

APPENDIX 3

Landscape and Ecology Study of Greenfield Sites in Worthing Borough – November 2015

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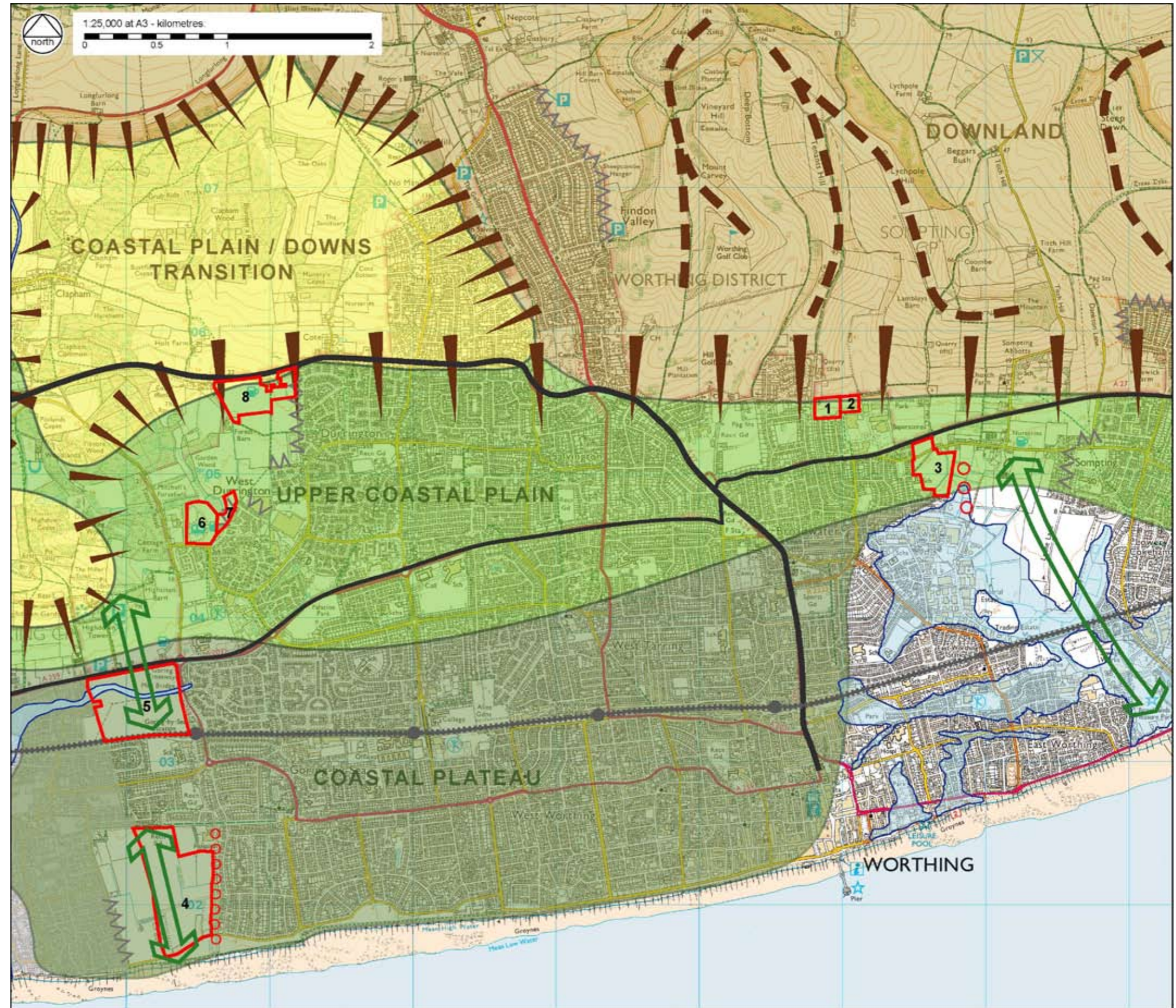
on behalf of

