



Master Plan

instances where surface water connects directly into the foul sewer network and groundwater infiltration is also present in the foul sewers. The Site currently outfalls via petrol interceptors or soakaway/ditches located within the Site and around the perimeter fence. The surface water is then discharged into the Gagle and Gallos Brooks, which eventually discharge into the River Ray, River Great Ouse and River Cherwell.

The surface water management strategy for the Site incorporates the implementation of sustainable drainage system best management practices, which will include maximisation of natural runoff losses through infiltration, maximisation of surface water runoff quality and reduction of the total volume of surface water runoff. Surface water will be discharged into the local watercourses at no greater than the existing situation. This will be achieved using both natural drainage methods; including surface water planter boxes, rainwater gardens, swales, detention basins, balancing ponds and other; and proprietary drainage features which are manufactured techniques including porous surfaces, rainwater harvesting and flow control devices.

During the construction phase, appropriate measures will be implemented through the Code of Construction Practice to follow best practice to prevent reduction of infiltration through compaction of the soil and to limit seepage and migration of ground water as appropriate. Measures will also be undertaken to prevent contamination by sediment to the watercourses by including appropriate sediment control measures.

Water Quality

The likely effects resulting from the proposed development on water quality would result predominately during construction through potential leakage and spillage, dust and sediment runoff and potential dewatering requirements.

During the construction phase the potential for pollution from spillages or leakages from materials or machinery will be mitigated by appropriate management, storage and maintenance on the Site through the preparation of a Code of Construction Practice. Disposal of water will be undertaken in accordance with appropriate licences and permitted. During the operational phase, the day to day releases of contaminants and sediments will be mitigated by use of interceptors and sediment traps in the design of the surface water system.

Flood Risk Assessment

The Site lies within a low flood risk area (Flood Zone 1). The potential sources of flood risk to the Site or adjacent areas include groundwater, overland flow of surface water and capacity to exceed the artificial drainage system. On the basis of the Flood Risk Assessment carried out in accordance with PPS25 and the suggested mitigation measures in terms of the implementation of the sustainable drainage system, it is concluded that the proposed development will not adversely affect onsite, neighbouring or downstream developments. Having identified and categorised the potential sources of flood risk, mitigation measures have been identified for each of the sources of potential flooding which would reduce the risks associated with the Site to acceptable levels, such that the residual risks can be judged low to zero risk.

Geology, Soils and Contamination

Given the use of the Site as a former RAF Airbase, the potential exists for contamination to arise due to the land-use observed previously. These include: the petrol, oil and lubrication fuel storage and pipeline system; filling station at the car garages; former fire practice area; boilers and incinerators; airfield facilities, buildings and houses; electrical substations; former laundrette; fireworks and weapon storage area; car storage areas and car wash facility; workshops; sewage works; landfill sites and waste disposal pits; and a former hospital.

Both desk based assessment and previous ground intrusive investigation works have been utilised to complete the assessment of the potential contamination present and the risks posed by these areas. The main potential sources of contamination are assessed to be the storage tanks and pipework together with the former airbase facilities and workshops, with hydrocarbons and arsenic in the soil and asbestos in the existing houses and buildings being the main contaminants of concern.

The contamination issues identified with respect to the Site would be subject to targeted further investigation where appropriate for detailed design purposes and appropriate mitigation and remediation measures will be agreed and undertaken in accordance with best practices requirements and guidelines, this will include the development of a Code of Construction Practice.

Traffic Access and Movement

The majority of the current land uses at Heyford Park, which includes existing settlement and commercial activities, hold temporary planning consents and will moreover be included in the outline planning application. The traffic on the local road network is currently comprised of background traffic plus traffic related to the existing development, although the County Council have insisted that traffic associated with temporary consents is excluded.

