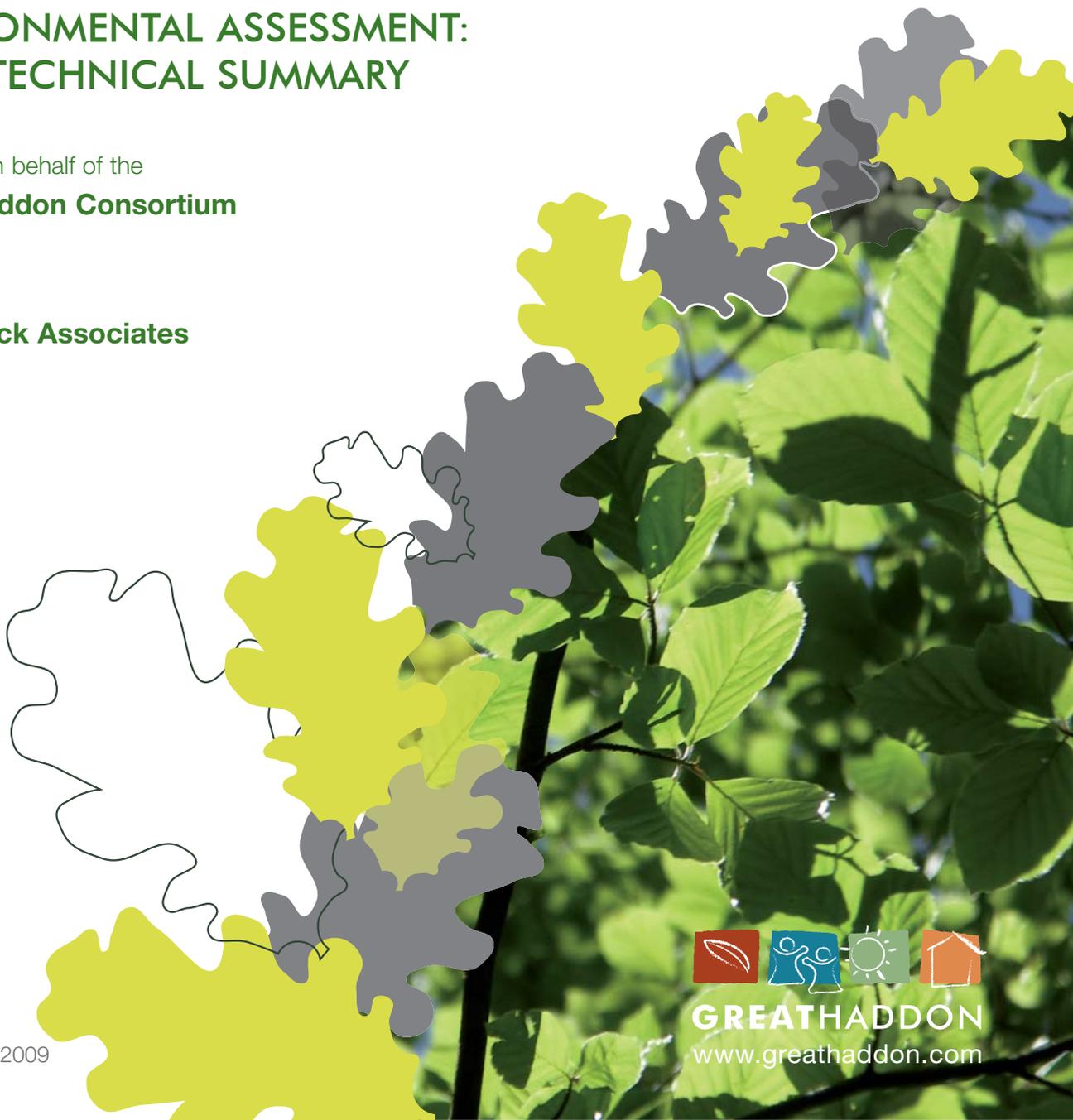


# GREATHADDON, PETERBOROUGH'

## WORKING PAPER 12: PLANNING APPLICATIONS AND ENVIRONMENTAL ASSESSMENT: NON TECHNICAL SUMMARY

Prepared on behalf of the  
**Great Haddon Consortium**

By  
**David Lock Associates**



NOVEMBER 2009



**GREATHADDON**  
[www.greathaddon.com](http://www.greathaddon.com)

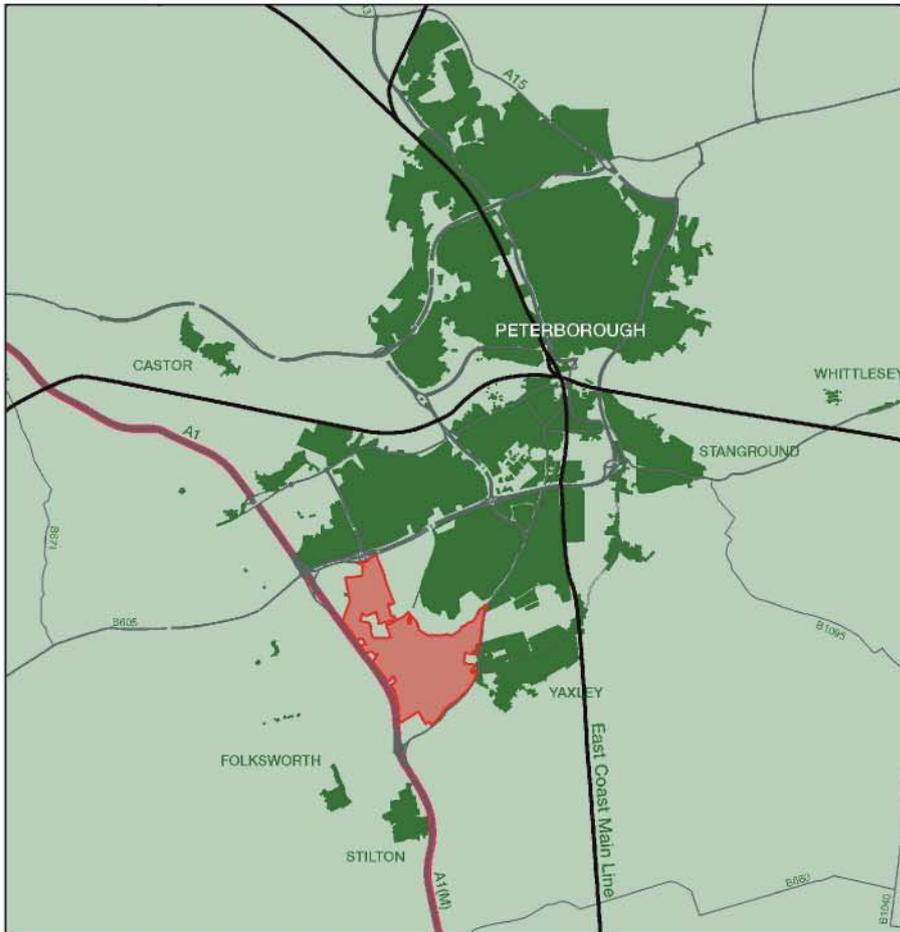
## Working Paper 12: Planning Applications and Environmental Assessment: Non Technical Summary

Great Haddon is a planned urban extension to southern Peterborough, designed to help meet the housing and employment land needs of the city to 2021 and beyond. The area has been promoted for a planned new community since 2004 by the Great Haddon Consortium (O&H Properties, Marlborough Oasis and David Wilson Homes).

Outline planning applications have been prepared for the Great Haddon scheme and have been submitted to the City Council for consideration.

This Working Paper provides a non-technical summary of the application proposals and the findings of the Environmental Impact Assessment which is required to accompany the outline applications. It represents the latest in a series of Working Papers (1-11) produced since 2004, which together document the evolution of the Great Haddon proposals since their inception.

