

3.4.6 Rusper Road

Rusper Road: Rusper Road passes through a number of different character areas. It is a feature rather than a character area, but is key to understanding the site due to the influences it has on several of the other character areas and the proposed site boundary.

Key Characteristics

- Passes through a number of different character areas. Rusper Road is a feature rather than a character area.
- Partially divides the site as many of the properties along it are not currently included in the site boundary.
- Forms the suburban edge of Crawley.
- Changes in character along its length transitioning from a suburban character with kerbs and footpaths to a rural character lined with trees and hedgerows once past the golf course.
- Traffic along it is frequent with no footpaths.



FIGURE 60 Eastern end of Rusper Road / Hyde Drive roundabout



FIGURE 61 Rusper Road urban character



FIGURE 59 Rusper Road rural character



FIGURE 62 Pound Cottages - Listed buildings

3.4.7 Site Landscape Character Analysis

A site analysis exercise was undertaken to gain a more detailed understanding of the site character and features, to support and supplement the findings of the landscape character assesment.

These findings show a strong local character of enclosed fields, with strong woodland and historic hedgerow belts throughout. Key access points, nodes, destinations and views are all identified. These provide a complete picture of the site which has informed the development of this landscape-led masterplan.

On the following pages the key characteristics of each local character area are set out, along with the implications of these on the emerging masterplan.

- Site Boundary
- Existing Paths & Connections
- Potential New Connections
- Potential New Gateways
- Existing Gateways
- Nodes / Destinations
- Existing Strong Edges
- Existing Weak Edge
- Listed Building
- Scheduled Ancient Monument
- Key View
- Ridgeline
- Veteran Trees & Grade A Trees
- Watercourse / Water bodies
- Steep Gradients

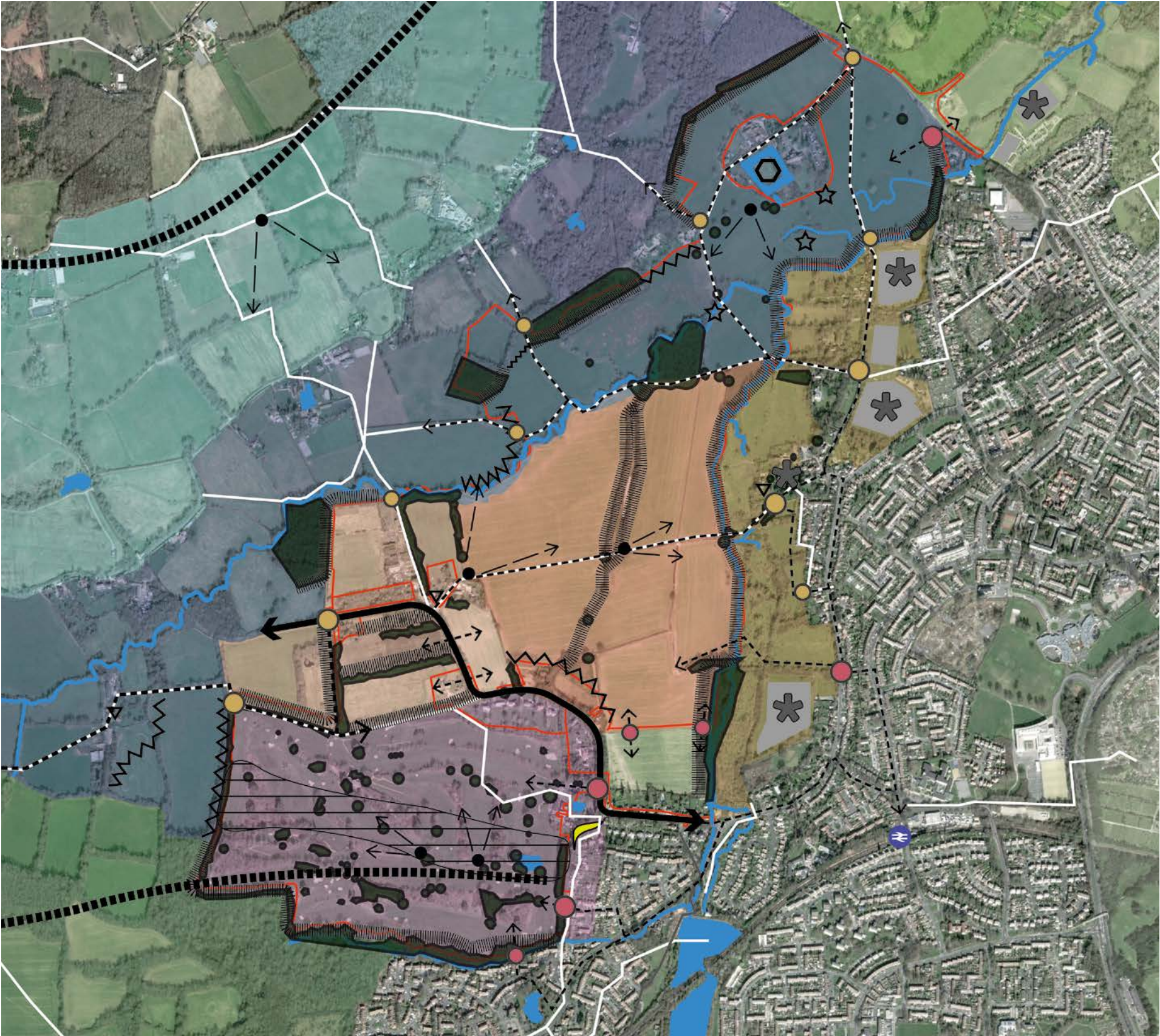


FIGURE 63 Site Landscape Character Analysis Diagram

3.4.8 Woodlands and Trees

Introduction

The landscape is characterised by the presence of mature trees, woodland and hedgerows; often in the form of historic field patterns. This mosaic of mature features structures the landscape and will define much of the arrangement and character of the new development. Good quality woodland and trees will be retained, protected and integrated into the design. Where removal is unavoidable for new infrastructure connections new tree and woodplanting will be required to mitigate impacts. A tree retention plan has been prepared to support this aim.

Key Features

- The site and its immediate context are well wooded with blocks of woodland within the site and adjoining the boundary along with good quality hedgerows. The tree lined courses of Hyde Hill Brook, the River Mole and Ifield Brook define much of the boundary of the Site.
- Most mature trees sit within historic field boundaries and hedgerows. Shaws - narrow belts of trees wider than a hedgerow - are a distinctive feature of the existing landscape.
- Areas of ancient woodland are present directly adjoining the site boundary to the north in Ifield Wood, to the west at the Grove, To the south at Hyde Hill and to the east at Ifield Wood.
- There are 3 veteran trees located on within the redline boundary - all located in the north of the site in proximity to the historic Ifield Manor.
- There is 1 Tree Protection Order (TPO) area within the site, located just off Rusper Road near the golf course lodge and car park.
- High quality mature trees, particularly a large number of mature oaks, contribute significantly to the character of many areas. These should be retained wherever possible to create an established feel to the landscape from the outset and minimise habitat lost to development. Mature specimen oak trees within hedgerow lines and individually in the parkland landscape of Ifield Manor and the golf course are particularly distinctive features.
- The site has a number of mature trees which follow the remnants of historic field boundaries. Within the golf course, these have been eroded, leaving more open areas with individual or grouped large mature trees which should be retained. Stands of younger more recently planted trees in the golf course have less ecological and

landscape character value.

- Rather than retaining trees as isolated specimens, wherever possible new open space should be positioned to make the most of these trees.
- The land is generally gently rolling with occasional ridges which are generally wooded - this characteristic of more open lower areas and wooded ridges could be retained within the development and new landscapes.



FIGURE 64 Mature parkland tree at Ifield Manor

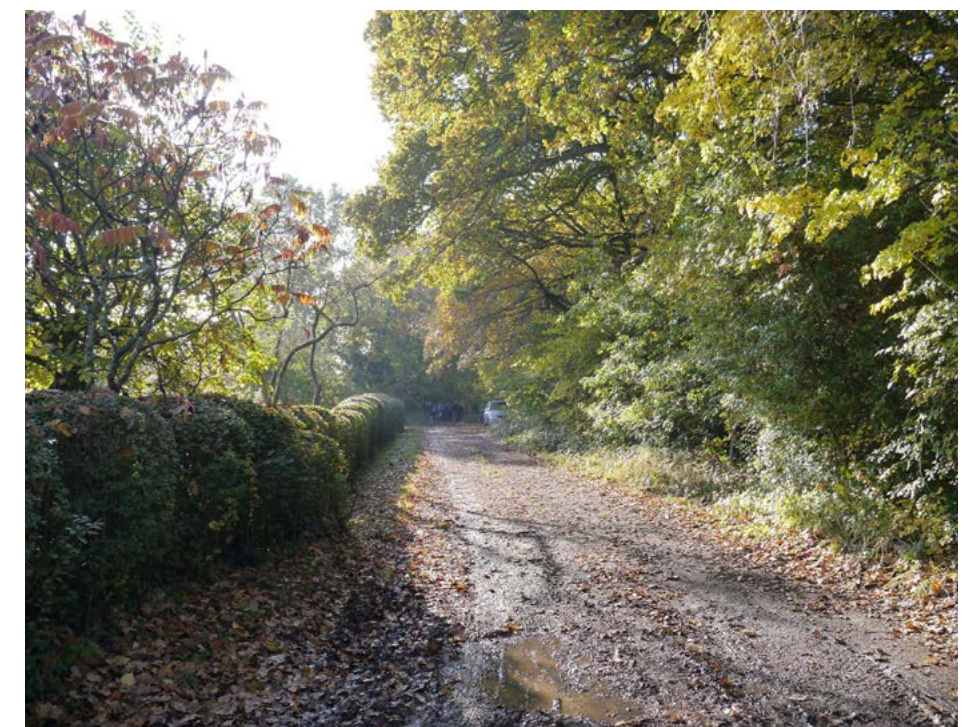


FIGURE 65 Densely wooded lane near Rusper Road

- KEY
- Hybrid Planning Area
 - SNCI (Site of Nature Conservation Interest)
 - SSSI (Site of Special Scientific Interest)
 - Hedgerows
 - Class A Woodland and Trees
 - Ancient Woodland
 - TPO (Tree Preservation Order)
 - Veteran Trees
 - Kilnwood Lane Wooded Ridge

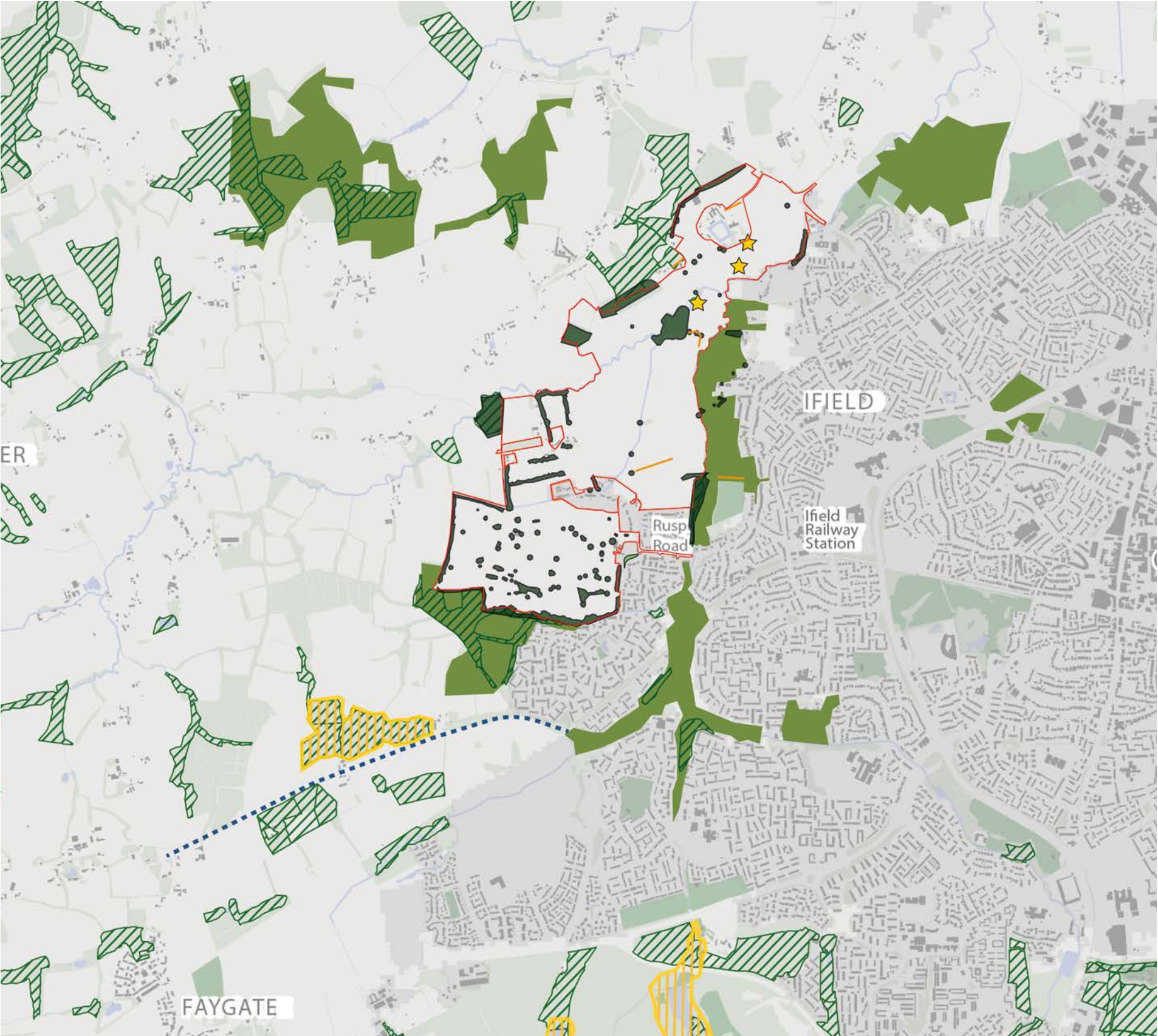


FIGURE 66 Woodlands and Trees Diagram

3.4.9 Existing Parks, Sports & Play Space Provision

Parks & Open Spaces

Several notable parks and open spaces are located nearby the site, the closest parks being Ifield Mill Pond directly to the south, and Geoff's Park to the East in Crawley. Larger parks within the area are Buchan Country Park and Tillgate Park. Ifield Brook Wood and Meadows adjoining the eastern boundary has footpaths and other pathways through it. In 2015 it was designated, along with the meadows further south, as a Local Green Space.

The masterplan is intended to connect to the adjacent local spaces through cycle and pedestrian routes, as well as ecological green linkages; with the smaller local open spaces acting as recreational and ecological stepping stones to the parks. In turn West of Ifield will connect users from each of these spaces to the open countryside to the north and west.

Sports Pitches & Playing Fields

The southern part of the site currently contains Ifield Golf Club. The course is located on the hillside and ridgeline mentioned earlier in this chapter, with the course set amongst historic and newer plantation woodlands.

There are a number of local sports pitches and clubs near the site, which support the local population. This provision covers a range of different sports, including football, rugby and cricket.

Site survey evidence shows that grass pitches within the area suffer from poor drainage as a result of soil composition, leading to severe water-logging of grass pitches in some areas when there is heavy rainfall.

Playgrounds

Local playgrounds can be found to the east and south of the site in the urban areas of Ifield and Crawley. There already a number of play space provided in the neighbourhoods of Ifield West and Bewbush to the south, but these are generally small in scale. To the east of the site Ifield and Gossops Green have relatively fewer existing playground. Millpond Adventure Playground is the nearest significant play space to the site.