Worthing Borough Council

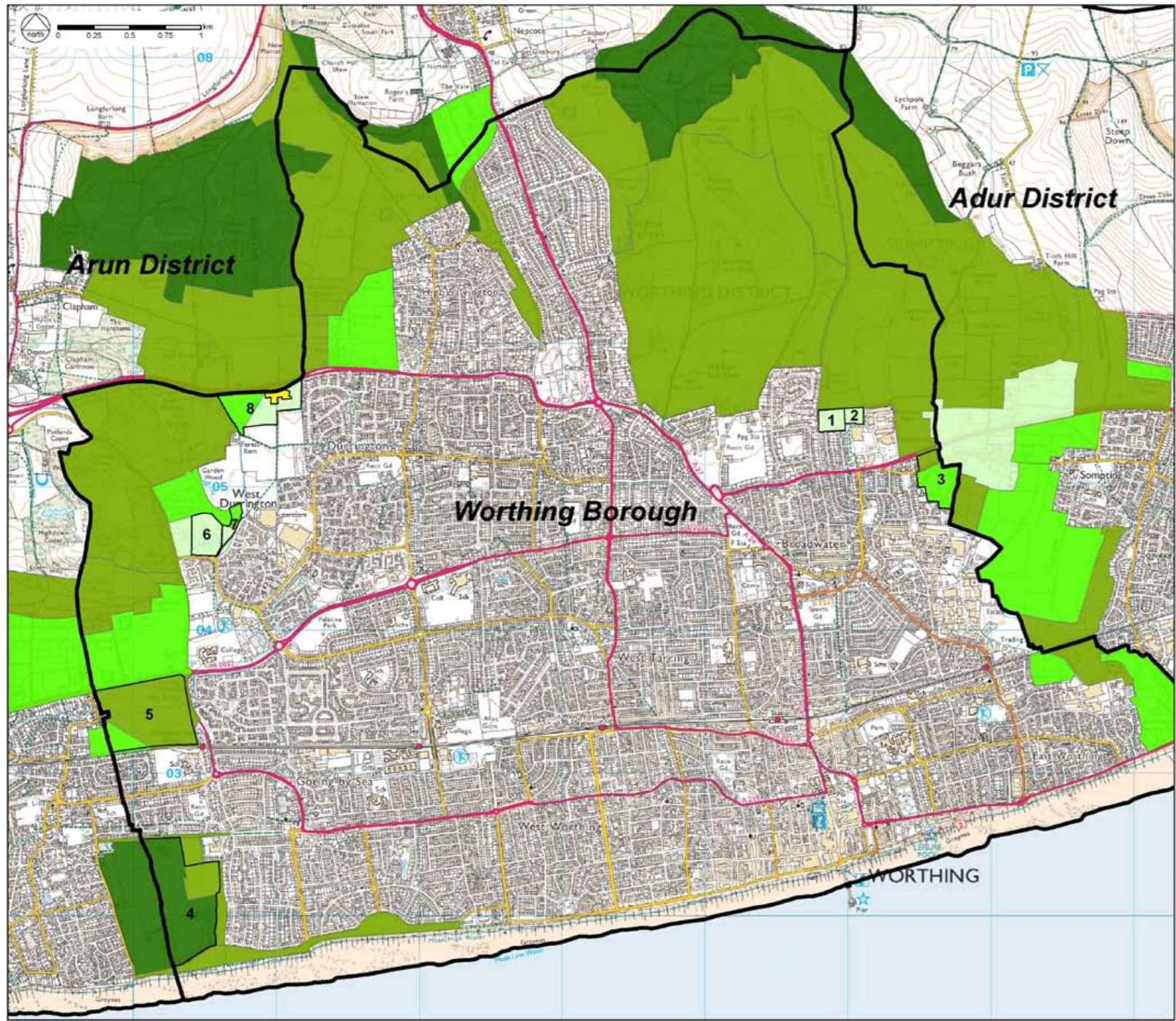
Figure 14
Landscape Structural Analysis

KEY

-  Coastal plain / Downs transition
-  Upper coastal plain
-  Coastal plateau
-  Downland
-  Flood plain
-  Prominent ridges
-  Prominent slopes
-  Separation
-  Containment
-  Hard urban edge
-  Railways
-  Major roads
-  Greenfield Sites:
- 1 Land North of Beeches Avenue (WB08176)
- 2 Worthing United Football Club, Beeches Avenue (WB08162)
- 3 Land South of Upper Brighton Road (WB08063)
- 4 Goring - Ferring Gap (Land north-east of Amberley Drive) (WB088182)
- 5 Chatsmore Farm (Land South of Highdown) (WB08152)
- 6 Caravan Club, Titnore Way (WB08038)