Camp Road will continue to form the main access into Heyford Park from the local highway network and to limit the impact and speed of vehicles, traffic calming features will be implemented every 60 metres or so. Cross-routes and junctions will provide some of these, with north-south routes connecting the two halves of the neighbourhood, given priority over movements along Camp Road. Existing roundabouts will be replaced by priority junctions and junctions on Camp Road will be designed with surface treatments and changes of level to facilitate pedestrian crossing movements. Other traffic calming features, in the form of build-outs, raised tables or road humps will be implemented to reduce the impression of free-flow vehicle priority.

A new road access will be formed towards the eastern end of Camp Road which will provide vehicular access to the commercial areas of the development and remove the need for vehicles, particularly HGVs, to use Camp Road where it passes through the main part of the settlement.

The proposed commercial operations at the Site are likely to generate a number of daily HGV trips and therefore negotiations will be held with Oxfordshire County Council with a view to concluding a HGV routing agreement.

Measures to improve local bus services have been discussed with Oxfordshire County Council and will be implemented subject to an appropriate agreement being reached and could include increased service frequency levels to Bicester and Oxford and extend the Friday and Saturday evening services to weekdays.

The proposed lattice street structure will create a permeable layout to allow movement through the development without having to follow road layouts. This will facilitate walking and cycling and all streets will be designed in detail to allow safe use of dedicated paths or shared surfaces.

Cultural Heritage and Archaeology

Archaeological evaluation in the form of geophysics and trial trenching has confirmed the presence of Iron Age features associated with settlement, albeit truncated and disturbed in places within the Flying Field Area. The presence of Aves Ditch and Portway through the Site is indicative of evidence from the Roman period. Aerial photographs of the area also suggest the landscape was extensively exploited during these periods. However, the New Settlement Area lies in an area heavily truncated and disturbed by later development and the proposed development will have no further adverse effects in these areas.

Across the airfield, where the potential for undisturbed remains is better, there will be limited impacts, tree planting being the most significant. In areas where this is proposed and areas which have a high archaeological potential, a programme of archaeological mitigation has been agreed with the County Archaeologist to mitigate any adverse effects on the archaeological resource. In addition there will be a positive effect on the historic landscape from reinstatement of Aves Ditch and Portway.

The built heritage potential of the Site is reflected in its designation as a Conservation Area and the recent scheduling of five Cold War sites, whilst three further sites are currently being considered for protection. Overall, the structures dating from the periods of the World Wars are located to the south of the Cold War landscape and are of less significance. Those relating to the Cold War history are mostly situated in the large open airfield area to the north of the New Settlement Area, and generally the landscape and structures are of higher significance. This coherent Cold War landscape is almost unaltered from its original form and the landscape of 'Flexible Response' is considered to be of international significance.

There will be considerable change within the New Settlement Area, but the core Cold War landscape within the Flying Field Area will not be directly impacted. The demolition will be located predominately within the less significant area to the south of the Cold War landscape. A programme of mitigation will be agreed with the County Archaeologist and English Heritage, which will entail the recording of the structures to be removed and Character Areas. This programme of investigation will increase understanding of modern military history. The proposed heritage centre will also provide beneficial explanatory educational facilities within the Site.

Noise

The assessment considered noise both in terms of noise generated by the proposed development including traffic and building services plant and construction noise. On-site measurement of the existing noise environment in the New Settlement Area was undertaken. The suitability of the Site for the proposed residential development is considered to appropriate in noise terms with the majority of the New Settlement Site falling within areas where permission would normally be granted. Conditions may be applicable in certain locations, particularly adjacent to Camp Road, such as noise screening, to mitigate against traffic movement noise levels, although the increase would not result in a change to the noise categories observed across this area.

As part of the construction process, appropriate construction site noise control will be implemented in accordance with the appropriate British Standard and will include specification of plant equipment, hours of operation and HGV access routes. This will be detailed within the Construction Code of Practice.