Public Rights of Way

Existing Public Rights of Way (PRoWs) and recreational routes are key to understanding the area's open space, sports and play provision. Please refer to the Movement & Access section for further information on PRoWs. Existing PRoWs are well used recreationally, with Ifield Meadows being a popular spot for dog walkers. Routes in the area are also popular with cyclists and horse riders although no bridle ways exist within or adjacent to the site. As well as recreational routes and access to the countryside, PRoWs provide links between key open spaces and sports provision within in the local area.



FIGURE 67 Ifield golf course



FIGURE 68 Sussex Football Academy, Faygate

- Hybrid Planning Area
- Distance
- Parks & Open Spaces
 1. Ifield Brook Wood and Meadows (Local Green Space)
 2. Ifield Mill Pond Park
 3. Buchan Country Park
 4. Goffs Park
 5. Tilgate Park
- Sports Pitches & Playing Fields
 6. Ifield Golf Club
 7. Crawley Rugby Football Club
 8. Ifield Green Sports Pitch
 9. Ifield Green Cricket Club
 10. Sussex Football Academy
 11. Rusper Road Playing Field
 12. Gossops Green Playing Field
 13. Bewbush Green Playing Field
 14. Bewbush West Playing Field
 15. Ewhurst Playing Field
 16. Cherry Lane Playing Field
- Playgrounds
 17. Ifield Green Playground
 18. Millpond Adventure Playground
 19. Kilnwood Vale Park
 20. Gossops Green Park
 21. Cherry Lane Adventure Playground
 22. Dormans Park
 23. Bewbush Green Playground
 24. Bewbush West Playground
 25. Bewbush Park
 26. Various Small Playgrounds
- Leisure Centres
- Allotments
- Open Access Land

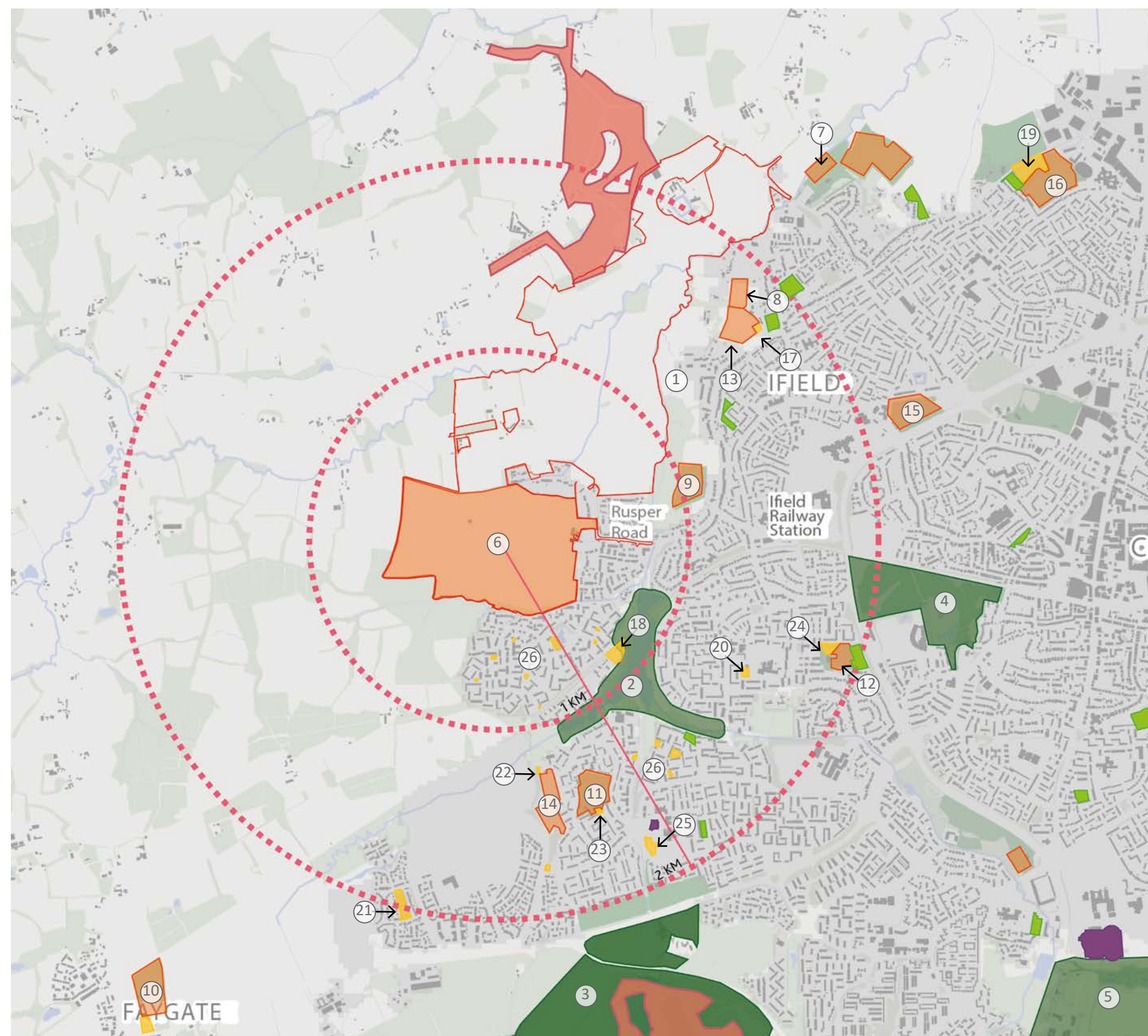


FIGURE 69 Existing Parks, Sports & Play Provision Diagram

3.5 Movement And Access Baseline

3.5.1 Mode Share

Census (2011) method of travel data for output areas adjacent to the site (Bewbush, Gossops Green and Ifield) demonstrates that journeys by car (69%) currently account for a significant proportion of travel. Over 72% of trips from the local output areas are retained within a broad 30-minute cycle catchment. Given that the majority of travel is short distance, there is significant potential for mode shift to sustainable and active modes of travel within Crawley, Horsham and West of Ifield.

Trips to local employment centres including Crawley town centre (23%), Gatwick Airport and Manor Royal (10%) form a significant proportion of existing travel demand. Trips to Greater London account for just over 7% of travel from the local output areas, of which over 50% are made by rail.

Due to the 2021 Census being undertaken during a Covid-19 National Lockdown, the travel to work data is not representative of the current baseline. Therefore 2021 data has been used.

3.5.2 Bus

Bus provision within Crawley is currently good which is reflected by the relatively high proportion of existing residents within neighbourhoods to the east of the site traveling to work by bus (9%). Bus route 2 provides a bus every 10 minutes between Ifield West and Tilgate via Ifield Drive and Crawley town centre, whilst bus route 200 provides a half hourly service between Horsham and Gatwick Airport via Manor Royal. The Fastway services within Crawley provide significant journey time savings over car use by utilising a high level of segregated bus priority infrastructure. Fastway services have increased patronage by 160% over ten years and facilitated a 19% decrease in traffic levels between 2006 and 2013.

3.5.3 Rail

Ifield rail station sits approximately 1km to the east of the site, however it is 1.6km along the current public highway network including Rusper Road and Ifield Drive. Around 7% of residents currently travelling from neighbourhoods to the east of the site travel by rail. Thameslink services currently operate from Ifield station towards Peterborough, via London and also towards Horsham. There are currently two direct services departing towards London in the morning peak hour. There are three direct services to Horsham in the evening peak hour.

Station usage has increased steadily over the last ten years, in 2019/20 there were 332,000 entries and exits from Ifield station; a 1% increase from 2018/19. However, this would have been impacted in latter months by Covid-19. Since then, station usage has dropped and the year 2021/22 saw 185,000 entries and exits from the station. Although service frequency is low and station infrastructure limited, Ifield station does enable longer distance commuter trips, particularly towards London. These longer journeys account for 50% of those using Ifield station.

3.5.4 Car Parking and Ownership

Analysis of existing census data for car ownership in the local area (Gossops Green, Ifield and Bewbush wards) shows that just under half of all households own a single car, whilst almost a quarter of all households (22%) do not own a car. West Sussex County Council (WSCC) parking policy aims to provide sufficient parking to accommodate demand, while also promoting sustainable travel and minimising the adverse effects

of increased car usage on road safety. To promote lower car ownership levels, current WSCC standards recommend the following:

- Travel plan measures, targeted at reducing vehicle ownership levels such as car clubs;
- High levels of accessibility to non-car modes of travel and to local amenities and facilities; and
- Comprehensive parking controls; i.e. Controlled Parking Zone.

WSCC have developed a parking demand matrix for residential developments, which assigns the expected parking demand per dwelling. Areas across the county are divided into "Parking Behaviour Zones", based on the location and connectivity of the area. West of Ifield falls within Parking Behaviour Zone (PBZ) 3, indicating that for each 3-bedroom residential unit provided, 1.8 car parking spaces would be expected. The standards state that a 10% reduction in expected parking demand could be expected if a range of travel choices are made available through sustainable travel initiatives.

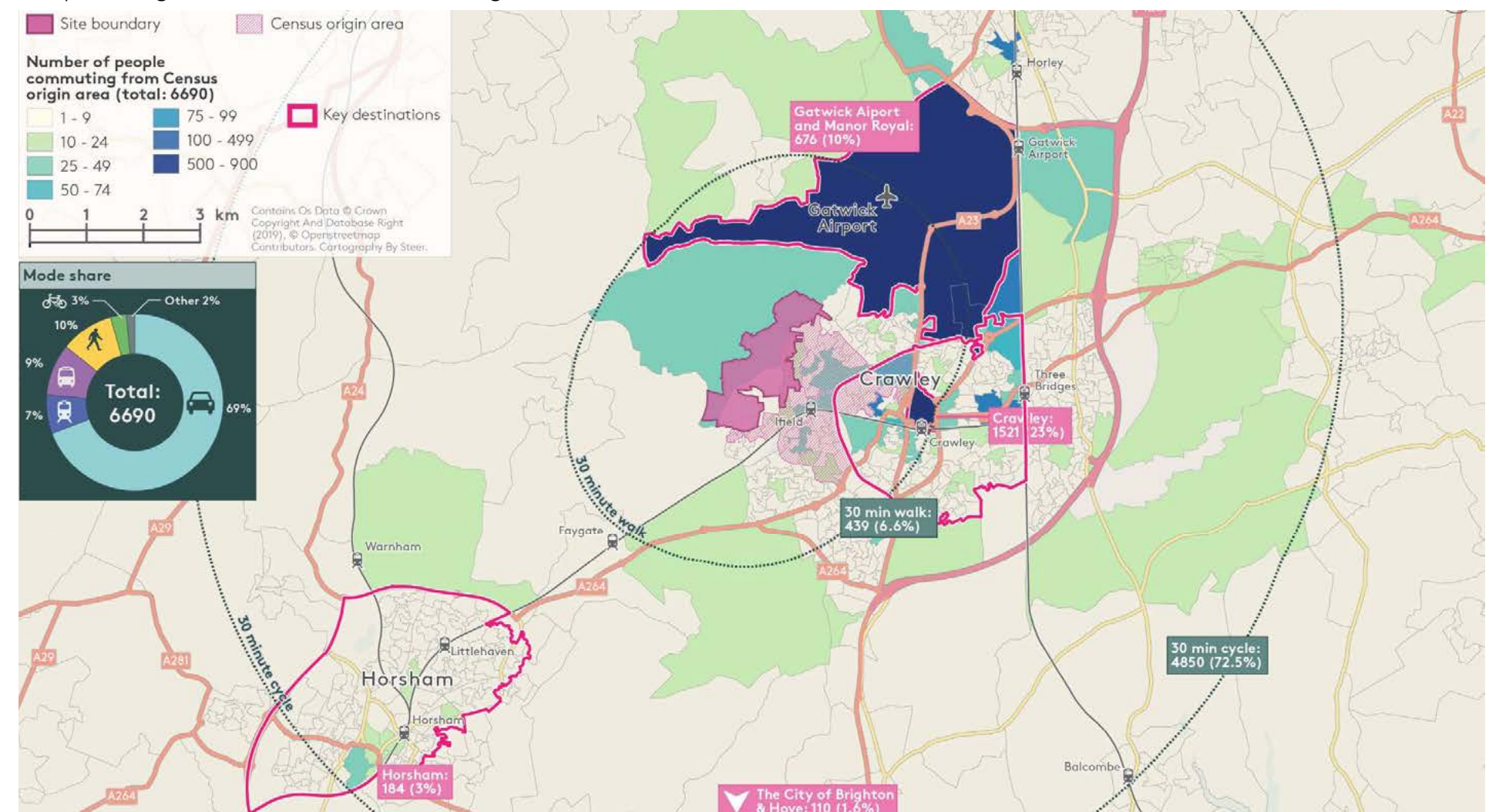


FIGURE 70 Journeys to Work and Existing Mode Share (Ifield, Bewbush and Gossops Green)

3.5.5 Walking and Cycling

The existing site is predominantly greenfield meaning that existing walking and cycling infrastructure is limited. Nonetheless, there are opportunities to connect to and improve surrounding infrastructure to make walking and cycling a more attractive mode choice. Key transport nodes are within walking distance from potential site access points, whilst key employment centres including Manor Royal, Gatwick Airport, Crawley town centre, Horsham North and Horsham town centre can be reached by cycle. There are Public Rights of Way (PRoW) running predominantly west to east across the site. These cross Ifield Meadows and Ifield Brook adjacent to Ifield Parish church and further north opposite Ifield Cricket club to join the existing network of footways in Ifield. These are well used by local residents. They are generally unsurfaced and can become very muddy in winter particularly those in vicinity to the River Mole. Cycle parking is currently limited, particularly at key transport nodes. Ifield station has a sheltered cycle rack with capacity for just 10 cycles.