- 7 Land West of Fulbeck Avenue (WB08183)
- 8 Land North of West Durrington Development (PFDA) (WB08037)



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**Figure 15
Landscape Sensitivity**

KEY

-  Borough and District boundaries
-  Greenfield Sites:

- 1 Land North of Beeches Avenue (WB08176)
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Landscape Sensitivity:


-  Major
-  Substantial
-  Moderate
-  Slight
-  Negligible

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Figure 16
Visual Sensitivity






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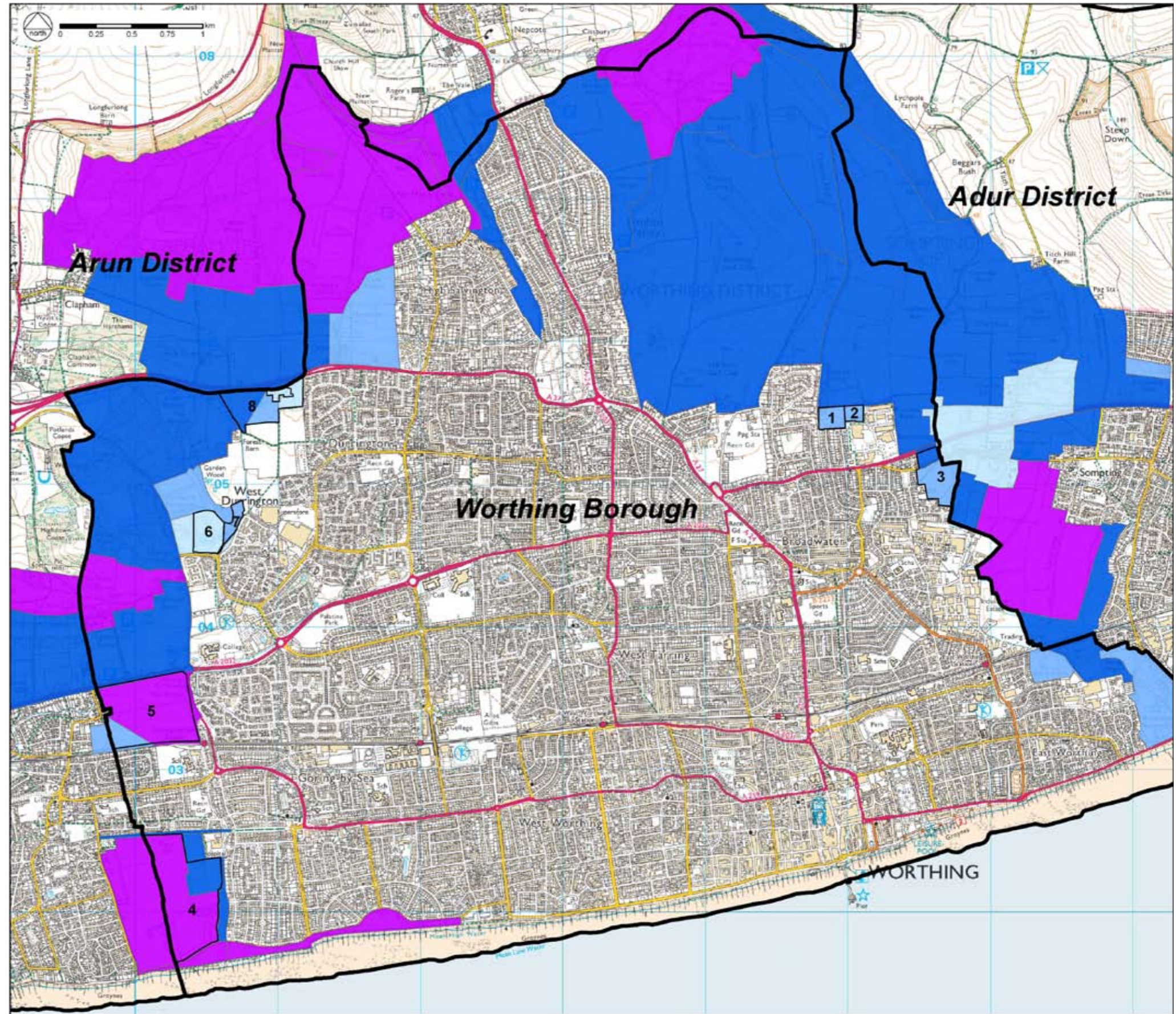
 Borough and District boundaries