Air Quality

The main potential air quality impact during the construction phase would be from the emission of dust, which if released in sufficient quantities could result in significant nuisance from soiling at the large number of nearby properties. Dust emissions from site would, be controlled using mitigation measures detailed in a Code of Construction Practice (CoCP) to be agreed with Cherwell District Council that would ensure that the potential adverse effects are minimised or avoided.

A detailed assessment has been used to predict the changes in air quality as a result of the traffic flow changes on the road network surrounding the proposed development. These have been produced for the baseline 2006 situation and forecast for the opening year of 2013, both with and without the proposed development in place. This modelling has shown that a negligible deterioration in local air quality is predicted at all receptors locations, however for some pollutants there is no predicted change in the concentration.

Overall, no significant effects on local air quality are predicted to result from the proposed development.

Conclusion

This ES demonstrates that there are no overriding environmental constraints or planning policies which would preclude the proposed development. All aspects of the proposals have taken full account of the pertinent environmental issues: where necessary, mitigation measures form an integral part of the proposal and will ensure that the environment is properly protected and any adverse impacts from the development are minimised.



NON TECHNICAL SUMMARY

ENVIRONMENTAL STATEMENT

SEPTEMBER 2007

NORTH OXFORDSHIRE CONSORTIUM LTD

Introduction

This leaflet forms the Non Technical Summary to the Environmental Statement which addresses any likely significant environmental effects of the proposed development at Heyford Park. The proposal is for a mixed-use sustainable new community utilising the former RAF base at Upper Heyford. It is envisaged that Heyford Park will provide a new settlement with necessary supporting infrastructure, including a primary school, appropriate community, recreational, amenity and employment opportunities whilst being protective towards the environment and the sustainability agenda.

Site Description and Proposed Development

The proposed development at Heyford Park comprises the former RAF Airbase at Upper Heyford which represents a significant brownfield opportunity. This Site is located in North Oxfordshire, east of the Cherwell Valley and covers an area of approximately 516 hectares. The Birmingham to Marylebone railway runs close to the Site's eastern perimeter while the Birmingham to Oxford railway service operates in the Cherwell Valley to the west. The nearest villages to the airbase are Upper and Lower Heyford. The Site lies north-west of Bicester (the nearest major service centre), and west of Junction 10 of the M40.

The Site contains a wide range of civilian and military buildings and associated areas of hard standing mainly located to the north of Camp Road, the principal access route which bisects the base. To the south of this road, the area includes residential housing, a disused petrol station, supermarket, school, gymnasium, hospital and recreational facilities.



The area surrounding the Site is a mosaic of large predominantly arable fields with few hedgerows. The area generally lacks woodland, although a limited number of woodland fragments are also present, There are two separate elements to the ES study area; the New Settlement Area and the Flying Field Area. The development proposals relating to this Site are:

Proposed **New Settlement Area** to include the following uses:-

- **Class C3 (residential dwelling):** construction of up to up to 1,005 new dwellings and the retention of 70 existing military dwellings), to be erected in 2 and 3 storey buildings,
- **Class D1 (non residential institutions):** change of use of Building 549 to provide accommodation for a Community Hall and Building 572 to provide accommodation for a Chapel; Buildings 126, 129 and 315 to provide a Heritage Centre and up to 4,200 sq.m of visitor facilities; together with associated car parking.
- **Class C1/D1:** change of use of Building 74 to use as a hotel/conference centre of up to 4,150 sq. metres.- Change of Use of Building 103 to Class A4 Public House, provision of up to 340 m2 of Class A4 floorspace in total.
- **Class A1:** retail provision of up to 743 sq.metres of floorspace.
- **Class A2 and Class A3 and A5 units:** provision of up to 1,000 sq.metres of floorspace as part of a Local Centre.
- **Class A4:** change of use of Building 103 to Public House, provision of up to 340 sq.metres of Class A4 floor space in total.
- **Class B1 (a), (b) and (c):** erection of 6 no. buildings comprising up to 7,800 sq.metres of floorspace.
- **Class B2/Class B8:** change of use of Buildings 80, 151, 320, 345, and 350, 354 to mixed Class B2/Class B8 use.
- **Provision of:** playing pitches and courts, sports pavilion and four tennis courts plus incidental open space including NEAPS and LEAPS.
- **Provision of all:** infrastructure to serve the above development including the provision of the requisite access roads and car parking to District Council standards.
- **Removal of:** boundary fence to the south of Camp Road.
- **Removal of:** buildings and structures within New Settlement Area as detailed in separate schedule.
- **Landscape alterations:** including the removal of some trees within the Conservation Area and planting of new trees and off-site hedgerows and access track.