- KEY
- Hybrid Application Area
- Existing Footpaths
- Existing Bridleways
- Existing Cycle Routes
- Existing Road Network

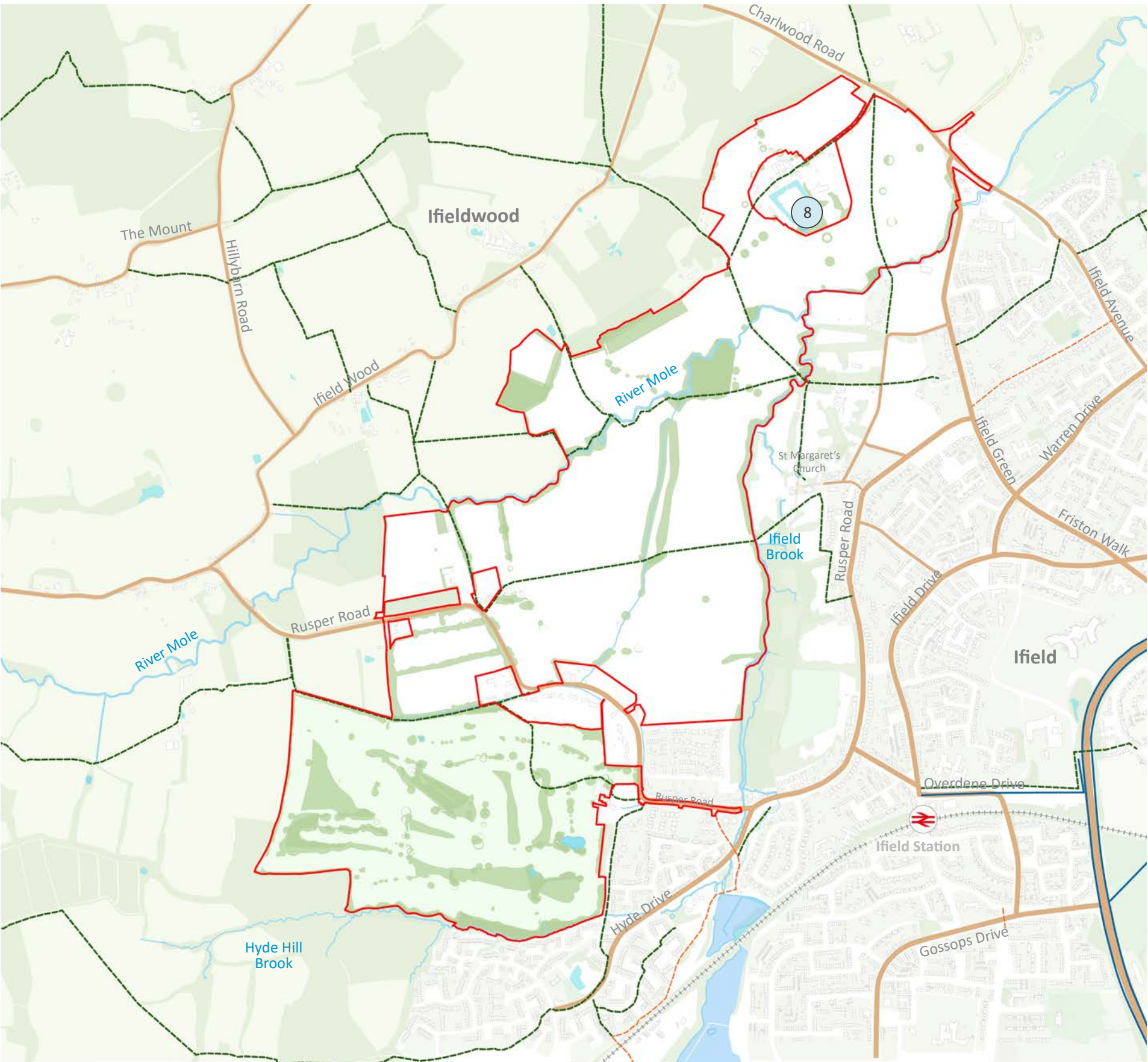


FIGURE 71 Existing PRoW showing footpaths, bridleways and cycle routes within wider site context

3.6 Environment

3.6.1 Agriculture & soils

The land within the boundary of the Site is covered entirely by soils in the Wickham 1 Association. As described by the Soil Survey of England and Wales, this the Wickham 1 Association, which is confined to Kent, Surrey and Sussex, is the most extensive in the Low Weald where intermittent thin drift rests on Atherfield and Weald Clays. The main soils in the Wickham 1 Association are grey coloured with prominent ochreous mottles in the subsoil. The topsoil is fine silty or fine loamy over clayey subsoil, i.e. typical stagnogleys. They are wet for long periods over the winter (Wetness Class IV) where undrained. Where the outfall/gradient of the land allows, under-drainage can help lower the Wetness Class to III. The Association includes some clayey Denchworth and Dale soils, i.e., pelo-stagnogleys, on moderate slopes, often associated with thin bands of limestone. The Association also includes some Oxpasture soils, which are similar to Wickham but less mottled, i.e., stagnogleyic argillic brown earths.

Provisional Agricultural Land Classification indicates a likelihood of the following land types:

- **Grade 3:** (not differentiated between Subgrades 3a or 3b):
 - Subgrade 3a – good quality agricultural land with moderate limitations that affect the choice of crop, timing and type of cultivation/harvesting or level of yield. This land can produce moderate to high yields of a narrow range of crops or moderate yields of a wide range of crops; and
 - Subgrade 3b – moderate quality agricultural land with strong limitations that affect the choice of crop, timing and type of cultivation/harvesting or level of yield. This land produces moderate yields of a narrow range of crops, low yields of a wide range of crops and high yields of grass.
- **Grade 4:** poor quality agricultural land with severe limitations which significantly restrict the range and level of yield of crops.

A Ministry of Agriculture, Fisheries and Food (MAFF) Post-1988 ALC survey has determined that there is approximately 90 hectares (ha) of agricultural land within the boundary of the Site which is Subgrade 3b; this is outside of the NPPF (2021) definition of best and most versatile (BMV) land. MAFF has not determined any BMV agricultural land at the Site.

Areas not covered by the MAFF Post-1988 ALC survey include a golf course in the south-west, i.e., approximately 48ha. This is classified as ‘non-agricultural’ in ALC terms. There are smaller areas of agricultural land in the west of the Proposed Development, i.e., approximately 12 ha, which are not covered by the MAFF Post 1988 ALC survey, but as they have the same climate and consist of the same soils as the remainder of the Site, i.e., Wickham 1 Association, it is reasonable to assume the quality of the agricultural land will be similar, i.e., Subgrade 3b. The remainder of the land within the boundary of the Proposed Development is classified as ‘non-agricultural’, i.e., buildings, roads, woodland, and water bodies/courses.

Agricultural land within the Site is currently farmed by an agricultural tenant on a Farm Business Tenancy (FBT) which is due to expire in September 2023. The agricultural land is used for producing combinable crops, which is assessed as being a farm type in which there is a degree of flexibility in the normal course of operations.

Some of the agricultural land at the Site has historically been entered in a 5-year Countryside Stewardship Scheme (Mid Tier) by the on-Site farm tenant. It is predicted the agreement will have ended prior to the agricultural land being required for the Proposed Development.

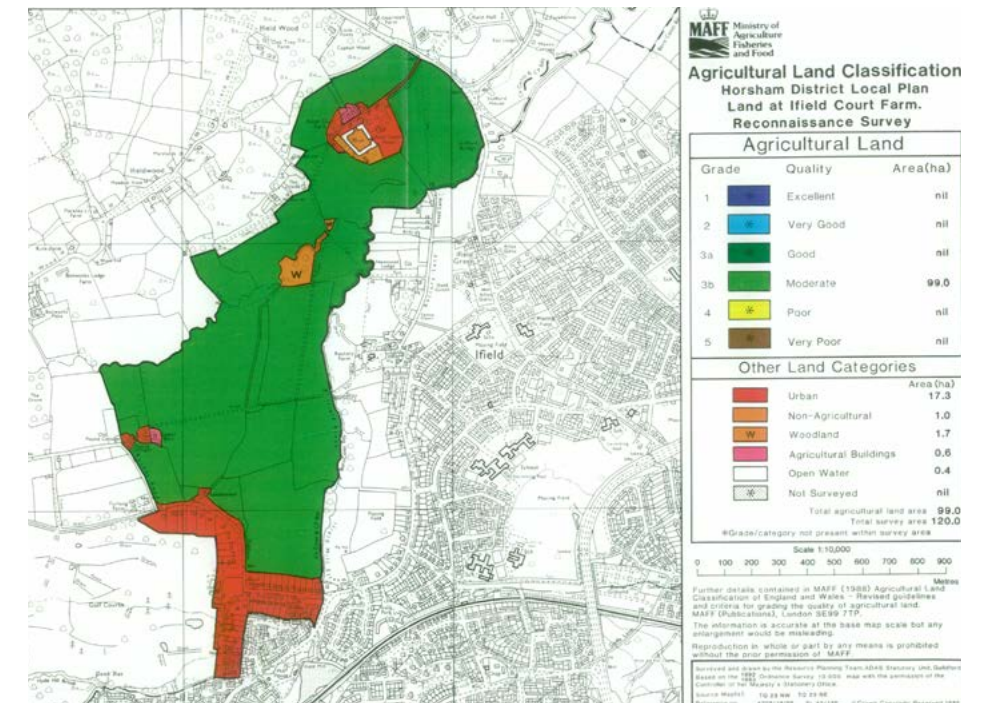


FIGURE 72 Agricultural land classification (based on 1983 - 1992 Ordnance Survey)

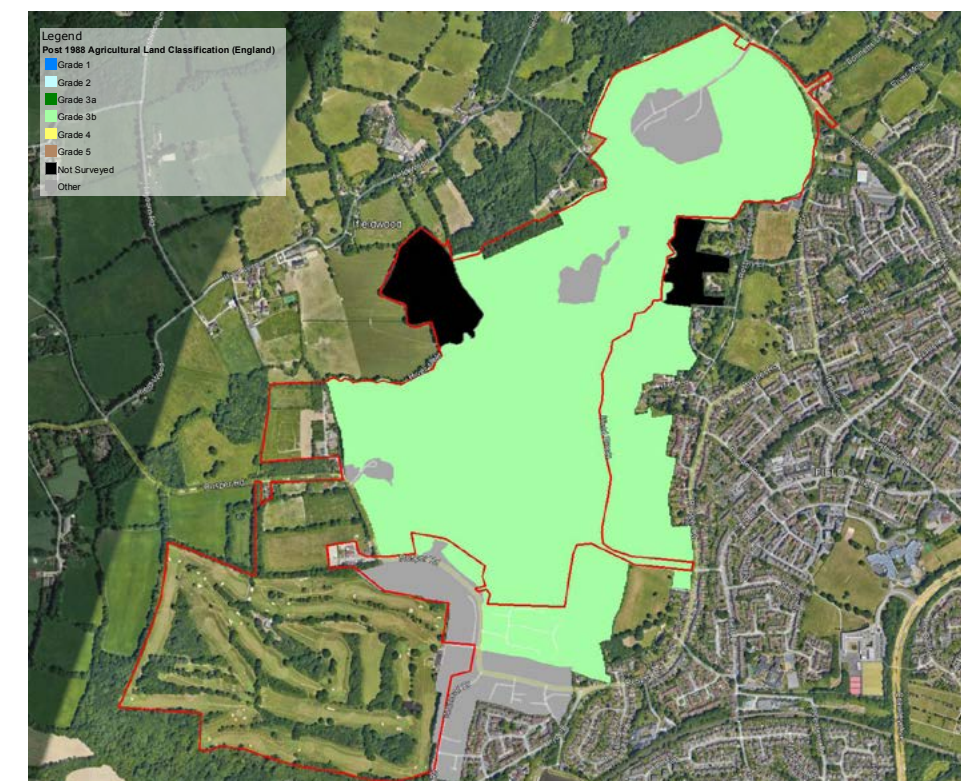


FIGURE 73 Post 1988 agricultural land classification (from MAGIC)

3.6.2 Air quality

Both Horsham District Council (HDC) and Crawley Borough Council (CBC) undertake air quality monitoring and this data has been used to inform the baseline. This Site itself is located in an area of good air quality as it is located to the north-west of the existing residential area of Crawley. Areas of poor air quality that may be affected by traffic are defined by the presence of Air Quality Management Areas, the closest of which are shown in Figure 82, along with the location of local air quality monitoring locations (Figure 81).

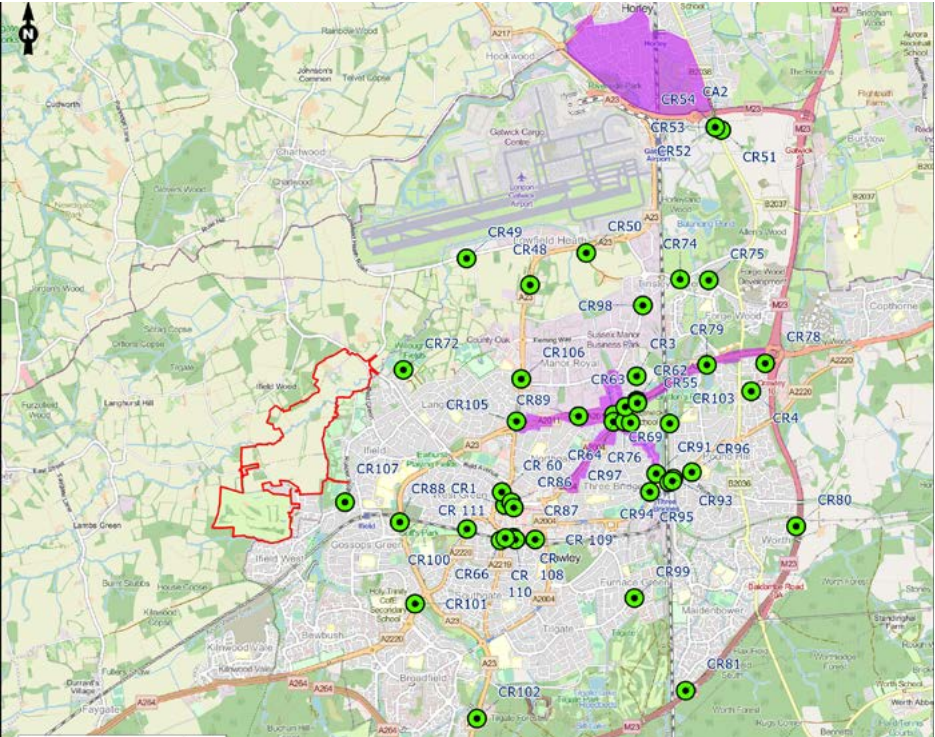


FIGURE 74 Air quality monitoring sites and air quality management areas

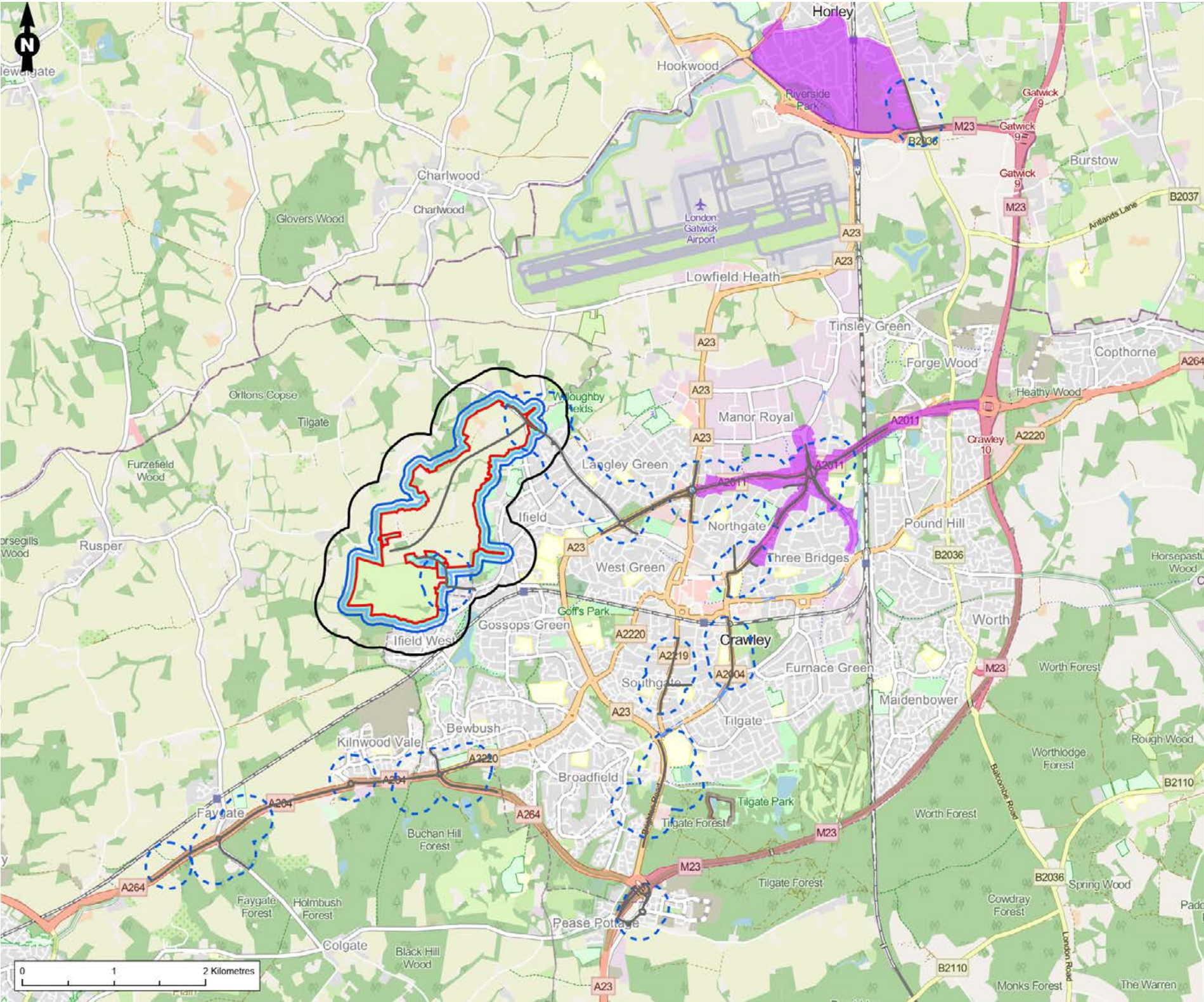
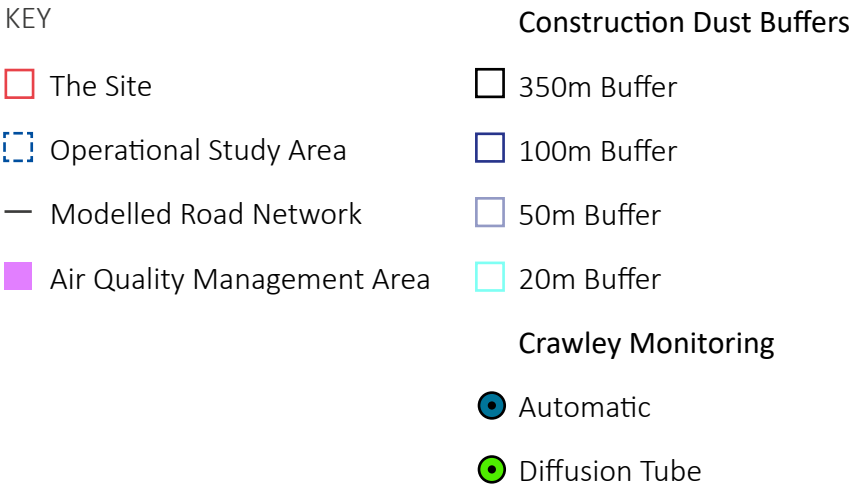


