

**Impact of 265 dwellings at Lodge Farm in 2021 (pre-Homestead Link), Air Quality Consultants Ltd
31/1/18**

The impact of a number of dwellings at Lodge Farm becoming occupied prior to the opening of the Homestead Link has been tested. The anticipated traffic through Dunchurch crossroads has been added to the STA traffic model outputs for the 2021 Local Plan scenario (i.e. all LP developments set out in the trajectory to 2021, without the Homestead Link).

The results below demonstrate that if 265 dwellings were built in 2021, in addition to the allocations in the Local Plan, concentrations would be below the objective of 40µg/m³ at all relevant locations.

Predicted Annual Mean Nitrogen Dioxide Concentrations in 2021 (µg/m³)

Receptor	Ref ^a	Local Plan	Local Plan +265 at Lodge Farm ^a	Worst-case Sensitivity Test ^b		
				Ref	Local Plan	Local Plan +265 at Lodge Farm
1	23.5	24.2	24.4	27.5	28.3	28.6
2	24.3	25.1	25.3	28.4	29.3	29.6
3	29.8	31.0	31.3	35.0	36.4	36.8
4	19.8	20.3	20.5	22.8	23.4	23.7
5	24.2	24.6	24.8	28.3	28.8	29.0
6	15.5	15.6	15.7	17.4	17.5	17.6
7	18.6	18.8	19.2	21.3	21.5	22.0
8	20.8	21.0	21.5	24.0	24.3	25.0
9	19.3	19.5	19.8	22.3	22.6	23.0
10	18.7	18.9	19.2	21.5	21.7	22.1
11	19.8	19.8	19.9	22.9	22.8	22.9
12	22.7	22.6	22.7	26.4	26.3	26.4
13	21.4	21.3	21.4	24.9	24.8	24.9
14	19.4	19.4	19.4	22.3	22.3	22.4
15	13.5	13.6	13.6	14.9	15.0	15.0
16	20.8	21.2	21.3	24.1	24.6	24.7
17	19.0	19.2	19.2	21.9	22.1	22.1
18	14.8	14.9	14.9	16.5	16.7	16.7
19	15.1	15.3	15.3	17.0	17.1	17.2
Objective	40					

^a In line with Defra's forecasts.

^b Assuming higher emissions from modern diesel vehicles as described in Air Quality Technical Report.