Copies of all Working Papers, coupled with detailed information on the proposals, can be found in the planning application submissions and on the Great Haddon website ([www.greathaddon.com](http://www.greathaddon.com))

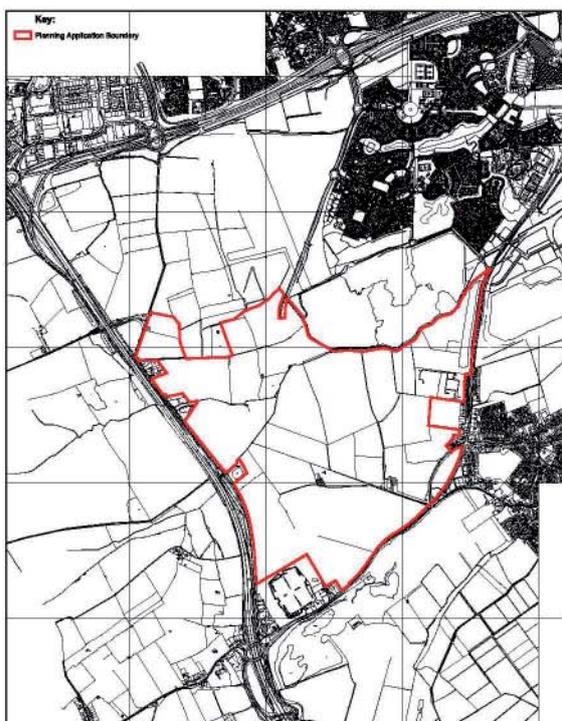


*Great Haddon Location Plan*

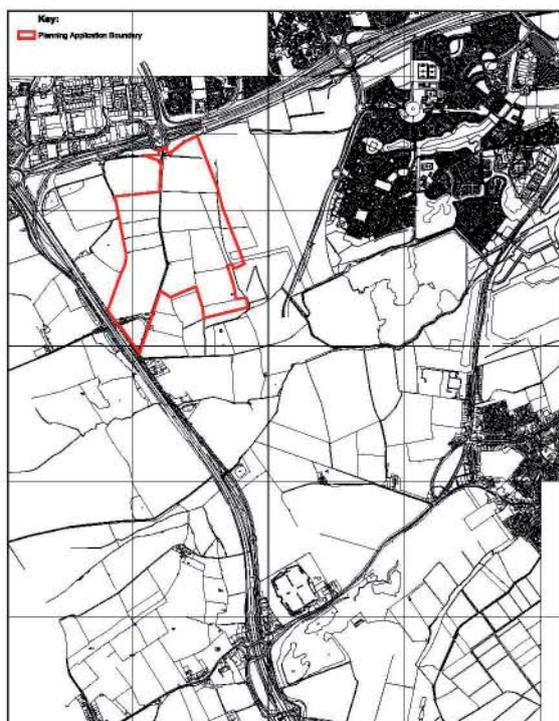
## What is being applied for?

Two outline planning applications have been submitted for Great Haddon – the Great Haddon Core Area and the Great Haddon Employment Area. If approved, these applications will together deliver a new community including up to 5,350 homes and 65ha of employment land, together with schools, shops, workplaces, open space, community facilities and local services, all set within a landscape framework which reflects the character and setting of the surrounding area.

The two application sites comprise the Great Haddon Development Area, totalling 390.03 hectares in size and currently comprising agricultural land and farm buildings, blocks of mature woodland and several waterbodies. Although for legal reasons it is necessary to submit two separate applications, these are to be considered and implemented jointly, and as such all supporting material sets out the details of the overall Great Haddon scheme.



*Great Haddon Core Area*



*Great Haddon Employment Area*

## Why are planning applications being submitted now?

Great Haddon is one of two urban extensions planned for Peterborough in the emerging local development framework (LDF). The site is proposed for allocation in the draft LDF Core Strategy and Site Specific Allocations documents prepared by the City Council, to be adopted in 2011.

Due to the long lead in time necessary to bring forward development projects of this scale, the design and planning of the new community often takes place in advance of the policy framework which will secure its designation for development. Whilst this necessitates a degree of risk on the part of the landowners and promoters, the preparation of the background technical work necessary to support the outline planning applications, together with an environmental impact assessment, ensures that the Great Haddon planning applications can be lodged with the Council at the earliest appropriate time to enable the Council to deliver the number of homes and jobs required in the Regional Spatial Strategy in the timescale needed.