Proposed **Flying Field Area** to include the following uses:

- **Change of Use for:** vehicle preparation and car staging comprising 17 hectares.
- **Class B1 (Business):** Change of Use of Buildings 3205, 3208
- **Class B1 (Business) and B2 (Industrial):** Change of use of Buildings to mixed Class B1 (Business) and B2 (Industrial) use
- **Class B1 (Business) and B8 (Storage):** Change of use of Buildings 234, 324, 350A, 3209 to mixed Class B1 (Business) and B8 (Storage) use
- **Class B2:** change of use of Buildings 259, 260, 292, 336, 337, 340, 1011, 3210 to Class B2
- **Class B2/Class B8:** change of use of Buildings 221, 249, 325, 327, 328, 329, 366 to mixed Class B2/Class B8 use.
- **Class B8:** change of use of Buildings 1001-1009, 1023, 1026-1038, 1041-1048, 1059, 1062, 1100, 1102-1109, 1111-1115, 1159-1185, 1372, 1601- 1625, 2001-2009, 3001-3037, 3043-3051, 3056, 3140, 3200-3203.
- **Removal of:** part of the boundary fence covering the perimeter ABCD and its replacement by a similar 3 metre fence along the route AD.
- **Demolition of:** Buildings 3052-3055 and 3135 in the north-western corner of Airfield.
- **Demolition of:** Buildings 3036-3042 in the south eastern corner of the Airfield.
- **Provision of:** all infrastructure to serve the above development, including the provision of the requisite access roads and car parking to Cherwell District Council standards.
- **Reopening of:** Portway and Ave's Ditch as public rights of way. Associated strategic infrastructure, comprising main spine road formed by Camp Road; with access to the main flying field to the north and residential areas to the south of Camp Road.
- **Removal of:** trees as detailed in accompanying schedule.

Alternatives

In the formulation and development of the proposals for Heyford Park, alternatives were considered for the overall layout and for the proposed and existing elements of the settlement. These included land use, vehicular access to the airfield, retention or demolition of prefabricated bungalows, location of the neighbourhood centre, traffic use of Camp Road, siting of the school and reuse of key buildings, together with the open areas and boundaries.

The proposals therefore represent the most appropriate form of development following the iterative masterplanning process and identification of the opportunities and constraints presented by the Site, whilst mindful of the adopted Comprehensive Planning Brief for the Site.

Planning Policy

The relevant policy contained within National Planning Policy Guidance and Statements, Regional Planning Guidance for the South East, the Oxfordshire Structure Plan and the Cherwell Local Plan have been reviewed with respect to the proposed development. Full regard is also had to emerging spatial strategies and local development documents such as the adopted Comprehensive Planning Brief. It can be demonstrated that the current development proposals accord with the policies contained within the draft Development Plan, as well as National Planning Policy Guidance.

In relation to the New Settlement Area, the adopted Comprehensive Planning Brief establishes a set of principles to guide development, these include; location and context, conserving the heritage interest, the provision of a satisfactory living environment, settlement components, transport, the design of the settlement, sustainability and future management. The Flying Field Area is addressed with a similar set of principles for development, namely, environmental improvements, public access, conservation of heritage assets, the provision of a satisfactory living environment, the future of the wider airfield and future management. The development proposals broadly accord the principles contained within this document.