FIGURE 75 Air quality study and constraints

3.7 Ecology

3.7.1 Surrounding Statutory and Non-Statutory Sites

A review of all statutory designated sites up to 2 km from the Site, including Special Areas of Conservation (SAC), Special Protection Areas (SPA), National Nature Reserves (NNR), Site of Special Scientific Interest (SSSI) and Local Nature Reserves (LNR) has been undertaken. Through undertaking this review there are three statutory designated sites within 2 km of the Site:

- Buchan Hill Ponds SSSI located approximately 2 km from the Site;
- House Copse SSSI located approximately 0.8 km from the Site;
- Willoughby Fields LNR located approximately 0.6 km from the Site.

In addition, a review of non-statutory designated sites including Sites of Importance for Nature Conservation (SINCs) and Local Wildlife Sites (LWS) located up to 2 km from the Site has been undertaken.

Through undertaking this review there are 10 non-statutory designated sites within 2 km of the Site, including Ifield Brook Wood and Meadows (LWS), Ewhurst Wood (LWS), Ifield Pond and surroundings (LWS), Woldhurstlea Wood (LWS), Willoughby Fields (LWS), Hyde Hill (LWS), Wood near Lower Prestwood Farm (LWS), Orltons Copse (LWS), Kilnwood Copse (LWS), and Buchan Country Park (LWS).

Part of the woodland within the Ifield Brook and Meadows (LWS) is identified as Ancient Woodland on the MAGIC website. The section identified lies between the Ifield Brook and the Ifield Mill Stream, with a younger section of woodland to the west of the Ifield Brook.

3.7.3 Site Habitats

The Site is characterised by a combination of agricultural land, woodlands, and Ifield Golf Course. In the northern and central areas, the landscape is dominated by arable and grazed pasture fields, with pockets of woodland and scrub scattered throughout. The southern portion is occupied by Ifield Golf Course.

The Site exhibits a diverse range of habitats, including grassland, arable land, woodland, scrub, hedgerows, tree lines, individual trees, ditches (including land drains), and ponds. These habitats support a variety of plant and animal species, contributing to the ecological richness of the area.

The River Mole runs from west to east through the northern half of the Site, providing a freshwater habitat and enhancing the Site’s ecological value. Along the eastern boundary, Ifield Brook flows from south to north, creating a natural boundary between the site and the adjacent Ifield Meadows LWS. This watercourse plays a crucial role in the hydrological dynamics of the area and supports riparian habitat.

3.7.2 Site Species

Species (Invertebrates):

- A desk study found 292 records of invertebrates within 2 km of the Site, including 61 species. Notable species include the brown hairstreak butterfly, small heath, white admiral, dingy skipper, brilliant emerald dragonfly, dusky thorn moth, cypress carpet moth, and long-horned bee.
- The Site’s habitats, such as grassland, scrub, woodland, and wetland, support rare and nationally scarce invertebrate species.
- A total of 719 invertebrate species were recorded during surveys in 2018 and 2019, with 34 of them having conservation status in the UK.
- Wetland habitats and slow-flowing water bodies provide suitable conditions for aquatic invertebrates, including the brilliant emerald dragonfly.
- Brown hairstreak butterflies were recorded at multiple locations within the Site.
- Woodland / scrub edges and grassland habitats are particularly important for invertebrates.
- The Site is considered important at the regional level for invertebrates.

Amphibians (Great Crested Newt):

- Records indicate the presence of common frog, common toad, great crested newt, palmate newt, and smooth newt.
- Four ponds were confirmed to be used by great crested newts, supporting breeding and non-breeding populations.

- The Site’s population of great crested newts is considered small to medium in size.

Reptiles:

- The desk study identified 60 records of reptiles within 2 km of the Site, including adders, grass snakes, and slow worms.
- All three common reptile species are in general decline nationally.
- The Site’s reptile population is assessed as “Good” in some areas and “Low” in others.
- The adjacent, off-Site Ifield Brook Wood and Meadows have an “Exceptional” population of slow worms.
- The Golf Course meets the definition of a ‘Key Reptile. No adders were recorded on the Site during any of the surveys, though desk study records were identified and it can be assumed that they are in the wider area in small numbers, and may make occasional use of the Site.

Birds:

- The desk study found 365 records of birds within 2 km of the Site, including 43 species.
- Seventeen species are listed under NERC Section 41 and seven under the WCA Schedule 1 Part 1.
- Notable species include bullfinch, corn bunting, cuckoo, hawfinch, house sparrow, nightjar, skylark, and wood warbler.

Barn Owl:

- Barn owls have been recorded within 1.3 km north of the Site.
- One Potential Breeding Site was identified, however, there was no current or recent evidence of breeding within it. Whilst barn owls do use three existing buildings on Site for roosting and foraging, they were not found to be breeding within any surveyed buildings
- The Site is considered of site-level importance for barn owls.

Bats:

- A total of 621 bat records were found within 5 km of the Site.
- Building and tree surveys identified roosts and roosting potential for common pipistrelle, soprano pipistrelle, and brown long-eared bats.

- The site shows “medium to high” bat activity levels.
- Recent surveys confirmed that bat activity throughout the Site continued to comprise predominantly common pipistrelles, with fewer brown long-eared bats, myotis sp., noctules (*Nyctalus noctula*) and soprano pipistrelles recorded. Very occasional Nathusius’ pipistrelle (*Pipistrellus nathusii*), serotine (*Eptesicus serotinus*), grey long-eared bat (*Plecotus austriacus*) and Leisler’s bat (*Nyctalus leisleri*) were also recorded during these surveys.

Dormice:

- A single record of hazel dormouse was found approximately 1.8 km south of the Site.
- No hazel dormice were found on the Site during the 2022 surveys.
- A potential hazel dormouse nest was discovered along a woodland boundary within the arable fields, but it does not confirm the presence of dormice in that area.
- Suitable habitat for dormice exists in the wider landscape to the north and west of the Site, and it is likely that the north-western boundary of the Site marks the edge of a small number of individual territories.
- Connectivity along hedgerows in the north-west of the Site provides foraging habitat for potential dormouse individuals.

Badgers:

- The 2018-2019 surveys recorded a total of 14 sett locations, with three of them beyond the Site boundary.
- On-Site setts include one main sett, one annex sett, one unclassified sett, and eight outlier setts (four of which are considered disused).
- The 2022 surveys confirmed the presence and unchanged status of the eleven badger setts within the Site boundary.
- Suitable foraging habitat for badgers on the Site includes grassland, hedgerow edges, woodland, and arable land.
- Badgers on the Site are considered of Site-level importance, as they are protected under the Protection of Badgers Act 1992 but are not of conservation concern.

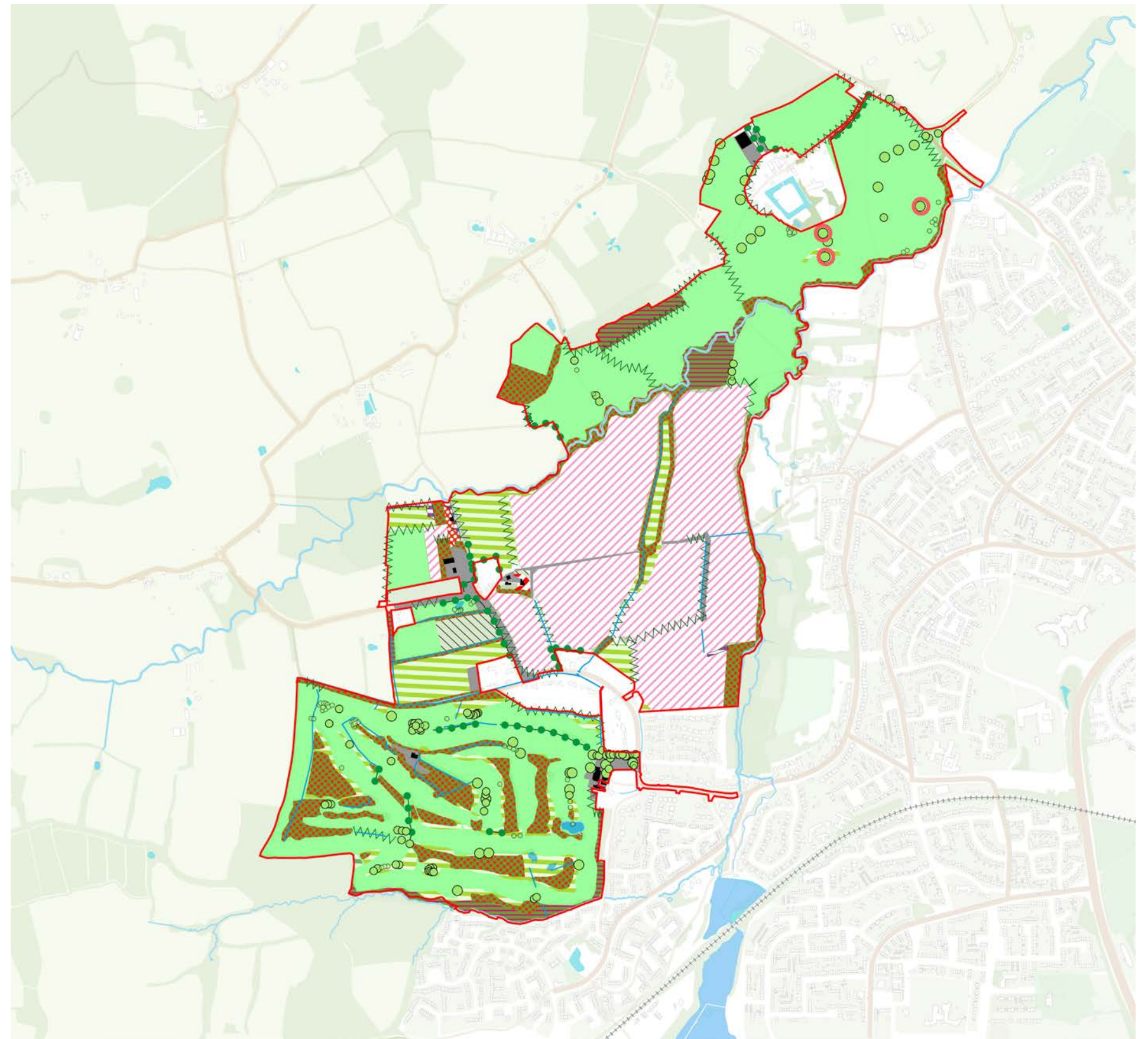


FIGURE 76 Ecological constraints within West of Ifield (SA101)

3.8 Flooding

3.7.4 Surface Water Features

The River Mole is located within the Site and immediately adjacent to the western boundary of the Site. The river is not tidal at this location. The Ifield Brook runs immediately adjacent to the eastern boundary of the Site.

The Site is located in three separate basins: Ifield Brook basin to the east, Badhorns Brook (downstream River Mole) basin to the west, and River Mole basin to the north / north-east.

The Ifield Brook is a heavily modified waterbody with a catchment which extends to cover approximately 15.02 km² in area. In this waterbody, the Ifield Brook is classified as being of Moderate overall water quality (comprising Moderate Ecological Potential and Failing Chemical Status).

The Badhorns Brook is not designated as an artificial or heavily modified waterbody. The catchment area is approximately 12.39 km² in area. The brook is classified as being of Poor overall water quality (comprising Poor Ecological Potential and Failing Chemical Status).

The River Mole is a heavily modified waterbody with a catchment area of approximately 29.58 km². It is classified as being of Moderate overall water quality (comprising Moderate Ecological Potential and Failing Chemical Status).

All three basins come under the classification of ‘fail’ in terms of the chemical status. The reasons for achieving a ‘fail’ chemical status are listed as a combination of physical modification, point source sewage or contamination releases and diffuse pollution from contaminated waterbed sediments and the urbanisation of the catchment.

3.7.5 Fluvial Flood Risk

With regards to fluvial flooding, the majority of the Site is within a fluvial Flood Zone 1 (comprising areas with an annual probability of flooding less than 0.1% (1 in 1,000). Areas of Flood Zone 2 (annual probability of flooding between 1% and 0.1%) and Flood Zone 3 (annual probability of flooding greater than 1%) are also present associated with both the River Mole and Ifield Brook and the Hyde Hill Brook. Only a limited section at the downstream (northern) limit of the Rusper Road Drain was shown to have a fluvial flood risk.

The residential, employment and school elements of the Proposed Development, as well as the locations of allotments and sports pitches, are proposed to be located on land, shown in the 2025 updated EA Flood Map for Planning, to be outside of the extent of fluvial (river) flooding during a future climate change adjusted 1 in 1,000 annual probability event, even in the absence of any catchment scale flood defence; i.e. within a fluvial Flood Zone 1. This means that the probability of fluvial (river) flooding to these parts of the Site should be considered to be low.

The Crawley Western Link is proposed to cross over Flood Zones 2 and 3 via a bridge. Embankments would be built that are located within Flood Zones 2 and 3 to raise the road out of the floodplain. Whilst there is land adjacent to the Rusper Road Drainage shown in the EA’s latest flood map update to be within Flood Zone 2 or 3, this is shown in EA data to have been derived from a direct rainfall method and, as such, has been assessed as a pluvial or surface water flood risk source rather than fluvial.