## The Proposed Development

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The proposals for Great Haddon comprise:

- up to 5350 residential dwellings at an average density of 40 dwellings per ha (ranging between 10dph in low density areas to 100 dph in the district centre);
- up to 65 hectares of employment land (a mix of B1, B2 and B8 uses);
- a site for a household recycling centre within the employment area;
- a district centre (with up to 9,200 square metres (99,031 sq.ft) retail floor space) and two neighbourhood centres (with up to 2,300 square metres (24,758 sq.ft) retail floor space in total), comprising district/neighbourhood retail (A1-A5), community and health (C2, D1), leisure (D2), residential (C3) and commercial (B1) uses;
- provision for education facilities (sites for three primary and one secondary school);
- sports and recreational facilities;
- site for 5 gypsy and traveller pitches;
- a range of strategic open spaces including new landscaping, woodland and allotments;
- provision of land for a cemetery extension;
- associated highway infrastructure (including pedestrian, bridleway and cycle routes), public transport infrastructure, and car parking for all uses;
- utilities and renewable energy infrastructure;
- foul and surface water drainage networks (including SuDS and lakes).

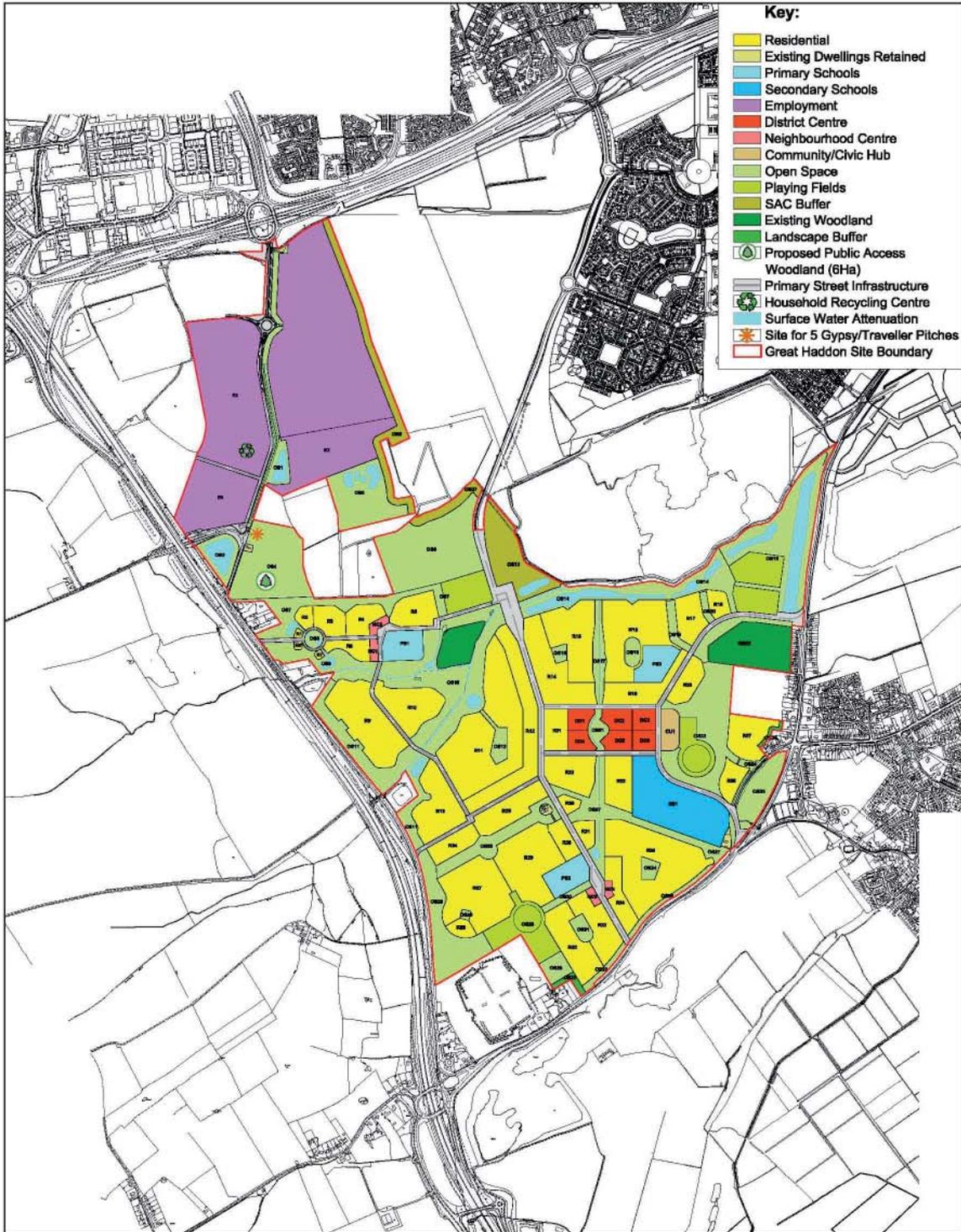
The Great Haddon Development Framework Plan shown opposite sets out the proposed layout of development and open space within the two application sites, and formed the basis for the environmental assessment of the scheme.

