# **Cumulative Effects**





# 16 Cumulative Effects

#### 16.1 Introduction

16.1.1 This chapter addresses the potential effects the project may have on the environment cumulatively with other projects. The assessment includes a summary of other major developments that are proposed within the surrounding area and identifies mitigation measures where appropriate.

## 16.2 Legislation and Policy

16.2.1 Other than the EIA Regulations, there is no other legislation that considers EIA. There is also no applicable policy.

#### 16.3 Methodology

- 16.3.1 Guidance on cumulative effects assessment is provided by the EC document 'Study on the Assessment of Indirect and Cumulative Impacts as well as Impact' (May 1999).
- 16.3.2 There are two main forms of cumulative effect:
  - The combined effect of the proposed development together with other reasonably foreseeable or committed developments (taking into consideration effects at both the construction and operational phases); and
  - The combined effects caused by the combination of a number of impacts on a particular receptor (taking into consideration impacts at both the construction and operational phases), which may collectively cause a more significant effect than individually. For example, the combination of noise and air quality impacts.
- 16.3.3 Both are considered in this assessment.
- 16.3.4 The assessment of cumulative effects does not lend itself to detailed assessment criteria since it is difficult to determine the exact level of significance that can be attributed to each project. In addition, the assessment covers many aspects that would not allow for a single set of criteria. Consequently, effects are considered in terms of positive or negative, significant or not significant and temporary or permanent only. These conclusions are justified qualitatively through the analysis set out below.

#### 16.4 Baseline Conditions

- 16.4.1 This assessment is based on baseline conditions set out in Chapters 6 to 15.
- 16.4.2 As discussed in Chapter 1, the only other development that should be considered cumulatively with the proposed development is the permitted North West Haverhill Development comprising 1,150 dwellings and the North West Relief Road (NWRR), see Figure 16.1.
- 16.4.3 Since this is an already permitted development and that the NWRR must be built before the proposed development can be completed, the North West Haverhill Development has been incorporated into the baseline for many of the assessments and therefore is already integral to the EIA.



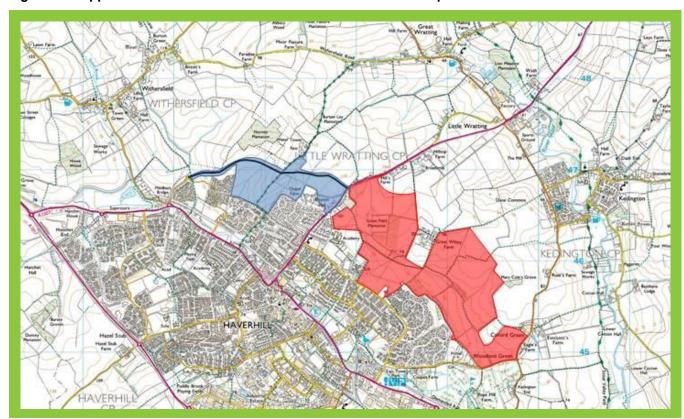


Figure 1.2: Approximate location of the North West Haverhill development and North West Relief Road

Note: Redline is indicative, refer to definitive redline plan in Appendix 4.1.

#### 16.5 Predicted Effects

# **Society and Economy**

16.5.1 This assessment considered the implications of the North West Haverhill Development as part of the baseline to understand the future demands on social infrastructure in the absence of the proposed development. As such, the measures proposed in that assessed mitigate any potential cumulative effects and no further assessment is considered necessary.

### **Transport**

16.5.2 The NWRR is integral to the long term sustainability of Haverhill, including the proposed development. As such it was necessary to consider the North West Haverhill Development as part of the baseline and therefore no further assessment is necessary.

#### **Noise and Vibration**

16.5.3 The road traffic noise assessment was based on the combined flows of the proposed development and the North West Haverhill Development, and as such the cumulative effect is already assessed. Consequently no further assessment is necessary.



#### **Ecology**

16.5.4 The ecology assessment gave some consideration to the cumulative effect with the North West Haverhill Development. However, the two developments are sufficiently separated to suggest that only limited connectivity exists between them. As such significant cumulative effects are unlikely.

#### **Agricultural Resources**

16.5.5 The effects on soils are contained within the site. As such no significant cumulative effect is likely and no further assessment is necessary.

#### **Surface Water Drainage and Flood Risk**

16.5.6 The two developments will occupy different sub-catchments of the River Stour. As such, even in the absence of mitigation, it would be unlikely that localised flooding would occur as a result of the cumulative development. Notwithstanding this, each development is required by the NPPF to ensure that it results in no increase in flood risk beyond its boundaries and as such significant cumulative effects are unlikely.

#### **Local Air Quality**

16.5.7 Similar to the noise assessment, the air quality assessment was based on the combined traffic flows of the proposed development and the North West Haverhill Development. As such the cumulative effect has already been assessed and no further assessment is necessary.

#### **Archaeology**

16.5.8 Each development is required to include investigations commensurate with the likelihood of archaeology found on the site. The combined effect of these investigations is a greater knowledge of the history and evolution of the town, which is likely to have a positive cumulative effect greater than its individual parts. However, this is unlikely to be a significant effect.

#### **Cultural Heritage**

16.5.9 The two sites are unlikely to be visible together from many locations. Indeed, many of the views of the proposed development site from the west are obscured glimpses (see Appendix 15.2). As such it is highly unlikely that the two developments would have a cumulative effect on the setting or integrity of any cultural heritage asset and therefore no further assessment is necessary.

# **Landscape Character and Visual Amenity**

16.5.10 Similar to the cultural heritage assessment above, there is very little intervisibility between the two sites as their zones of visual influence have very little overlap. Consequently, the likelihood of a significant cumulative effect on landscape character or visual amenity is very low.

#### **Effects on Particular Receptors**

16.5.11There is the potential for some receptors to be affected by more than one type of effect from the proposed development, or cumulatively with the North West Haverhill Development. Environmental features (i.e. ecology, drainage, archaeology etc.) have been considered above and need not be considered further.



16.5.12There is however potential for some existing groups of residential receptors to be affected by accumulative effects:

- Residential receptors on Haverhill Road and Chalkstone Way close to the access points to the proposed development site will likely be affected by noise, changes in air quality and changes in views. Individually these effects are largely considered to be low or very low. Combined, it seems unlikely that the accumulative effect would be any greater than its constituent parts. Therefore no further assessment is necessary.
- Residential receptors on main routes within Haverhill will likely be affected by noise and changes in air quality until the NWRR is open. These effects will be temporary and mitigated through junction improvements such that the effects are individually considered to be very low. Combined, it seems unlikely that the accumulative effect would be any greater than its constituent parts. Therefore no further assessment is necessary.

#### 16.6 Mitigation, Monitoring and Residual Effects

16.6.1 No additional significant cumulative effects have been identified. This is mainly due to the North West Haverhill Development being incorporated into the forecasted baseline conditions such that it was integral to assessing the effects of the proposed development. Consequently, no additional mitigation or monitoring measures are necessary.