3.7.6 Surface Water Flood Risk

The Site is shown to have areas of High, Medium and Low surface water (pluvial) flood risk affecting the western and eastern areas of the site. In particular the pluvial flood depths are shown to follow the River Mole in the west of the Site the Ifield Brook in the east of the Site and the Rusper Road Drain. Pluvial flood depths are more widespread where the confluence between the River Mole and Ifield Brook is located.

Environment Agency (EA) Mapping of the Site suggests that it is located on a potential surface water conveyance route. The EA Flood Map for Surface Water is based on the best information held by the EA with regard to ground elevations and drainage. However, the modelling is completed at a national scale and the EA has stated that there are a number of assumptions in the model used to produce this mapping. Therefore, whilst the EA mapping indicates where there could be heightened surface water flood risks in some areas, this does not take account of specific surface water drainage measures which are likely to be present, nor does it represent the post-development situation due to proposed changes to the Site’s topography and the proposed surface water drainage network.

3.7.7 Groundwater

The Site is indicated to be within an area shown to be at low risk of experiencing any groundwater emergence events.

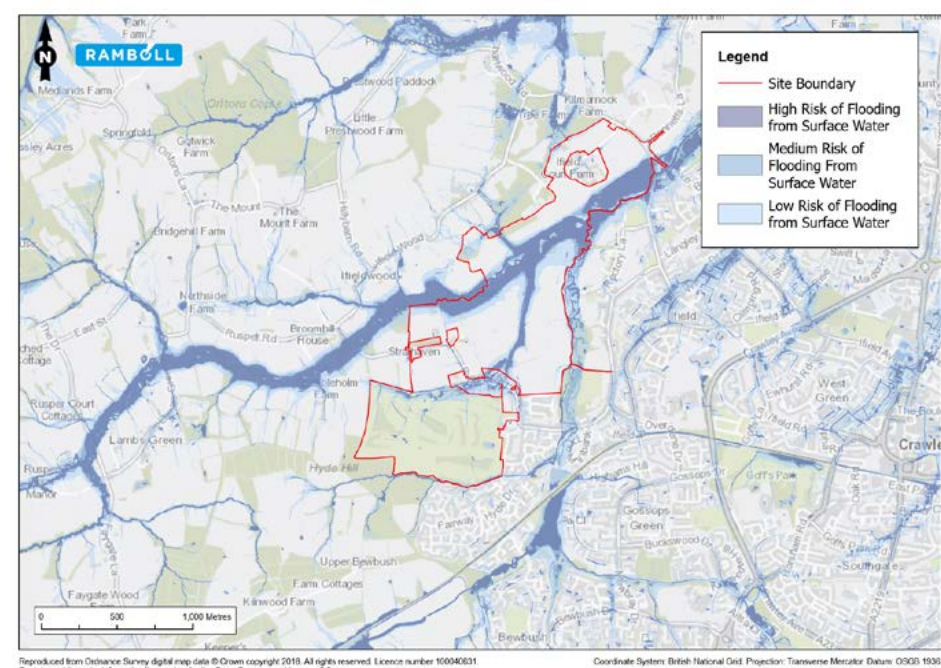


FIGURE 77 Surface Water Flood Risk

- KEY**
- Hybrid Application Area
 - Rivers, drains and ponds
 - Flood Zone 3
 - Flood Zone 2

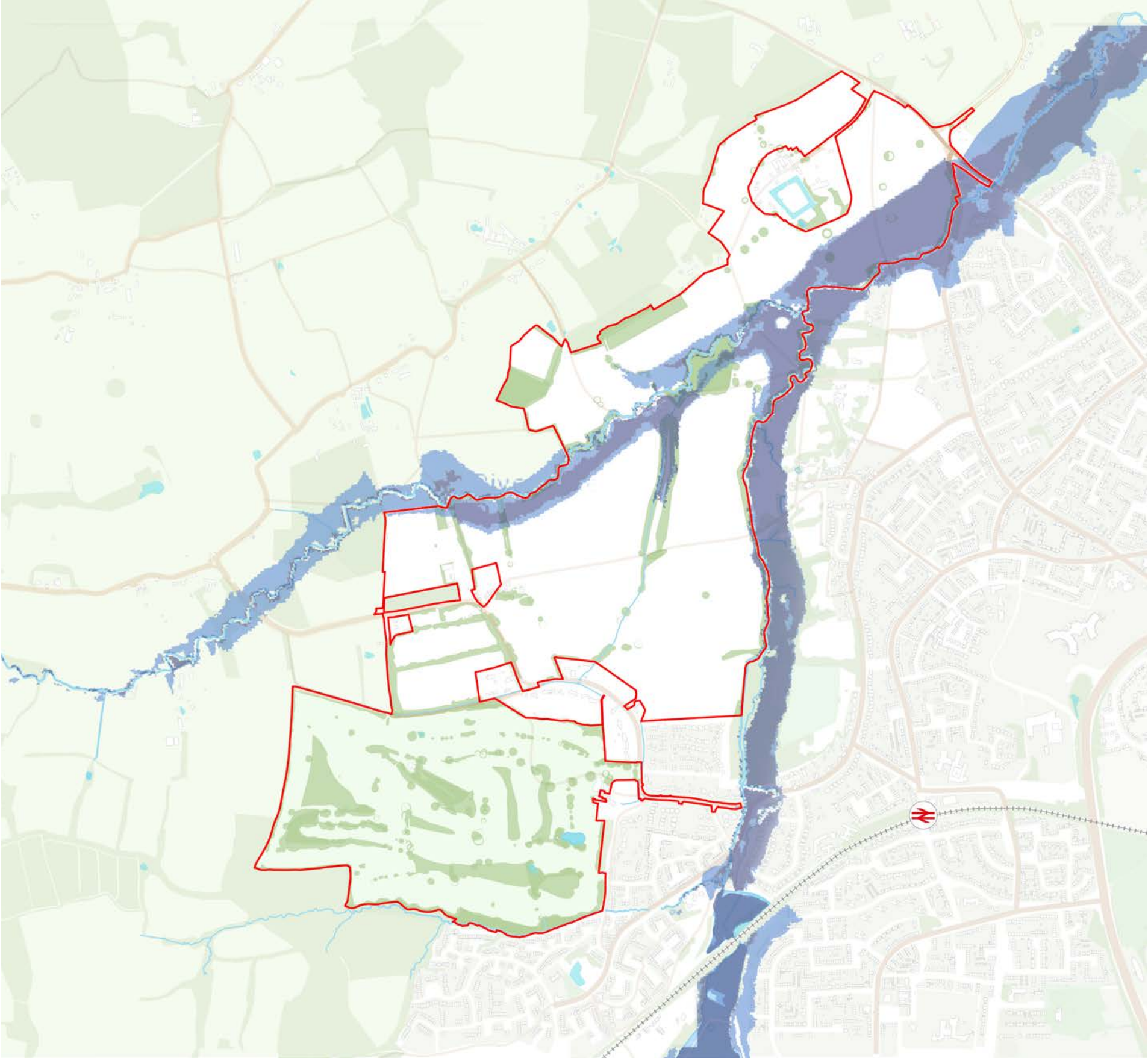


FIGURE 78 Fluvial Flood Risk (EA Flood Map for Planning: Corrected for Fluvial Flood Zones Only)

3.9 Heritage

3.9.1 Designated Heritage Assets

Scheduled Monuments

Within a 1 km radius of the Site, there are two scheduled monuments. The first one is the Medieval Moated site at Ifield Court, which is located in a parcel of land surrounded by the Site, although it is not within the redline boundary. The second scheduled monument is the Moated Site at Ewhurst, situated approximately 1 km east of the Site.

Listed buildings

There are 35 designated listed buildings within 1 km of the Site. The Site does not comprise any designated listed buildings, with the following 30 listed buildings located within 500 m of the site boundary:

- Old Pound Cottage, Grade II
- Bonwycke Place, Grade II
- Garden gate, overthrow and side railings to the west of Stumbleholme Farmhouse, Grade II
- Barn to north of Stumbleholme Farmhouse, Grade II
- Granary to west of Stumbleholme Farmhouse, Grade II
- Cattle shed to south-west of Stumbleholme Farmhouse, Grade II
- Stumbleholme Farmhouse, Grade II
- Ifield Mill House, Grade II
- Ifield Water Mill, Grade II
- Brook Cottage, Grade II
- Turks Croft, Grade II
- St Margaret’s Cottage, Grade II
- The Vicarage, Grade II
- Church Cottage, Grade II
- Harrow Cottage, Old Plough Cottage and Plough Cottage Plough Inn, Grade II
- Table tomb to George and Mary Hutchinson in Parish Churchyard, Grade II
- Parish Church of St Margaret, Grade I
- The Old Rectory, Grade II
- Newstead Lodge, Grade II

- The Tweed, Grade II
- Michaelmas Cottage, Grade II
- Mounting block in forecourt of Friends Meeting House, Grade II
- Meeting House Cottage, Grade I*
- Ifield Quaker Meeting House, Grade I
- Old Inn Cottage, Grade II
- Apple Tree Farm, Grade II
- Finches Cottage, Grade II
- Langley Grange, Grade II
- Pockneys Farmhouse, Grade II
- Oak Lodge, Grade II

In addition to the above, 10 locally listed buildings are located within 2 km of the Site under Crawley Borough Local Plan 2015–2030 (adopted 2015).

Conservations Areas

There are two Conservation Areas within 1 km of the Site. The closest is the Ifield Village Conservation Area, which adjoins the Site’s eastern boundary. It holds significance due to its archaeological potential, historical interest, and architectural qualities. The second conservation area is the Gossops Green Neighbourhood Centre, notable for being the last neighbourhood centre developed by the Crawley Development Corporation as part of the original Crawley New Town masterplan. The area reflects the post-war architecture, pedestrian-friendly design, and the incorporation of classical

3.9.2 Archaeological Character

Within the Site and its 500m study area, there is no confirmed evidence of Palaeolithic or Mesolithic activity. However, various archaeological investigations have revealed archaeological remains, including:

- A Late Bronze Age Roundhouse, together with associated undated pits, post-holes and field boundaries.
- A circular mound and surrounding ditch are located within the northern area of the Site. A slightly curving ditch on the north-western side of the feature apparently connects it to the River Mole. Speculative interpretations for the mound, including a prehistoric tumulus, a settlement site or a medieval motte, but other origins such as an extraction spoil heap or a windmill mound are also valid.
- A small pit which contained a concentration of waste pottery sherds from at least 10 different vessels, predominantly of Iron Age date but also of Romano-British origin.
- Identified a potential enclosure in the southern part of the Proposed Development. Subsequent trial trenching later confirmed this to be a large rectangular Romano-British enclosure measuring approximately 30m by 40m in extent. Elsewhere within the Site, the trial trenching uncovered evidence for pits, ditches and postholes, again probably of Romano-British date, and two cremations and a possible roundhouse drip gully, also of probable Romano-British origin.
- In addition to the evidence for prehistoric and Romano-British settlement within the Proposed Development, there is also evidence (in the form of geophysical anomalies) for ironworking activity, particularly close to the site’s various watercourses.

KEY

- Hybrid Application Area
- Study Area 500m
- Study Area 1km
- Scheduled Monument
- Conservation Area
- Listed Building
- Locally Listed Building
- Non-designated Heritage Asset

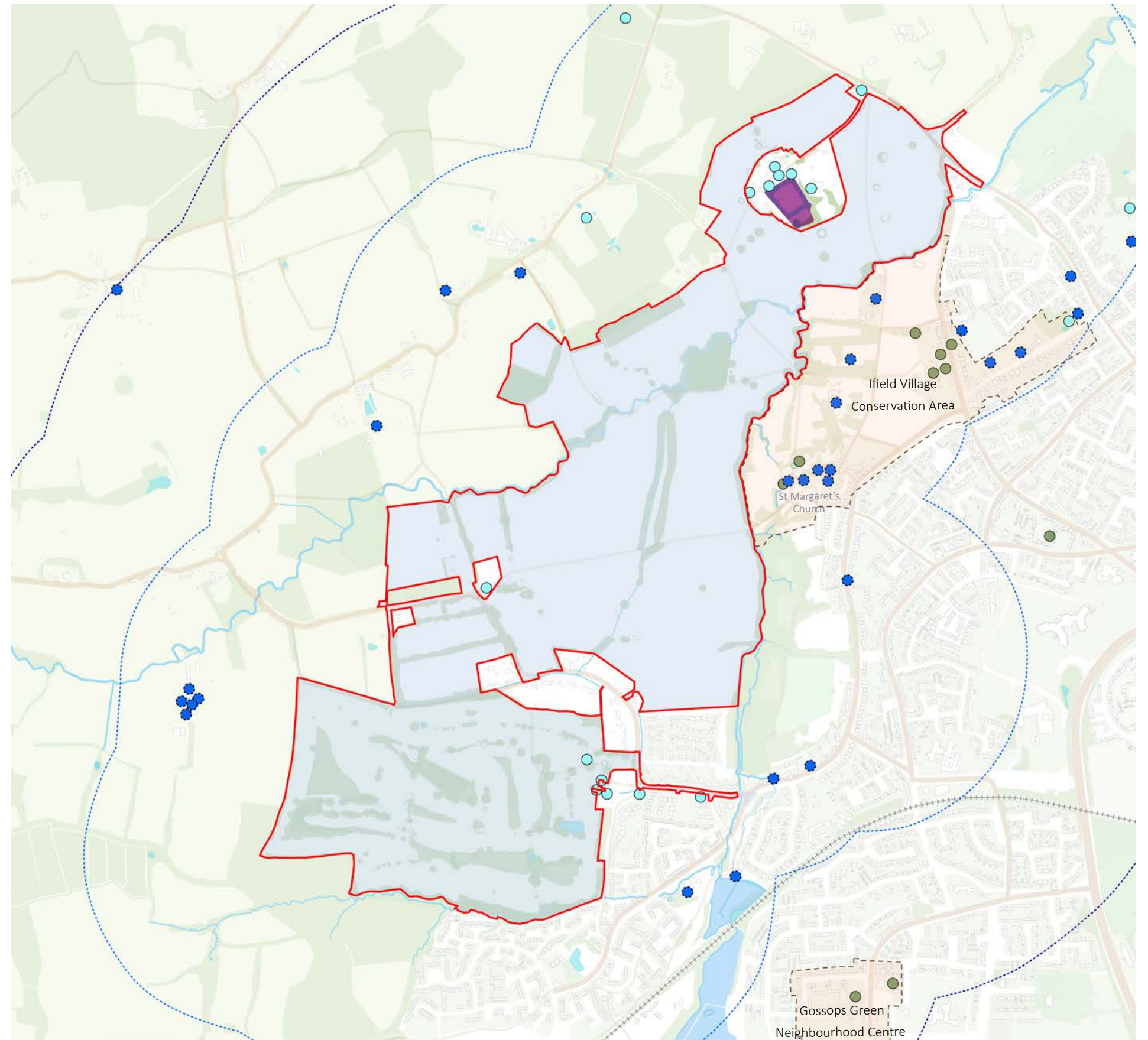


FIGURE 79 Heritage assessment

3.10 Infrastructure

3.10.1 Foul Water Management

Thames Water’s existing foul network conveys flows to the Crawley Sewage Treatment Works (CSTW) located to the north-east of the Site. The CSTW is understood to have limited spare capacity at present, although Thames Water have been undertaking further remodelling work to assess available capacity for the West of Ifield development, including within the CSTW. This modelling is understood to be complete and capacity within the existing network is due to be confirmed with Thames Water.