Change of Use Plan

Socio Economic Issues

The assessment has concluded that overall the impact of the proposed development on the socio-economics of Heyford Park and Cherwell District as a whole is positive. In particular, the scheme offers significant potential long-term benefits in respect of providing approximately 1,075 residential units of varying sizes, catering for the needs of the area including a significant proportion of affordable housing. The Site will also provide employment space appropriate for the current demands of firms.

It is estimated that 373 jobs will be created during construction and 459 jobs created following completion at the local level (600 jobs at the regional level) in addition to the existing 1,000 jobs already existing on the Site. These posts will include a greater proportion of higher skilled positions essential for encouraging economic growth in Cherwell District.

The new community will generate a need for between 129 and 160 primary and between 92 and 115 secondary school places. The new primary school proposed as part of the development will accommodate this increased requirement at primary level however existing surplus capacity is likely to assist capacity issues in the early stages of the proposed development. At the secondary level, it is likely that there will be shortfall in places once the residential component of the proposed development is complete and therefore it may be necessary to make additional provision. This would be addressed through the provision of financial contributions and subject to negotiation with the Local Planning and Education Authorities to ensure that the appropriate need is met. The new population will generate a need for two full-time GPs which could be accommodated through the expansion of operational hours of the existing surrounding practices.

Landscape and Visual Issues

There will be significant landscape, landscape character and historic landscape character benefits arising from the proposed development. The former Cold War site will retain a productive commercial use which respects the surrounding landscape character and pattern, while retaining its open landscape nature. The runway extensions will be removed on the western and eastern nibs, but the NATO runway will still be visible as part of the landscape of the former airbase. There will be a benefit arising to site trees and woodland, by the removal of alien conifers and comprehensive management to individual trees.



Retention/Demolition Plan

There will be a number of short term adverse visual impacts associated with construction works as a result of the demolition and removal of the water towers, selected hardened aircraft shelters and the north western most warehouse building on the Site, especially when seen on the skyline from villages on the east facing slope of the Cherwell village. These construction works are localised and generally enclosed.

On completion, there will be widespread visual benefits arising from the removal of large buildings and structures, where these are most visible. These include some HAS's, the water towers and parts of the security fencing. New footpaths will be created, including the Upper Heyford Trail, a new circular path linking points of interest around the former airbase.

Thirty-nine of the viewpoints around the Site were assessed and all of these experience visual benefits, apart from views where the impact is neutral or where there is no impact. There are four significant visual benefits: one from Upper Heyford village; one from Chilgrove Drive in the south east; and the other two arising from the new views from the reinstated footpaths of Portway and Aves Ditch that cross the runway. Moderately significant visual benefits will occur in views from Steeple Aston, near to Middle Aston, Somerton, Chilgrove Drive and Rousham and in views towards the southern boundary of the former airbase. In twenty years, following the growth of planting, these significant and moderately significant visual benefits will remain. There will be no adverse visual impacts at that time.

Ecology

The ecological assessment of the Site comprised both desk based study and on-site field survey work, over the period 1997 to 2007. The Site consists mainly of open, improved, species-poor grassland with former airbase buildings and hard standing. However, within this grassland is an area of more species-rich calcareous grassland that is designated as a County Wildlife Site. The Site is dry with the exception of artificial water tanks. The former runway, with associated grasslands, makes up the majority of the Site. Specialist species surveys were completed for vegetation and grassland, birds, bats, badgers, reptiles, invertebrates and great crested newts. The New Settlement Area as part of the proposed development is located away from the areas of greatest ecological interest and the Flying Field Area is to be retained with some demolition of existing features.