### Planning Policy Context

The case for the level of growth required in Peterborough has been made through the preparation of the Regional Spatial Strategy, and the suitability of this area as a general location for development has been established through several strategic growth studies, the Sub-Regional Strategy and the emerging Local Development Framework Core Strategy.

The proposed development is wholly in accordance with objectives of national planning policy advice and strategic planning policy. Policies for the allocation of the Great Haddon urban extension are included in the emerging LDF Core Strategy and Site Allocations documents. The scale and type of development proposed in the two outline applications is fully in accordance with the details of these emerging policies.

The *Great Haddon Planning Statement* has been prepared in support of the outline applications, and sets out the policy context in more detail.



Great Haddon Development Framework Plan (ref: PST021/DFP/01 rev I)

## Environmental Considerations

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To determine which environmental issues should be assessed, the Great Haddon Consortium requested a 'Scoping Opinion' from Peterborough City Council in 2008. Various organisations, including the local environmental health department, the Environment Agency and English Nature, were consulted as part of defining the areas of assessment and assessment methods.

The issues that were assessed and the results of these assessments as part of this exercise are summarised below.

### Ground Conditions

From the late nineteenth century to the modern day, the vast majority of the sites has been worked by arable agricultural or has remained covered by woodland. A desktop assessment identified that the sites have essentially only a history of agricultural working and consequently that the potential for site wide contamination was low.

Ground investigations confirmed the initial desktop assessment that there is no potential site wide contamination as a result of the sites' natural geology or history of previous land usage, but there are a small number of areas where local 'contamination' may be present. These areas - namely, a WW2 'hostel site' in the eastern part of the Core Area which had its own small sewage works, and the easement zone of a disused government (oil) pipeline running across the Core Area which may have had historic leakage/spills – do not preclude development, and will be excavated and cleared as part of the preparing the sites for development, thus removing any sources of potential contamination from the area.

### Flood Risk, Water and Drainage

The Great Haddon Core Area is bisected by the Stanground Lode, which is classed as a Main River, a tributary of the River Nene. The headwaters of the Stanground Lode comprise two tributaries, one rising in the vicinity of Haddon (the northern tributary), the other rising in the vicinity of Morborne (the southern tributary).

The modelling analysis shows that the 1 in 100 year floodplain of the Stanground Lode is generally confined to a very narrow corridor either side of the watercourse. Although some limited areas of the river corridor immediately adjacent to the watercourse are shown to lie within Flood Zone 3a ('High Probability'), an assessment of the 1 in 1,000 year floodplain extent shows that the vast majority of the Core Area and all of the Employment Area are classified as Flood Zone 1 ('Low Probability').

A surface water management strategy is proposed to mitigate any potential flooding impacts. This strategy is based upon floodwater diversion to Beeby's Lakes and will reduce peak flood flows in the Stanground Lode and downstream when considered within the context of the existing/"prior to development" flow regime.

On this basis, the scheme contributes to a reduction in downstream flood risk thereby giving rise to a *substantial beneficial* residual impact, and a strategic benefit to existing and proposed development located downstream. The surface water drainage strategy also ensures that no surface water run-off generated by the development will enter the Orton Pit SAC.

All drainage designs will comply with Environment Agency and drainage authority regulations.

## Ecology and Nature Conservation

The Great Haddon sites lie adjacent to the Orton Pit Site of Special Scientific Interest (SSSI)/ Special Area of Conservation (SAC)/Candidate SAC (cSAC). Orton Pit is an important site both nationally and internationally for great crested newts and stoneworts (fresh and brackish water algae), with water quality being a critical factor in maintaining its ecological interest. Several other areas in and adjacent to the sites are of nature conservation interest for protected habitats and species.