Preliminary discussions with Thames Water have indicated that the planned upgrades will consider the capacity requirements of the proposed development, however, this remains subject to the final design. It was noted that as part of the proposed upgrades for the CSTW, a relief sewer is intended to be constructed along the eastern boundary of the site. This was a concept design as part of the overall upgrade works, final confirmation of the design by Thames Water is yet to be confirmed.

3.10.2 Water supply

There is little to no existing water supply infrastructure on the Site due to its greenfield nature. Existing properties in Ifield are supplied with potable water from the mains supply provided by Southern Water which in the context of the Site runs within Rusper Road.

A capacity check application for West of Ifield was made to Southern Water, the results of which state that there is enough capacity in the existing network to supply West of Ifield with clean water via a connection to the existing cast iron water main within Rusper Road at the location of Ifield Golf Course, pending network reinforcements being undertaken. To provide the required capacity, the diameter of the existing mains within Rusper Road and Whitehall Drive would need to be increased to 280mm.

3.10.3 Energy

The existing Site, being primarily greenfield, has little or no energy infrastructure and as such presents the opportunity to develop a low carbon strategy to meet the developments needs and targets.

Capacity enquiries for the Site were submitted and costs for a new sub-station have been provided by UKPN.

The UK government declared a climate emergency in May 2019 and in June set a new legally binding target to bring all greenhouse gas emissions to Net Zero by 2050. Horsham District Council declared a climate emergency in June 2019, followed by Crawley Borough Council in July 2019.

3.10.4 Telecoms

The existing telecoms networks within the project areas are limited and run within current road corridors and serve existing properties. C2 applications were submitted for West of Ifield (SA1010) by Arcadis. Both BT Openreach and Virgin media have apparatus in the adjacent areas and it is proposed that these are be extended and reinforced to provide telecoms infrastructure to the development. BT Openreach are also required to have an open access network for other providers therefore allowing the future property owners a “legacy of choice” with regards their telecoms supplier.

KEY

- Hybrid Application Area
- UKPN HV Cable or Line
- SGN Gas Main
- Foul Drainage
- Surface Water Drainage
- Potable Water
- Telecoms

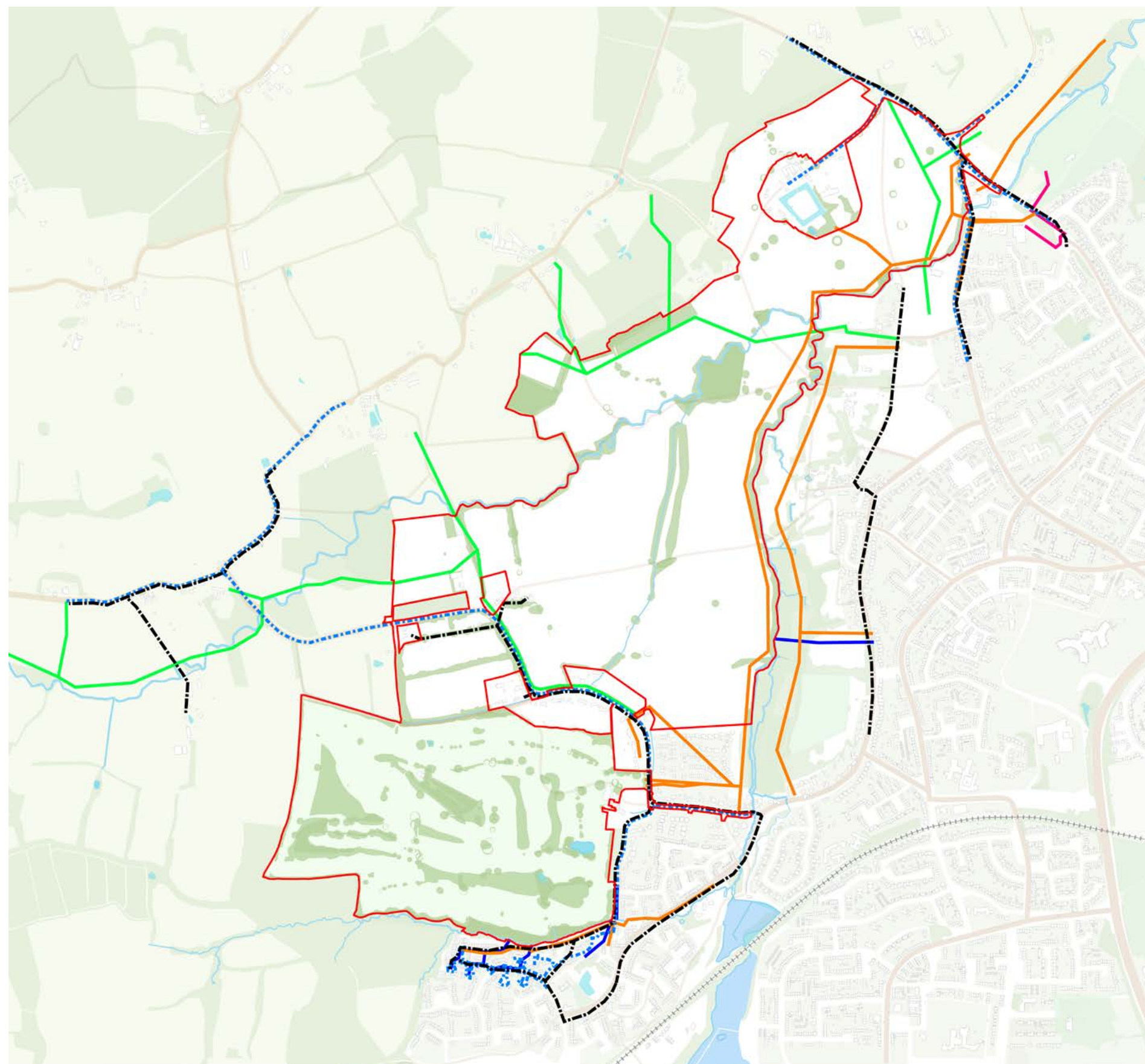


FIGURE 80 Existing Utilities

3.11 Noise and Gatwick Airport

3.11.1 Noise and vibration

Noise surveys were completed between Tuesday 28 June and Thursday 7 July 2022. The survey comprised 4 unattended noise loggers measuring continuously throughout the survey period and a series of short-term attended measurements across the Site.

The noise climate during daytime and night-time periods mostly comprised:

- Aircraft noise;
- Road traffic noise; and
- Birdsong.

3.11.2 Gatwick Airport

Residential development has been placed outside of the 60 dBA Leq contour, as per consultations with the Local Authorities. In addition, the future design of the residential parcels will account for the relevant contours at the time of bringing these parcels forward, so that residential dwellings are not placed in the 60 dB Leq contour.

3.11.3 Gatwick Airport 60dB noise contour

Two 60dB noise contours are shown. One is taken from the Reg 19 Local Plan for a 2040 forecast and the other has been provided by GAL for a 2050 forecast. The following drawings are overlay onto the Site A plan for reference:

95mppa_Option3_2050_NoEATs_Leq

CAD contour received from Gatwick Airport on 9 Dec 2019. Note that file name indicates this is a 2050 forecast.

Crawley 2035 Reg 19 Local Plan Noise Contours

Extracted from Crawley 2035 Reg 19 Local Plan. Note that file name indicates this is a 2040 forecast.

high_res_noise_contour_option3_95mppa_july14

Information from Arcadis handover, note file name potentially indicate the information is from 2014, so potentially superseded. Included for completeness.

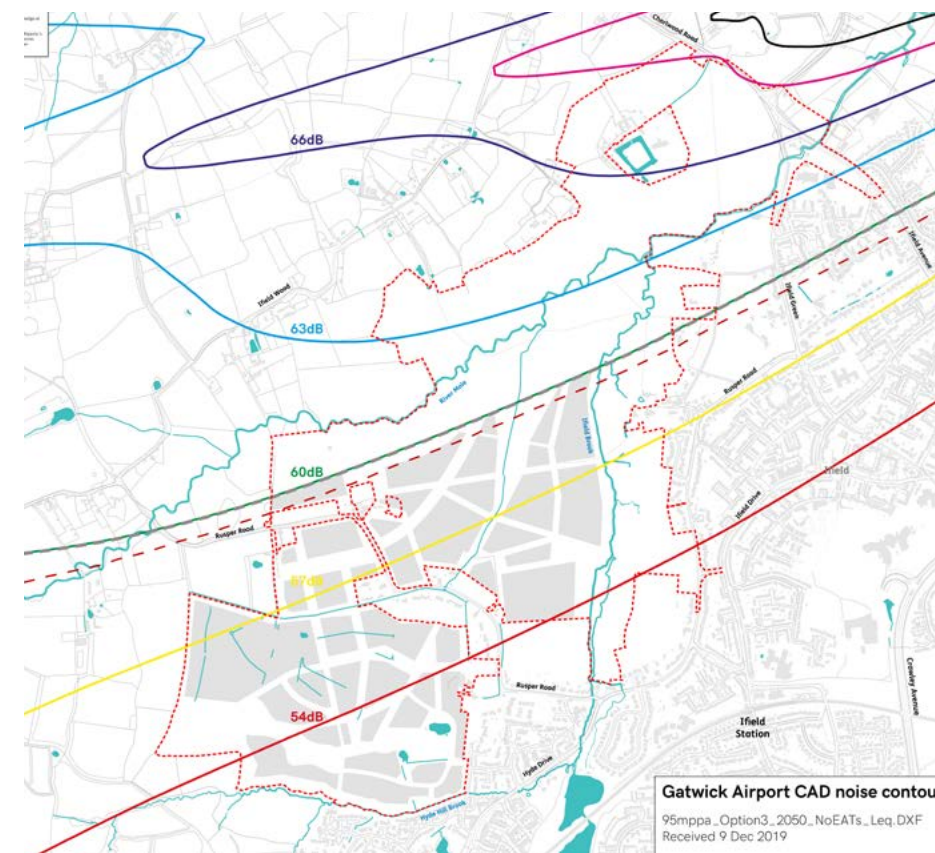


FIGURE 81 R2 Option 3 (Wide Spaced Mixed Mode) No EATs 2050 Leq 54-72 dB(A) Contours

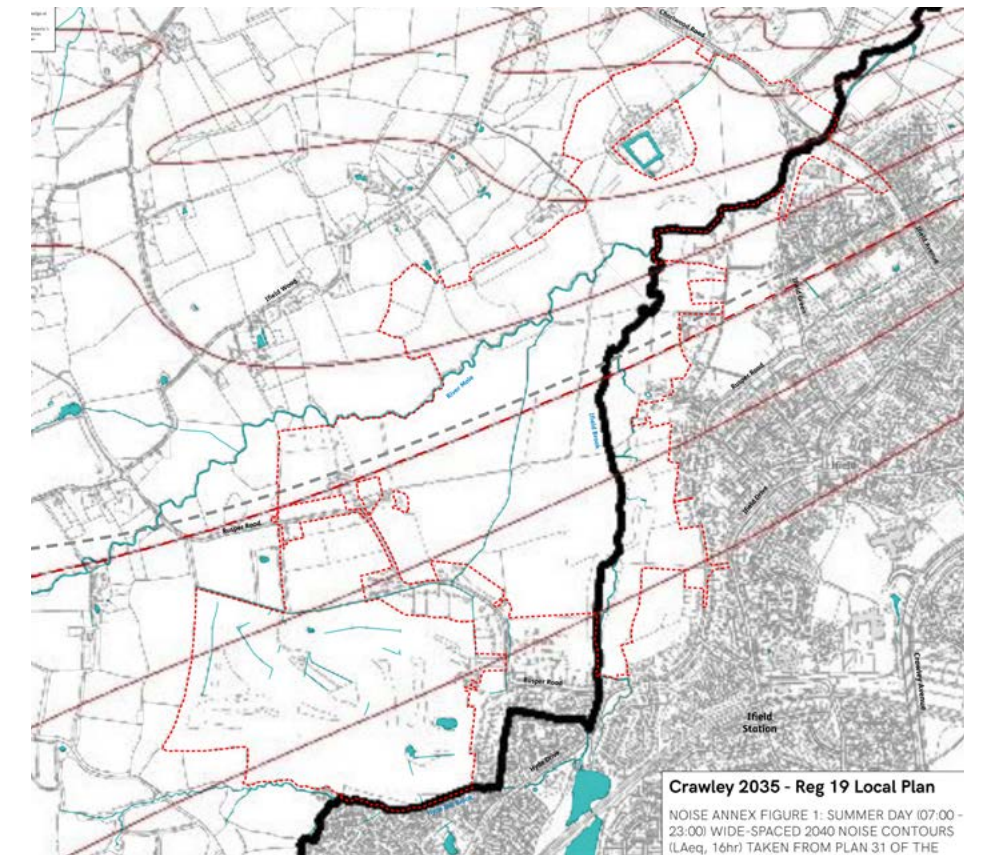


FIGURE 82 Crawley 2035 Reg 19 Local Plan Noise Contours

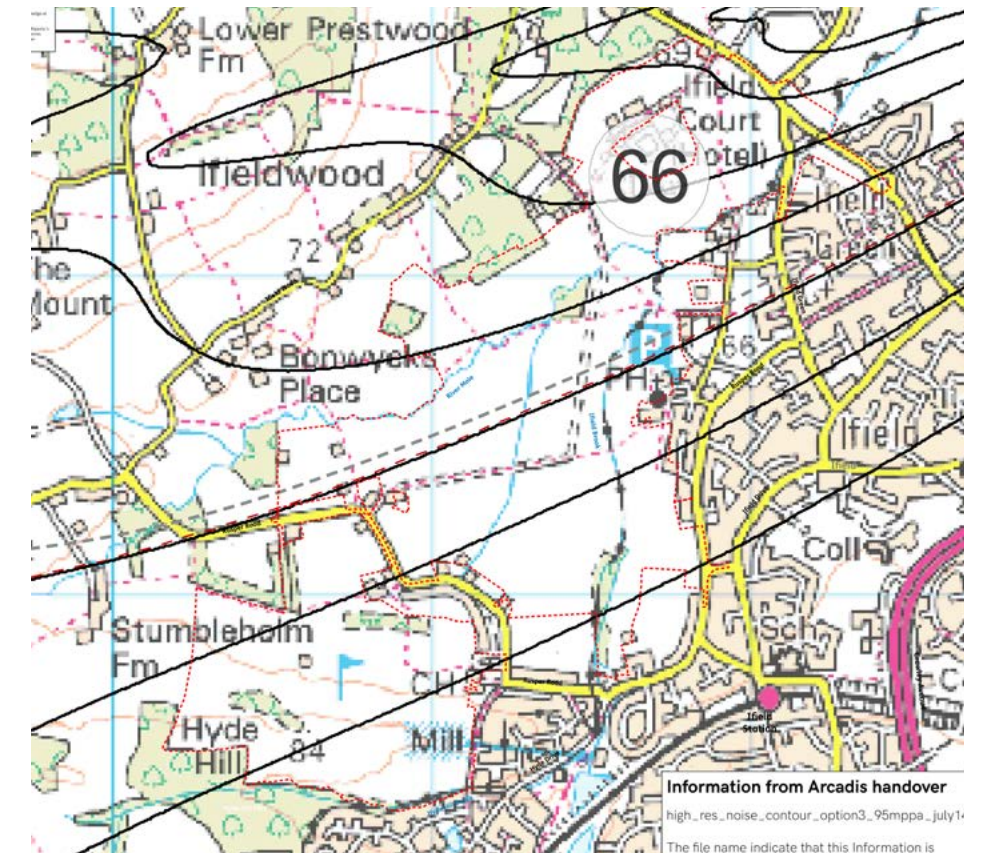


FIGURE 83 95mppa R2 Option 3 (Wide Spaced Mixed Mode) No EATs 2040 Leq 54-72 dB(A) Contours