Bat roosts are present on the Site and a licence would be required to remove any buildings containing roosts within the Site. Twelve badger setts were identified on the boundary of the Site however the proposals do not require the closure of any setts. The New Settlement Area is generally of little intrinsic nature conservation value for breeding birds, however the Flying Field Area is of greater importance supporting a large number of bird species at relatively high densities. Great crested newts were identified in 16 artificial water bodies surveyed and comprised a number of separate populations.

The Upper Heyford County Wildlife Site would not be directly affected by the proposals, however mitigation measures will be implemented to prevent indirect effects from the construction phase.

A comprehensive mitigation strategy has been developed and a Conservation Management Plan will be produced to ensure the delivery of the required mitigation measures. This includes: the access and management of the County Wildlife Site; management and enhancement of the grassland habitats for wildlife benefit; retention of trees where possible and provision of new landscape planting; retention of waterbodies and management of aquatic and terrestrial habitats for great crested newts; provision of designed buildings to accommodate loft areas for bats; grassland management for bird species, badger utilisation and to increase invertebrate diversity.

Construction Waste

The proposed development at Heyford Park has the potential to generate a range of solid waste materials as a result of the ground remediation with further material resulting from the required demolition and subsequent activities. A conventional approach to waste management would favour determining the Waste Acceptance Classification of wastes and, based on the degree of contamination, either disposal to landfill or specific treatment and remediation.

A more strategic waste management approach would afford due attention to consideration of the waste hierarchy and favour waste elimination ahead of re-use, recycling with disposal to landfill as a final option. Methods to facilitate a hierarchical approach to waste management that may be employed on a construction programme include; control of procurement, ordering and packaging, provision of segregated recycling facilities, re-use of waste material within the scheme, and transport of specific waste streams to appropriate recycling facilities.

A range of construction industry waste management systems are available which provide the opportunity to formalise waste management procedures within the broader scope of the construction programme. Commitment to a Site Waste Management Plan, a Demolition Protocol or a Waste Auditing Scheme (or similar) would all contribute to reducing the ultimate volume of waste disposal to landfill by providing systems to contribute to management of demolition and construction waste according to a hierarchical waste management strategy.

Utility Services and Waste

The proposed development will increase demand on the existing infrastructure service supplies and, without mitigation and upgrading of those existing supplies, services to existing customers could be compromised, and supplies to be proposed for the development may be restricted. The construction impacts of the implementation of this infrastructure will be short term in nature and are considered to be negligible as work is mostly related to the laying of cables and pipes underground and are likely to be undertaken in line with internal road construction.

On-site and off-site improvements to the water supply network will be required to accommodate the development proposals and the existing private sewerage network and treatment works, approximately 300m south of Camp Road, has capacity to accommodate the proposed development. Any diversions of existing infrastructure apparatus can be minimised by careful consideration of levels during detail design of roads and access junction and constraints such as existing routing to be maintained and location of mature trees will also be considered as part of the detailed layout.

It is not considered that any of the services infrastructure will preclude the development proposals following appropriate reinforcement works. The additional services required will not result in any significant environmental impact. In terms of the operational use of the Site, waste would either fall into domestic or industrial and commercial waste categories for disposal. The proposed development will include design within the New Settlement Area to allow kerbside collection of domestic waste as currently undertaken by the Council with appropriate storage within the residential properties to allow segregation of waste types. Industrial and commercial waste will be collected by appropriately licensed waste management companies and the responsibility of the building occupiers. Mechanisms to encourage re-use and recovery will be facilitated where possible.

Water Environment

The water features within the vicinity of the Site include: a series of springs (approximately 13 within 1km of the Site boundary); the River Cherwell 1km to the west of the Site at the nearest point; the Oxford Canal adjacent to the River Cherwell; a number of brooks which flow into the River Cherwell including Gagle Brook, Padbury Brook and Gallos Brook; and a number of smaller ponds and pools also located off-site.

Surface Water Drainage

Existing surface water drainage is collected from hard surfaces by downpipes, footways and road gullies to surface water sewers. The majority of the Site has separate surface water and foul sewers, however there are some