Although much of the arable farmland on site is of limited ecological value, the proximity of the SAC and other protected habitats and species mean that ecological mitigation - and where necessary compensation measures – have formed an integral part of the evolution of the development proposals. The Development Framework Plan has been designed specifically to reduce or avoid significant adverse ecological effects.

Some short term adverse effects on existing habitats as a result of the development are identified, such as loss of some trees, hedgerow, scrub and standing water. There are also some adverse effects on individual species – great crested newts, barn owl and breeding birds – as a result of this short term habitat loss. The mitigation measures proposed, including protection of retained habitats, translocation of species to new receptor sites and the creation of new and replacement habitat means that the ecological strategy for the sites will result in a beneficial contribution to biodiversity supporting the objectives of the Peterborough Green Grid.

## Archaeology

There are no Registered Battlefields or Historic Parks and Gardens within or close to the application sites. The application sites do not lie within a conservation area (Yaxley Conservation Area lies to the east of the Core Area application site).

The Norman Cross SAM (the site of a Napoleonic prisoner of war camp) lies to the immediate southwest of the Great Haddon Core Area, together with two Grade II listed buildings relating to the SAM. Three listed structures - the Norman Cross Eagle Monument and two mileposts - are located south and west of the application sites.

Although a desk-based assessment revealed no known buried archaeological sites within the application sites, it did identify a high potential for Prehistoric, Roman and later activity. As a result, a programme of archaeological work was agreed with the City Council's Archaeologist, and a series of geophysical surveys were conducted across the application sites in 2007 and 2008.

Four distinct areas of archaeological activity were identified, but none of the areas are considered to be of such archaeological significance as to require preservation in situ and thereby prevent development. A programme of archaeological work will be carried out prior to the start of construction to record any archaeological features from within the site, to preserve the archaeological features by record, as specified in PPG16.

The Development Framework Plan has been designed specifically to reduce any adverse effects of development on features of interest outside the sites. The introduction of an open space 'buffer' and landscaped setting for development along the western/southern boundary of the Core Area will enhance the setting of the SAM and listed buildings and structures and will ensure a visual and physical separation between Yaxley Conservation Area and Great Haddon.

## Landscape and Visual Amenity

### *Landscape*

The sites are not affected by any statutory or non-statutory landscape designations and are not identified as areas of special or notable landscape value or quality through specific designation or protection. The sites contain no areas of ancient woodland or any individual trees protected by Tree Preservation Orders (TPO). Woodland at Jones's Covert (outside the application sites) lies within the Orton Pit Special Area of Conservation (SAC).

A number of trees are protected by TPOs (located within the gardens of existing dwellings along the northern side of London Road), but lie outside the site boundary and will be unaffected by the development proposed.

The proposed development layout allows the retention and incorporation of existing landscape features including woodland, watercourses, and the majority of trees and hedgerows primarily within areas of proposed strategic open space. A number of individual trees and lengths of existing hedgerow are proposed for removal giving rise to short term adverse effects. However, these losses will be more than compensated by new tree and hedgerow planting within areas of open space throughout the development and the network of new open spaces has been designed to incorporate the framework of existing natural features and support the objectives of the Peterborough Green Grid.

Access into and through the sites via public footpaths and bridleways will be retained and incorporated into strategic open space corridors, through partial diversion where necessary to better integrate these routes with new open spaces and mitigate ecological impacts. These proposed diversions will be subject to separate detailed applications and formal orders prior to the commencement of the development phase within which the diversion is proposed.

### *Visual Impact*

The sites are relatively well contained visually within the landscape, being largely screened from external locations to the south and west by existing vegetation along the western and southern site boundaries and the relative topography particularly to the south of the A15 where the land falls away to the Fens. There will therefore be no significant residual adverse effects on the landscape character and qualities of the wider rural landscape as a result of the proposed development.

Long term residual visual effects will be minor or negligible from the majority of receptor locations. However, it is not possible to fully screen the development from all adjacent land uses and major to moderate residual adverse visual effects will be experienced from a small number of residential properties immediately adjacent to the Core Area site.