KEY

- Hybrid Application Area
- Gatwick 2050 60dB Contour
- Gatwick 2035 60dB Contour
- Area Unsuitable for Residential Development

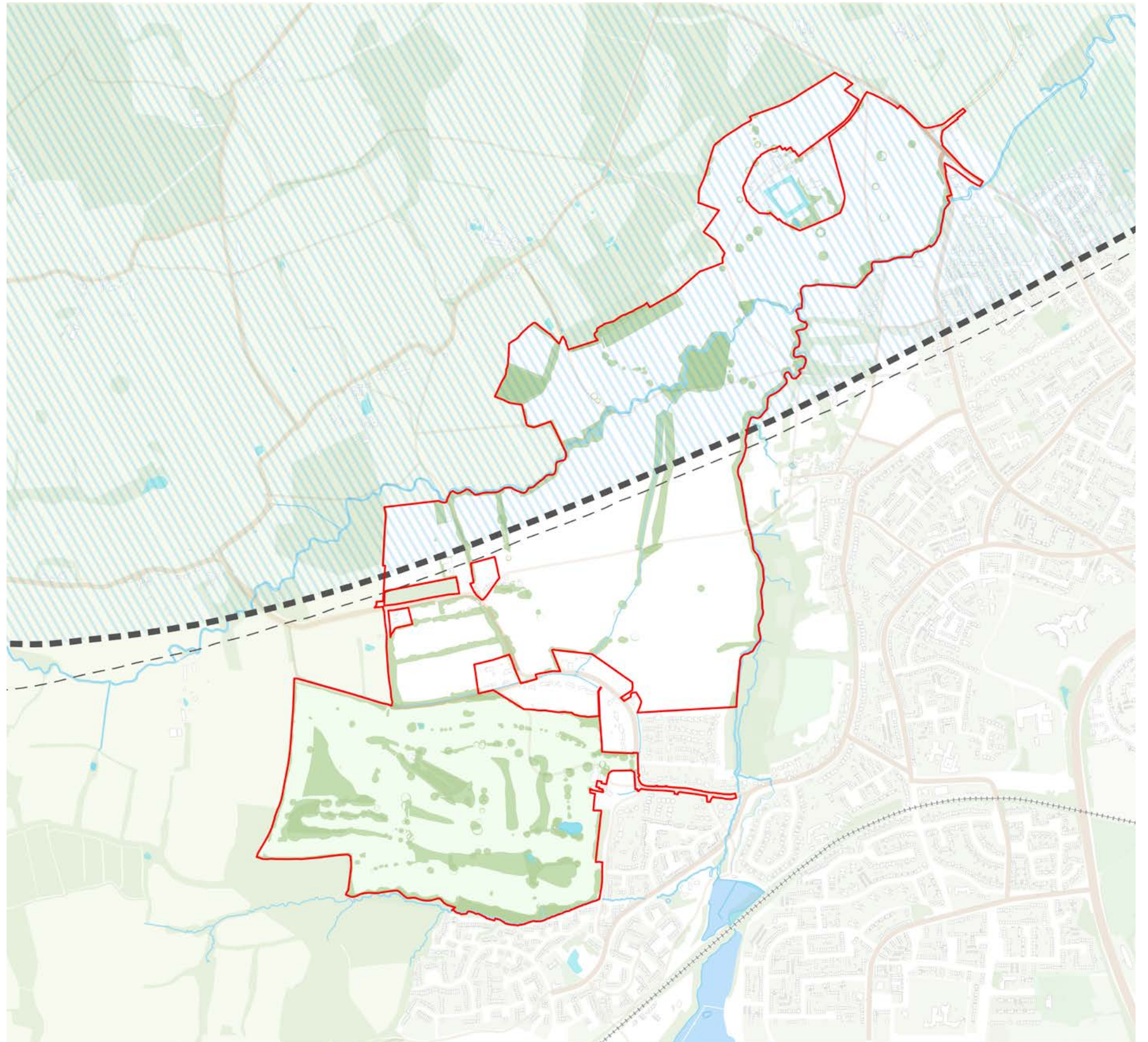


FIGURE 84 Gatwick Airport 60dB Noise Contour

3.12 Summary of Site Characteristics/Constraints

The key constraints illustrated opposite relate to the physical constraints and designated landscape and built areas, some of which have statutory protection. It is considered that these impact the area of the site which is suitable for development. These are shown in Figure 966 and include:

- **Topography** – In the area located south of Rusper Road, there exists a significant 10m variation in land elevation within the golf club land. This variation will impact the form of the development but is not steep enough on this site to preclude development.
- **Woodlands and Trees** – The site boasts an abundance of valuable ancient woodlands, hedgerows, mature trees, all of which require careful offsetting and protection measures.
- **Access and movement** – The existing site is largely greenfield, with limited transport infrastructure in place. However, several PROWs traverse the area, primarily running west to east. These paths cross Ifield Meadows and Ifield Brook near Ifield Parish Church, and further north, they connect by Ifield Cricket Club to join the broader network of footways in Ifield. Well-used by local residents, these PROWs provide valuable pedestrian connections across the site and link it to the surrounding community
- **Ecology** – The site encompasses a diverse range of habitats, such as grassland, arable land, woodland, scrub, hedgerows, tree lines, individual trees, ditches (including land drains), and ponds. To maintain the site's ecological richness and support local wildlife, it is essential to prioritise the retention and integration of these habitats within the masterplan.
- **Drainage and Flood Risk** – River Mole and Ifield Brook separately run across the eastern and western edges of the site. However the major flooding impact area are within Gatwick Airport 60dB noise contour, which means less suitable built up area will be influenced.
- **Heritage** – Within 1km of the site, there are two scheduled monuments and 35 listed buildings, reflecting the area's rich historical and architectural heritage. Additionally, two Conservation Areas are located nearby, with the Ifield Village Conservation Area directly adjoining the site's eastern boundary. This area is of particular significance due to its archaeological potential, historical importance, and architectural character, all of which must be carefully considered in the masterplanning process. No listed buildings are present within the site itself.
- **Infrastructure** – As the site is predominantly greenfield and undeveloped, there is minimal existing infrastructure in place.
- **Noise** – Residential development activities are considered not suitable within Gatwick Airport 60dB noise contour.

- KEY
- Hybrid Application Area
- Landscape and Ecology
- Class A Woodland and Trees

Class B Woodland and Trees

Ancient woodland

Site of Nature Conservation Interest

Landscape Buffers
- Movement and Access
- Existing Footpaths

Existing Bridleways

Existing Cycle Routes

Existing Road Network
- Flooding
- River, drains and ponds

Flood Zone 2

Flood Zone 3
- Heritage
- Scheduled Monument

Conservation Area

Listed Building

Locally Listed Building
- Infrastructure
- UKPN HV Cable or Line

SGN Gas Main

Foul Drainage

Surface Water Drainage

Potable Water

Telecoms
- Noise
- Gatwick 60dB Noise Contour

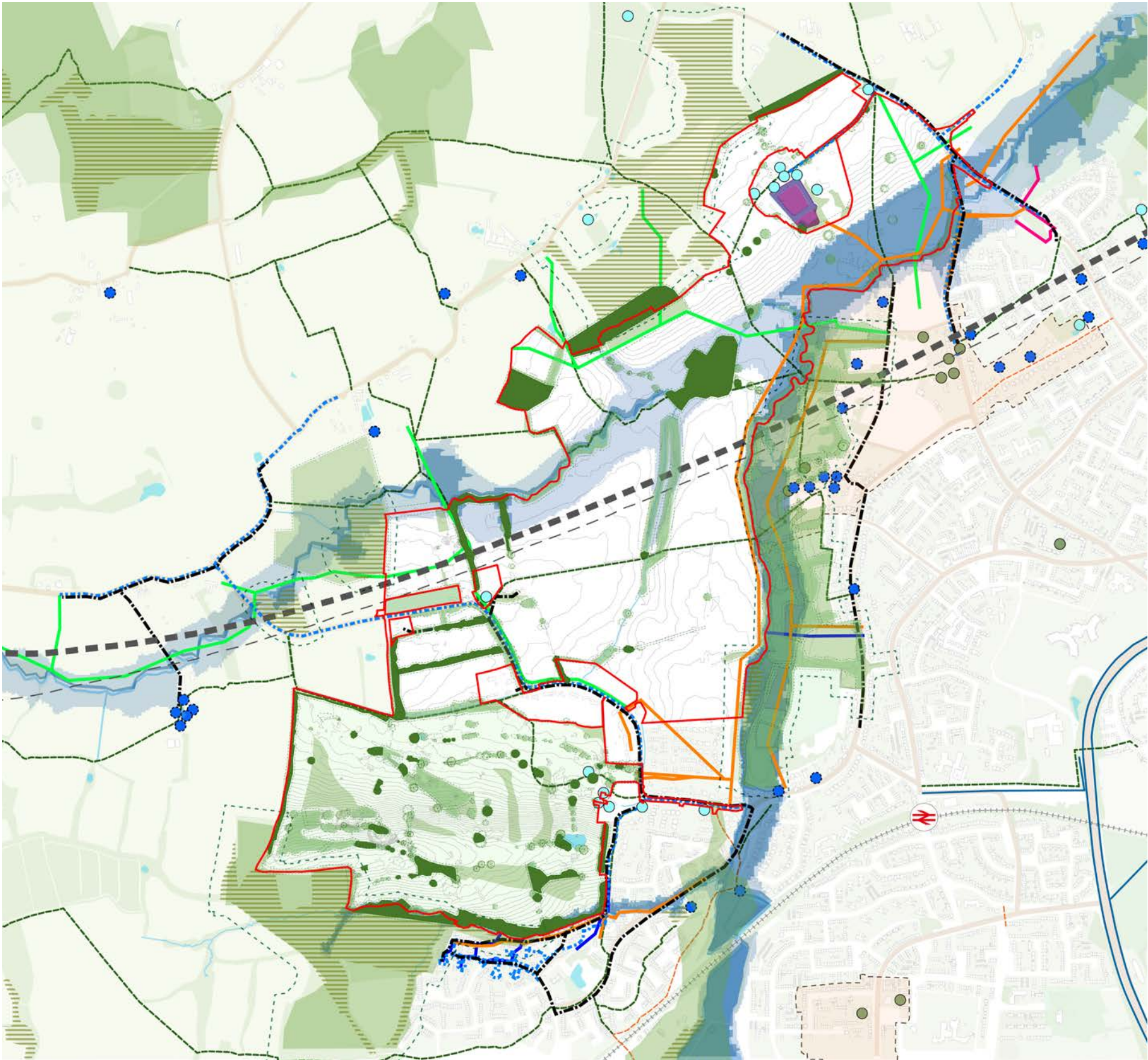


FIGURE 85 Composite Constraints Plan

3.13 Defining the Developable Area

Based on site analysis and identified constraints, areas suitable for development have been delineated. The shape of the developable area is defined by the following key steps:

Exclude Flood Zones: Remove flood-prone areas from the developable area.

Establish Buffers for Protected Landscapes: Set aside land surrounding protected and special landscapes.

Protect Existing Trees: Prioritise the protection of trees identified for conservation and avoid development in these areas.

Consider Noise and Topography: Avoid land within Gatwick Airport's 60dB noise contour and along ridgelines.

Areas identified as unsuitable for development will serve as provisions for diverse green infrastructure and amenity spaces, integrating natural features as essential components of the overall development plan.

