over 2 million readings per year (less computer down time, broadband failures, power cuts etc).

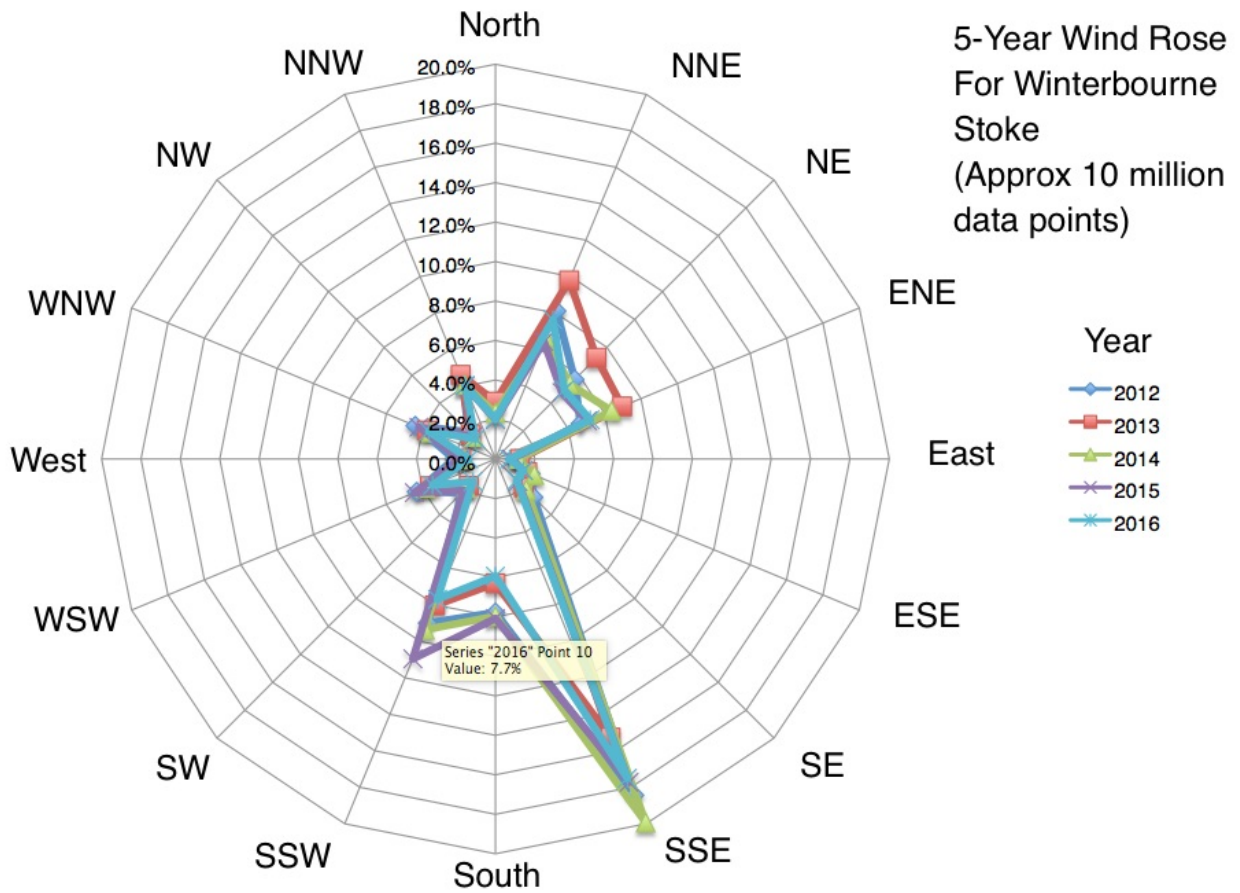
The sensors are at roof ridge height (approx 10 metres) on the western end of a small terrace - Meadow View as shown on the map below:

The location is fairly central within the main body of the village and equidistant between the proposed northern and southern routes, so is ideally placed to give a representative view of micro scale meteorology and the impact of noise and vehicular pollution on the village.

The wind rose above shows the cumulative data for each of the last 5 years. At this scale, the prevailing wind is from the SSE and for about 40% of the year the wind blows from between SSE and SSW. For each year measured, 20% of the readings are too low to measure or get a clear



direction. Furthermore, most of the wind experienced from the NNE to ENE (20% of the total) occurs in the winter months when most people are indoors.



During the summer months, when more people are outdoors enjoying their gardens, etc., the mesoscale weather is carrying sound from the west to south-west and the microscale meteorology predominates from the south-south-east.

The only objective assessment that can be made from the available data is that the southern option will increase road noise to the village and the northern option will reduce it markedly, especially for the periods of the year when people tend to be outside their houses.

Whilst clever design, low noise surfaces, and use of physical and biological shields can mitigate some of the noise, we would want to see evidence to show that the southern route caused no increase in noise from that experienced from the current A303.

Such mitigation will have little or no impact on airborne pollutants whether they be vapour or particulates in the respirable range. The wind pattern in and around the village would cause a significant increase in such airborne pollutants if the southern route is adopted. We would expect to see output from modelling studies to show the likely impact on the village of each road option, and the seasonal variation in this, to inform any decision as to route. We would also want to know which models were used for such studies and the validation measures taken to support their use in this context - primarily to allow independent evaluation and assessment.