LOCATION
Mimmshall valley runs in a north/south direction around Welham Green. The area is confined in the east and west by major transport corridors (the A1(M) and the railway line) and higher ground. The settlements of Hatfield and Potters Bar form the north and south boundaries respectively.

LANDSCAPE CHARACTER
Mimmshall Brook valley slopes and floor have a wooded farmland character, with rectangular field compartments along the valley slopes. It is strongly influenced by the major transport routes and the surrounding settlement, which give it an urban-edge rather than a rural character. The Royal Veterinary College is located centrally and has a local impact. The roads down the slopes coincide with a series of high points and the meandering streams that feed the brook also mark the shallow valleys between.

KEY CHARACTERISTICS
- organic field pattern of small woodland blocks and fenced pasture
- mixed farming
- major transport corridor
- water related features
- valley slopes and floor
- urban influence

DISTINCTIVE FEATURES:
- Potterells Spew gravel slopes
- swallowholes
- Royal Veterinary College

Swallowholes in Brush Wood •
(E. Staveley)
PHYSICAL INFLUENCES

Geology and soils. The area lies within the central river valleys, part of the northern Thames basin. The slowly permeable clayey soils mostly have brown subsoils and lie over Tertiary clays, giving rise to seasonal waterlogging (Windsor series). There are local areas of slight seasonal waterlogging on the slopes. Springs issue from a distinctive spew gravel bank at Potterells.

Topography. A string of high points runs centrally along the area and the land falls slightly away to the east at the boundary of the Hatfield estate.

Degree of slope. The average gradient is 1:30.

Altitude range. 80m to 110m

Hydrology. Water End swallowholes (SSSI) are major sinkholes in chalk and a permanent landscape feature. The site, which is the largest in England, consists of a group of more than 15 sinkholes where two streams drain from the London clay and sink very close to the boundary of a chalk outcrop. During heavy rainfall a lake accumulates in the basin but is only temporary. This flow is the spring source for Chadwell at Ware (New River), and overflows westwards into the Colne (the Mimmshall Brook at Water End). Ponds at Welham Green are connected underground. A number of small ponds on the higher ground are associated with the farms and woodlands.

Land cover and land use. Wooded farmland is prominent throughout the area. The farmland is predominantly arable, with small fields of pasture with fenced boundaries edging the settlement and surrounding the Vet College. The area is well used for informal recreation.

Vegetation and wildlife. The willow carr/swamp community adjacent to the Water End swallowholes is of biological importance, with stands of wetland species. Field boundaries are generally treed hedgerows, with hedgebanks locally. Hawthorn is a common hedge species throughout the area, with elder and elm also frequent. Other species include ash, dogwood, field maple and blackthorn. Woodland blocks are relatively small and unconnected, generally an oak/ash mix with wetland species associated with watercourses. Hornbeam, field maple and the occasional beech can also be found. Bush Wood at Welham Green is a significant hornbeam woodland. Some remnant acid grassland can be found in association with the oak/hornbeam woodland. Immature woodland planting mixes edge the A1(M) corridor.

HISTORIC AND CULTURAL INFLUENCES

Historically, the woods were used for a supply of timber for brick kiln furnaces. A moat is sited to the west of Welham Green. The transport corridors and regular configuration of lanes that cross the area have strongly influenced the landscape character and evolution of the settlements and have obliterated the historic/cultural pattern. For example, any links with North Mymms Park have been severed by the motorway corridor. Relics of the historic field pattern can be found further up the slopes away from the A1(M).

Field pattern. Small regular

Transport pattern. The A1(M) and the railway define this area to east and west

Settlements and built form. Linear 20th-century settlement borders Hawkshead Lane and the historic village of Water End follows the Mimmshall brook. Some infill development has occurred adjacent to the A1(M) corridor. Isolated houses and farms are scattered throughout the area. Mimms Hall is located close to Potters Bar and has a flint and red-brick lodge house, which is unusual in the area.

OTHER SOURCES OF AREA-SPECIFIC INFORMATION

English Nature SSSI notification.
VISUAL AND SENSORY PERCEPTION
In general, dense hedgerows and woodland restrict visibility. Longer views are generally associated with the larger fields on the high ground. Vegetation and landform confine views within the Mimmshall Brook valley.

Rarity and distinctiveness. The geological SSSI in this area, Water End swallowholes, is the best example of its type in England.

VISUAL IMPACT
The site and sound of the A1(M), railway line and the surrounding settlements of Potters Bar and Hatfield cause a significant impact on the character of the entire area, while the Vet College has a localised impact. The pig farm only presents a very localised impact and is well screened by vegetation. At the southern end of the area views are marred by the leisure centre and Cranborne Industrial Estate, offset by the Furzefield Local Nature Reserve.

ACCESSIBILITY
Access is good and the landscape is well used by the local residents. Parking access is difficult for most of the footpaths in the area. Motorcycling, walking and riding recreational activities also occur.

COMMUNITY VIEWS
Elements in this landscape are regarded as distinctive (D). The Potterells slopes are perceived as being particularly significant: ‘A pleasant walking area with many paths’ (Potters Bar Society). The Furzefield Local Nature reserve is valued by local residents.

LANDSCAPE RELATED DESIGNATIONS
Mimmshall is recognised within the county Biodiversity Action Plan as a High Biodiversity area (HBA) for its woodlands.
Geological SSSI: Water End swallowholes.

---

CONDITION
Land cover change: localised
Age structure of tree cover: mixed
Extent of semi-natural habitat survival: fragmented
Management of semi-natural habitat: poor
Survival of cultural pattern: interrupted
Impact of built development: high
Impact of land-use change: moderate

ROBUSTNESS
Impact of landform: apparent
Impact of land cover: prominent
Impact of historic pattern: relic
Visibility from outside: locally visible
Sense of enclosure: partial/mixed
Visual unity: incoherent
Distinctiveness/rarity: frequent (with SSSIs)

---

CONDITION
GOOD
MODERATE
POOR
WEAK

STRENGTHEN AND REINFORCE
CONSERVE AND STRENGTHEN
SAFEGUARD AND MANAGE

IMPROVE AND CONSERVE
CONSERVE AND RESTORE
RESTORE CONDITION TO MAINTAIN CHARACTER

WEAK
MODERATE
STRONG

STRENGTH OF CHARACTER
STRATEGY AND GUIDELINES FOR MANAGING CHANGE: IMPROVE AND CONSERVE

- encourage the reversal of habitat fragmentation and the establishment and improvement of habitat links to create eco-corridors
- promote the expansion of woodland, especially where this will enhance the distinctiveness of the area and help in creating habitat links
- encourage the planting of new woodlands to screen features that detract from the historic landscape character of this area, such as urban edges and roads
- ensure that only indigenous species of local provenance are used for new woodlands and hedges
- encourage the retention and replanting of hedges as field boundaries, rather than fences
- ensure that any change to horse rather than cattle/sheep grazing does not lead to a degradation of local landscape character via inappropriate fencing, structures and buildings
- protect wetland habitats of significant nature conservation value
- resist the targeting of redundant or derelict pasture for development
- resist development that could lower the water table within valleys and affect wetland habitats
- promote the creation of buffer strips along watercourses to prevent pesticide, herbicide and fertilizer run-off and to provide habitat for wildlife; encourage their linkage to eco-corridors within the wider landscape
- encourage the maintenance and retention of all ponds
- encourage the provision of small, informal car parks at access points along public footpaths
- promote woodland management to ensure age diversity and the retention of species-rich ground flora