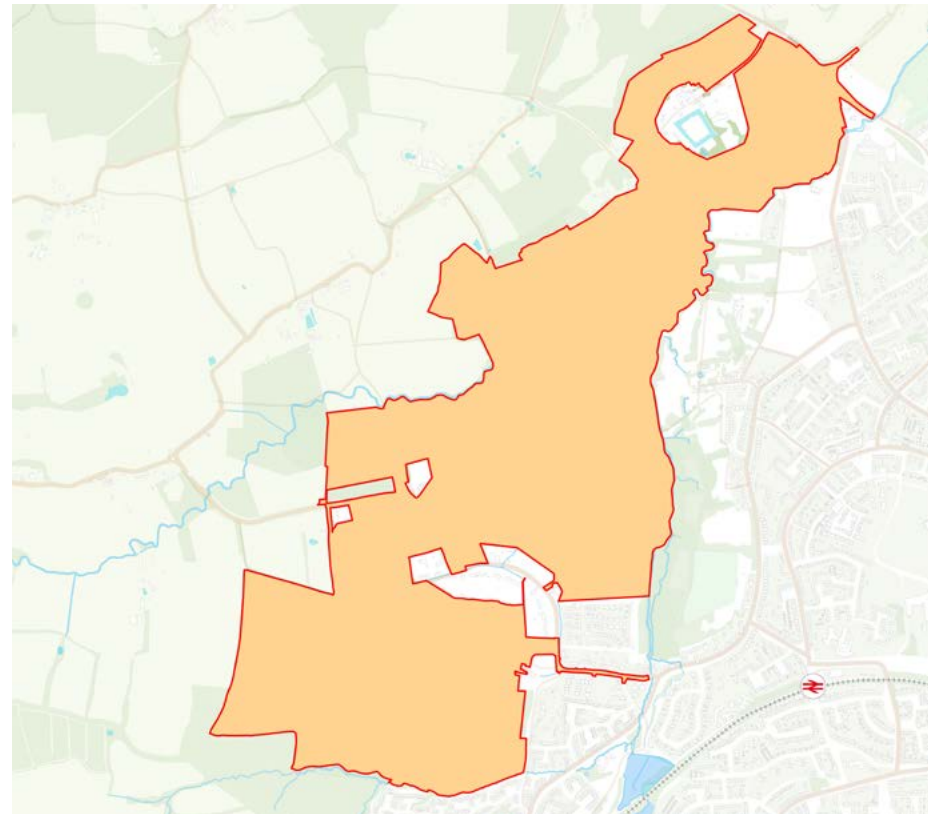


FIGURE 86 Hybrid Application Area

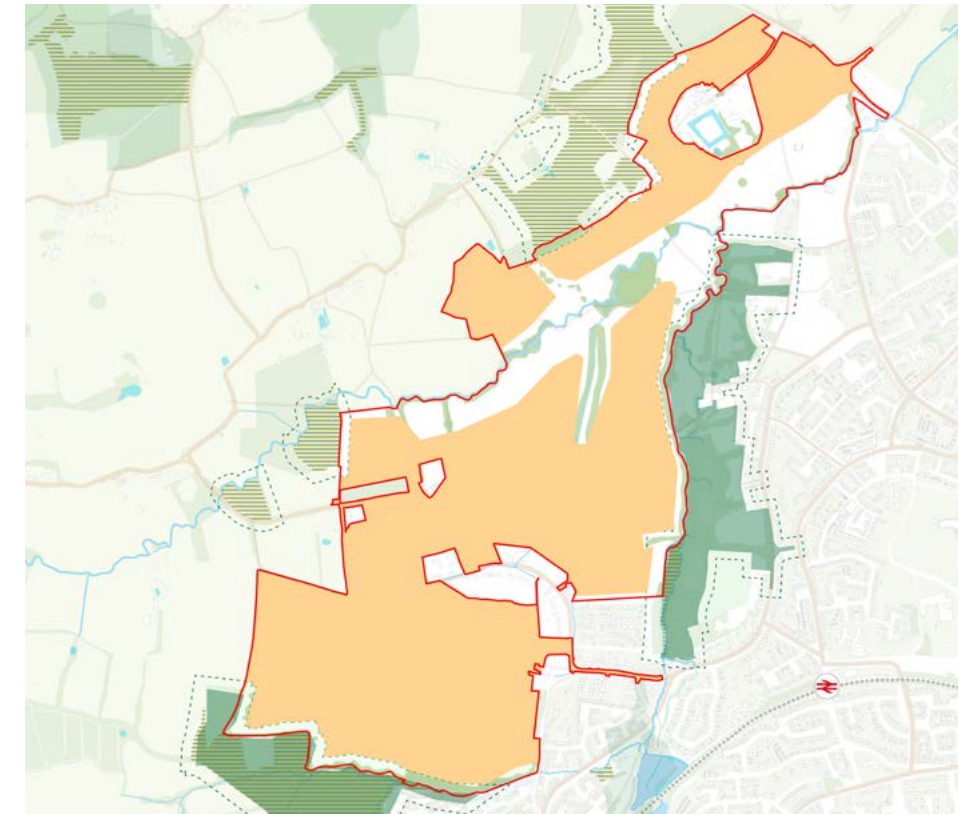


FIGURE 88 Establish Buffers for Protected Landscapes

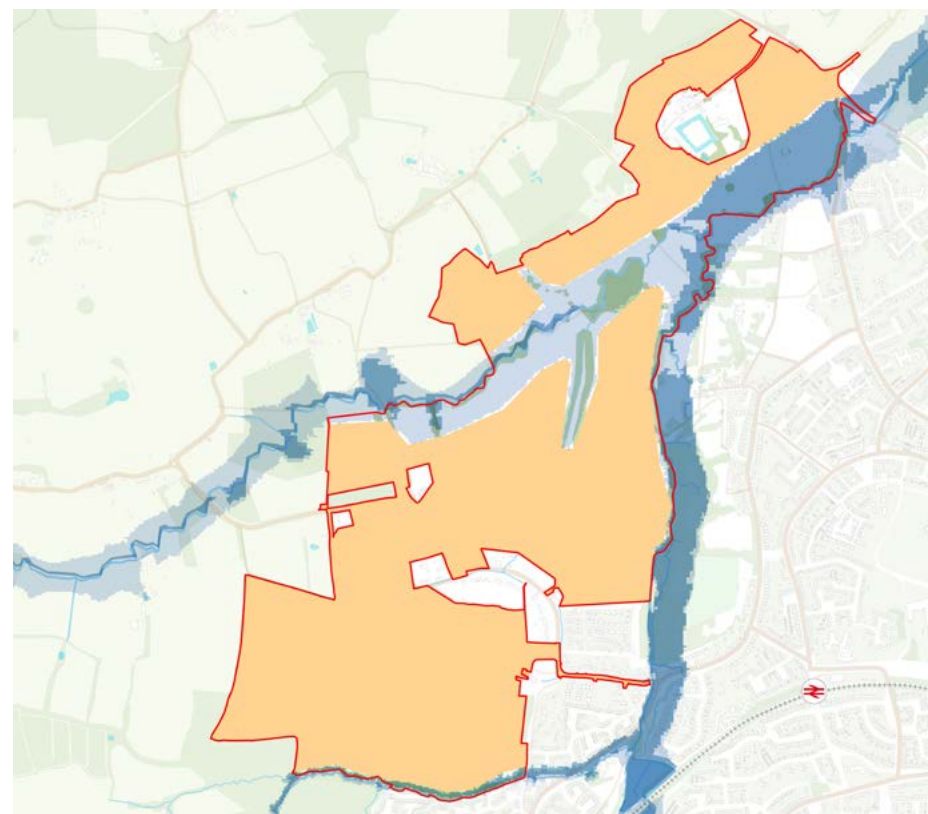


FIGURE 87 Exclude Flood Zone

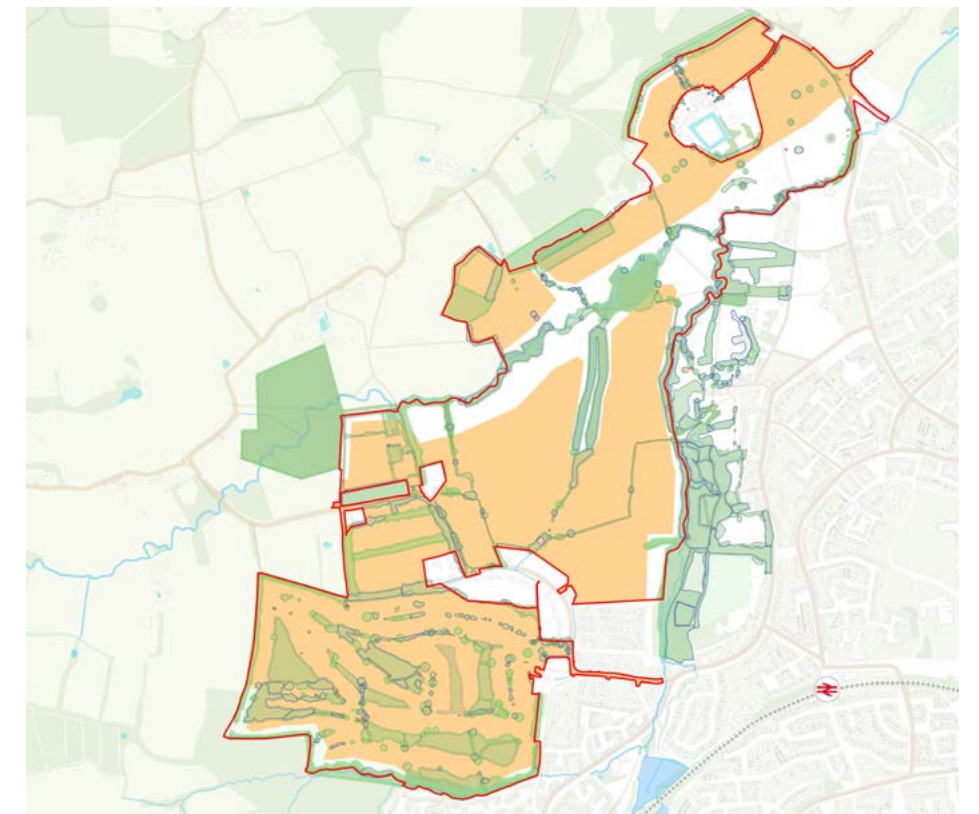


FIGURE 89 Protect Existing Trees

KEY

- Hybrid Application Area
- Gatwick 2050 60dB Contour
- Gatwick 2035 60dB Contour
- Area Unsuitable for Residential Development
- Developable Area
- Existing Trees

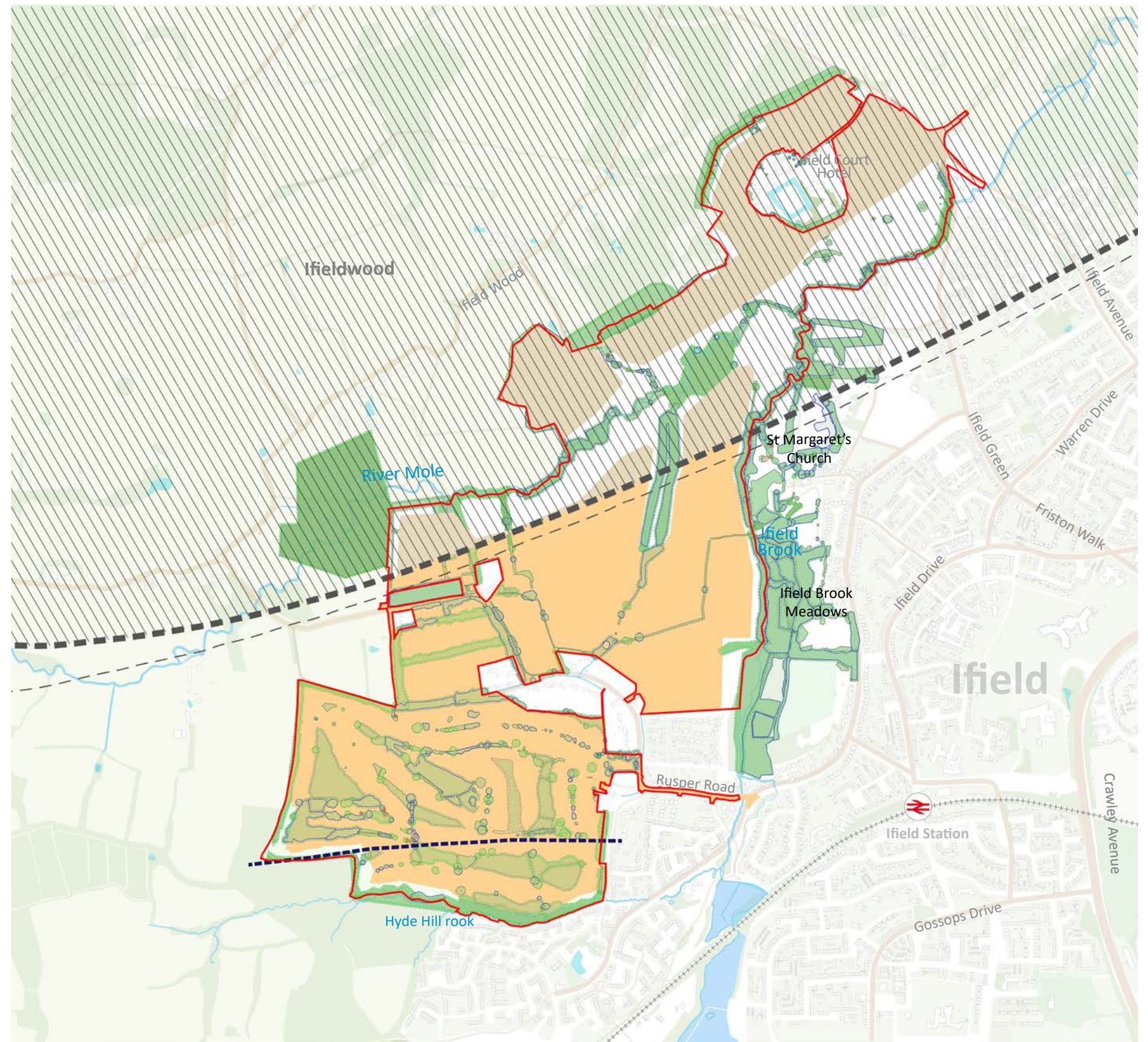


FIGURE 90 Consider Noise and Topography

3.14 Site Opportunities

The key opportunities identified are:

- The River Mole, Ifield Brook, and Hyde Hill Brook define the site's edges, forming natural landscape corridors that support a cohesive green network.
- The western site edge presents an opportunity for enhancement as a significant landscape corridor for natural conservation.
- The opportunity exists to create a well connected pedestrian and cycle network, integrating with existing Public Rights of Way.
- The opportunity exists to create strategic green infrastructure corridors, offering walking and cycling links to the wider landscape context, promoting a sustainable and green environment.
- There is the opportunity to retain and integrate existing vegetation, including hedgerows, woodland blocks, trees, and scrub, into the masterplan, forming two parklands.
- An opportunity exists to transform the area above the Gatwick 60 dB noise contour into a country park, providing a valuable green space for recreation and biodiversity.
- Views can be designed to showcase local landmarks, such as St Margaret's Church in Ifield, enhancing the sense of place and identity.
- The 10m level change presents an opportunity to explore creative design approaches that can accommodate and integrate the natural topography into the development plan.
- The topographical variation, with a 10m level difference between the ridge and the flat northern area, allows for the creation of long-range view corridors from the ridge top, offering stunning vistas.
- An opportunity exists to establish a new local centre that caters to the development and surrounding residents, creating a vibrant and essential hub within the community.

KEY

- Hybrid Application Area
- Primary Green Corridor
- Public Rights of Way
- Green Corridor
- Nature Conservation
- Country Park
- Parkland
- Local Centre
- View Corridor
- Rusper Road

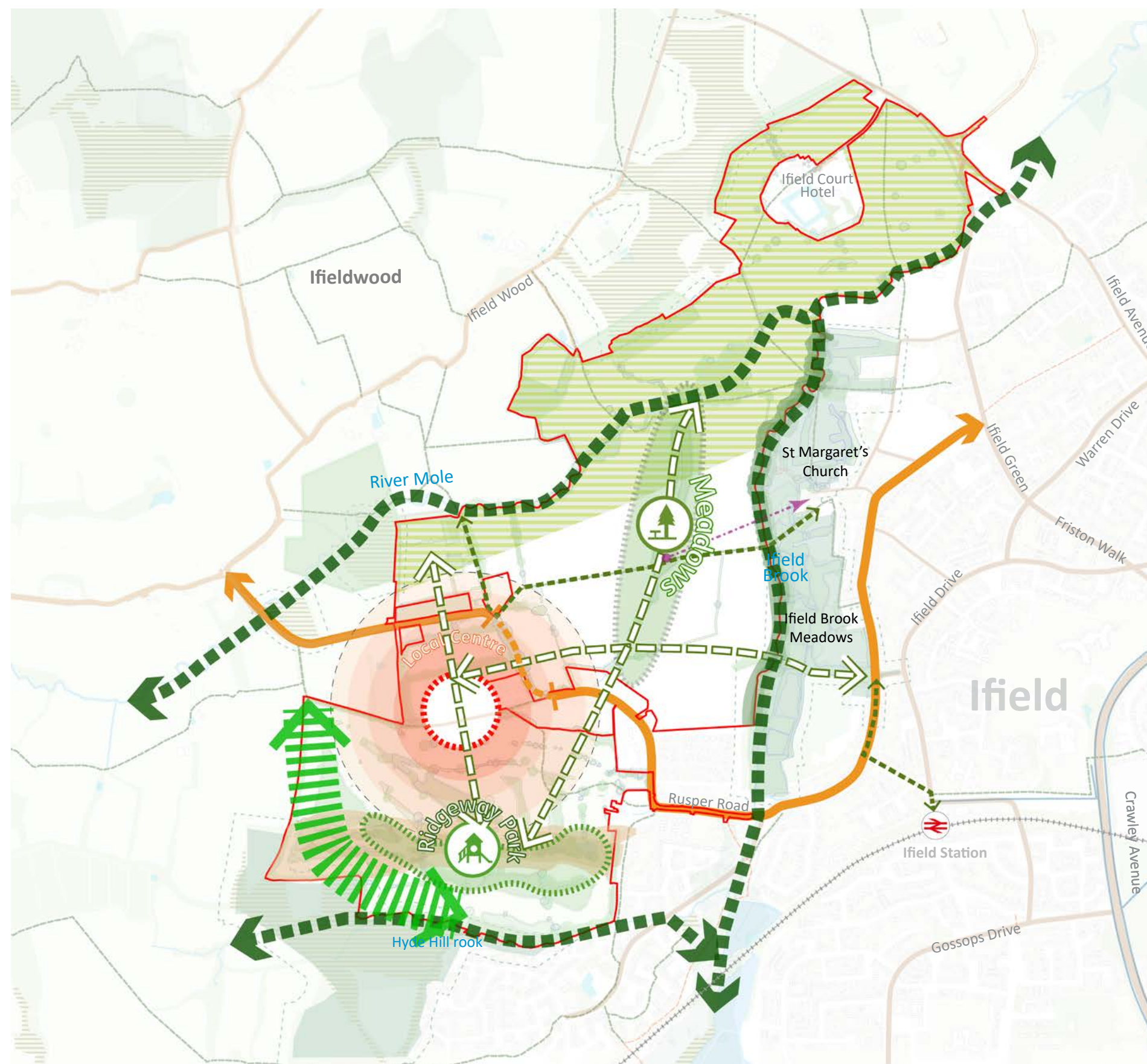


FIGURE 91 Opportunities