### *Transportation*

The principal source of data used in the assessment of the environmental impact of transport for the new application is the City Council's computer-generated Peterborough Transport Model (PTM), which forecasts future traffic movements on each of the roads within and surrounding a specified area. However, the traffic model is only one of the tools used to undertake an environmental assessment: other best practice in transportation planning has also informed this assessment.

The PTM data shows that there is a need for the City Council to widen Fletton Parkway Junction 1 to 2 in order to accommodate projected growth in the region, and to increase junction capacity along Fletton Parkway due to increased traffic as a result of the growth within Peterborough as a whole. Discussions with the City Council and the Highways Agency as part of the consultation on the applications will confirm the additional level of impact generated by the Great Haddon proposals as a basis for determining a contribution to the cost of the wider works.

Junction assessments for the A1(M) Junction 16 and Junction 17 (with partial signals committed as part of the consented Alwalton Hill development) show that both junctions will continue to operate with acceptable queues and delay: the A1(M) Junction 16 will in fact operate better with the development of Great Haddon than without, as traffic going to and through Peterborough will use the motorway network and Parkway system rather than the A15 and local road network. Consequently, there is a noticeable reduction in traffic on the local highway network which improves pedestrian amenity.

A short section of the A15 - from the A1(M) Junction 16 to its junction with the Great North Road – is proposed to be widened to dual carriageway, together with improvements to the existing junction with the Great North Road. In addition, the current speed limit along the A15 London Road from the A1(M) to Yaxley is 60 mph and is anticipated to be reduced to 40 mph to the site accesses to reduce the risk of accidents, pedestrian delay and fear and severance and help create a gateway to the development.

A 30 mph speed limit is likely to be adopted on the Yaxley Bypass and along the main north-south route within the Core Area. In addition speed limits of 20 mph are envisaged along the internal Great Haddon street network in order to reduce vehicular speeds through the development areas.

There are also several positive residual impacts, including the creation of new public transport services and routes, improved walking and cycling facilities and highway alterations in the surrounding area to provide an improvement over the current provision. Local people as well as new residents will benefit from these improvements as well as those travelling to and from the sites.

### Noise and Vibration

A noise assessment has been carried out in order to establish whether planning guidelines for mixed development will be met across the site, and to assess the likely effect of noise generation from new roads and increased traffic flows on existing roads, and on any noise-sensitive ecological receptors.

The traffic noise generated by the A1(M) represents the most significant potential impact on new development. The introduction of a substantial landscaped/open space buffer between the edge of the site closest to the motorway and proposed residential areas as part of the design of the Development Framework mitigates against any associated adverse noise impact.

Elsewhere within the sites, the assessment concludes that considered site planning and glazing specification can be employed to ensure that all properties have acceptable noise levels internally in accordance with current guidelines. Similarly, noise levels within new offices and commercial premises will be able to be limited to acceptable levels. The noise levels generated by a Combined Heat and Power (CHP) plant (site proposed in the District centre) will be assessed as part of a separate detailed application, bearing in mind the need to minimise any adverse effect on adjacent new development.

Increased noise and disturbance levels during construction and over the longer term within parts of the existing woodland in the east of the Core Area closest to London Road may have an adverse impact on breeding birds. The introduction of new woodland elsewhere on site will mitigate this in part, but some residual adverse impact may remain.

### Air Quality

Assessed against national current and future objectives for air quality, the assessment concluded that existing air quality in the vicinity of the application site is good. The assessment of impacts focused on nitrogen oxides (NO<sub>x</sub>), nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub>), since these are the pollutants of most concern from road transport and Combined Heat and Power (CHP) plant, and dust and PM<sub>10</sub> during construction. It includes an assessment of the impact of NO<sub>x</sub> and nitrogen (N) deposition on the Orton Pit Special Area of Conservation (SAC).

The assessment concluded that the residual impact of the construction of the proposed development will be temporary and of minor significance. The maximum increase in annual mean pollutant concentrations as a result of the development will be less than 10%, and thus the national objectives for air quality will be achieved by a wide margin. This equates to a permanent residual impact from the operation of the proposed development of minor significance.

The modelling predicts an improvement in air quality along London Road as a result of increased traffic using the A1(M) rather than the A15 into Peterborough. Therefore the small increase in NO<sub>2</sub> concentrations at some receptors is offset by a decrease at others and on balance, the residual impact from the proposed development will not be significant.

### Minerals and Waste

An assessment of the waste management, materials usage and extractive mineral impacts associated with the proposed development was undertaken.

Part of the application site is identified by the City Council as an 'area of search' for future clay extraction. However, in light of the research undertaken on the clay reserves within the application sites it is considered that the development of the site is likely to have a 'neutral' effect on local and regional mineral resources in the area.

The assessment suggests that the current baseline waste management capacity in the area may be seen as inadequate to cope with additional needs. However, in line with the City's emerging waste policy, the Employment Area application includes the provision of a site for a household waste recycling facility to serve Great Haddon and south Peterborough, enabling household waste to be recycled on site.

In addition, it should be noted that domestic and commercial refuse from Great Haddon will augment the wider Peterborough waste collection process, and is a potentially valuable resource which can be used to contribute to the proposed Peterborough Energy from Waste facility(ies) elsewhere in the city.

### Energy and Utilities

The utilities companies have a statutory duty to serve new and existing developments. Discussions have been held with them to determine the most appropriate way of supplying the new development.

As with all developments of the scale proposed, reinforcements and diversions will be required for electricity, gas, potable water, foul water drainage, highway drains, and telecommunications. These required reinforcements are capable of being implemented without significant impacts either on or off site, and the necessary diversions can be made.

Sustainable Urban Drainage Systems (SUDS) have been included in the Development Framework Plan to ensure adequate drainage of the sites which at the same time does not lead to increased flood risk on or off site. Detailed proposals for SUDS will be progressed as part of the detailed design of each phase.

A Combined Heat and Power (CHP) facility is proposed to serve the district centre with its energy requirements in a sustainable way. The potential for incorporating other renewable energy solutions at Great Haddon has also been investigated as part of the drawing up of development proposals. The Great Haddon Energy Strategy submitted in support of the applications sets out the findings of these investigations in detail.

### Socio-Economic Issues

The assessment of the 'socio-economic impacts' of the outline applications means assessing the appropriate provision of facilities to properly support the new population at Great Haddon, and deciding whether a suitable balance between homes, jobs and facilities is achieved on site.

No adverse effects are anticipated as a result of the application proposals. The strategic employment opportunities for the city generated by the Employment Area proposals, coupled with a new mixed use community within the Core Area which includes not just residential development but also schools, local centres, and a district centre with community facilities and workplaces for local businesses, will help to generate a balanced community. Furthermore, the provision of new local facilities and open spaces will also serve existing residents in the surrounding villages who would otherwise have to travel to facilities further afield.

The draft Sustainability Statement for Great Haddon sets out in more detail how principles of sustainability have underpinned the Great Haddon proposals, and explains how this will be delivered in practice.

## Mitigation Measures

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Each chapter of the Environmental Statement addresses the ways in which the retention and safeguarding of identified features of merit, as well as measures to prevent any adverse impact, would be implemented. Where appropriate, these measures are set out in tabular form.

## Copies of the Environmental Statement

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A copy of the Environmental Statement can be viewed at the following places during normal office hours:

Peterborough Central Library  
Broadway  
Peterborough  
PE1 1RX

Customer Service Centre  
Peterborough City Council  
Bayard Place  
Broadway  
Peterborough  
PE1 1FB

O&H Hampton Ltd  
Hempsted Barn  
285 London Road  
Peterborough  
PE7 0LD

Copies of the Environmental Statement, Plans and Appendices on disk can be purchased for £5.00 on request from David Lock Associates, 50 North Thirteenth Street, Central Milton Keynes, Buckinghamshire MK9 3BP.

Paper copies of the Environmental Statement Non-Technical Summary are available free of charge on request, or available to view on the Great Haddon website ([www.greathaddon.com](http://www.greathaddon.com)).

## Comments

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Written comment on the planning applications and Environmental Statement should be made to Peterborough City Council Planning Department in order that comments can be lodged and considered as part of the consultation on the applications.



*Illustrative view of Great Haddon*