 Greenfield Sites:

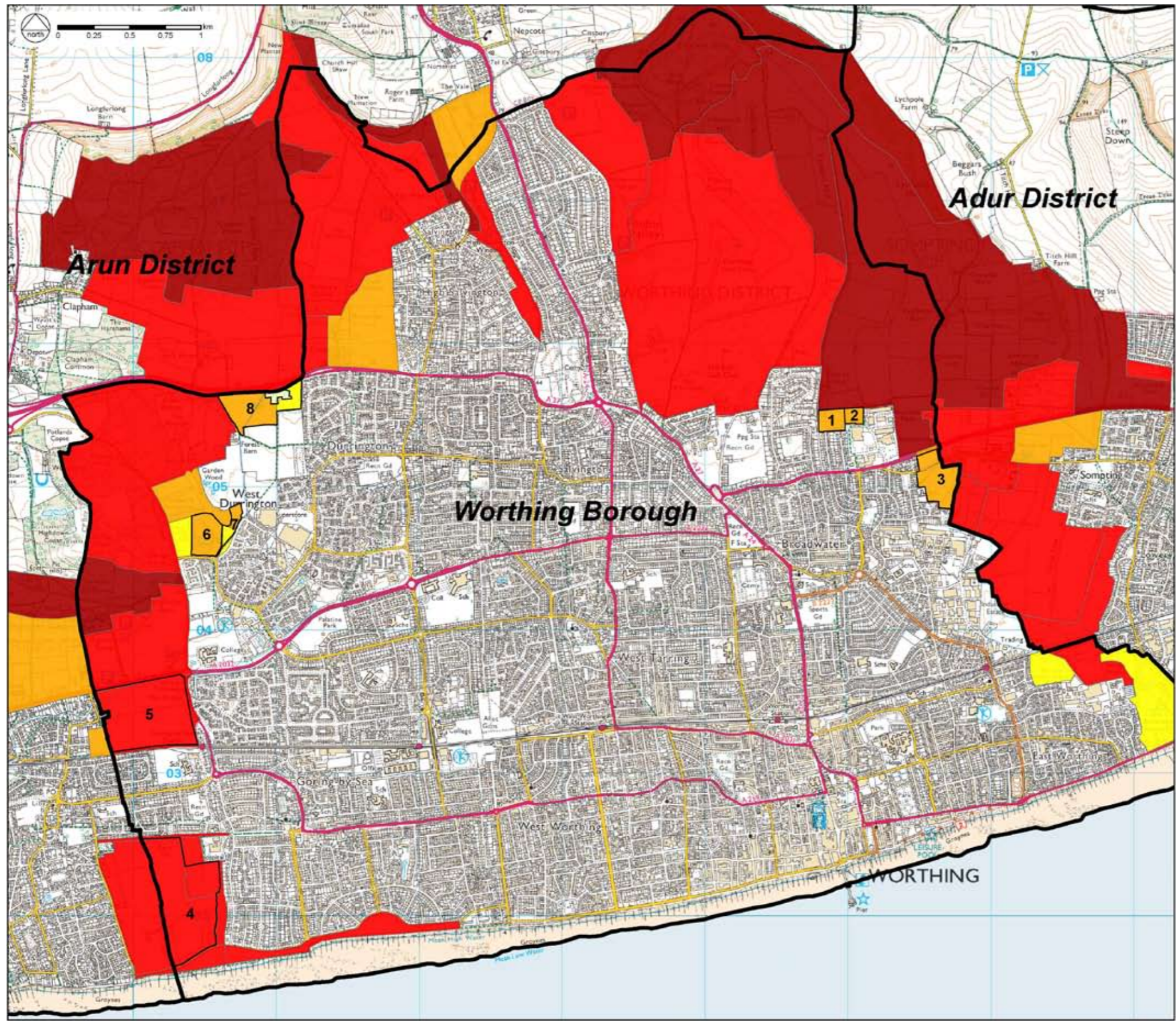
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Visual Sensitivity:

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**Figure 17
Landscape Value**

KEY

Borough and District boundaries

Greenfield Sites:

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SITE 5: CHATSMORE FARM

Landscape Structure

5.74 A flat site, underlain by chalk with superficial sand and gravel deposits, adjacent to the southern edge of the South Downs National Park. The site consists of two large arable fields, separated by Ferring Rife which flows east to west through the northern half of the site. A line of pylons also runs east-west through the middle of the site.

5.75 The site is bounded by broken vegetation of varying density including bushes and occasional small tree groups, within or adjacent to the site's southern, eastern and western boundaries. Ferring Rife has limited significant riparian vegetation, including occasional shrubs/small trees. The site is surrounded by existing development to the south, east and west, including 3 storey buildings to the north-east and multi-storey flats to the south-east. The A259 forms the sites northern boundary. The railway line runs along the southern edge of the site. Footpath 2121 also runs along the southern boundary (within the site), and footpath 2121/1 runs along part of the western boundary.

Landscape Character

5.76 The site is located in the low lying flat open landscape of the 'Littlehampton and Worthing Fringes' county character area (area SC11), and is part of the 'Goring Coastal Plain' local landscape character area characterised by open large scale arable fields which continue to the north and west beyond the A259 road.

Settlement Pattern

5.77 Prior to the 20th century, Goring-by-Sea and Ferring were small nucleated settlements some distance from the site. During the 1950s, Goring Way was lined with houses, establishing a linear link of settlement between Goring-by-Sea and Ferring, about 200m to the south of the site. During the 1960s, much of the current housing to the east and west was in place, with housing in Ferring reaching level with the northern edge of the site, and housing reaching north from Goring Way to the railway along the southern edge of the site. The full extent of housing which borders the site to the east was reached during the 1980s, and multi-storey buildings have recently been constructed to the south-east of the site on the opposite side of the railway. However, an open area remains adjacent to the south, beyond the railway as school playing fields.

5.78 Worthing has also spread north towards West Durrington, but no substantial development has taken place immediately north of the site within the vicinity of Highdown Hill. The site remains as a continuation of the open landscape to the north, separating the northern settlement patterns of Worthing and Ferring when viewed from the north. If the site is developed in its entirety, the areas of settlement to the east and west of the site would coalesce.

Ecology Summary (see Appendix A for full summary)

5.79 The site is dominated by habitats of negligible conservation interest in their own right including arable land, species-poor grassland, scrub and defunct hedgerows, and a small numbers of trees which are generally young and/or comprise non-native species. Linear vegetative features, such as hedgerows and scrub lines with trees do however provide suitable opportunities for movement of wildlife and compliment habitats in the wider area so are considered in combination to be of local wildlife value.

5.80 The feature of greatest ecological interest within the site is Ferring Rife and the corridor of semi-

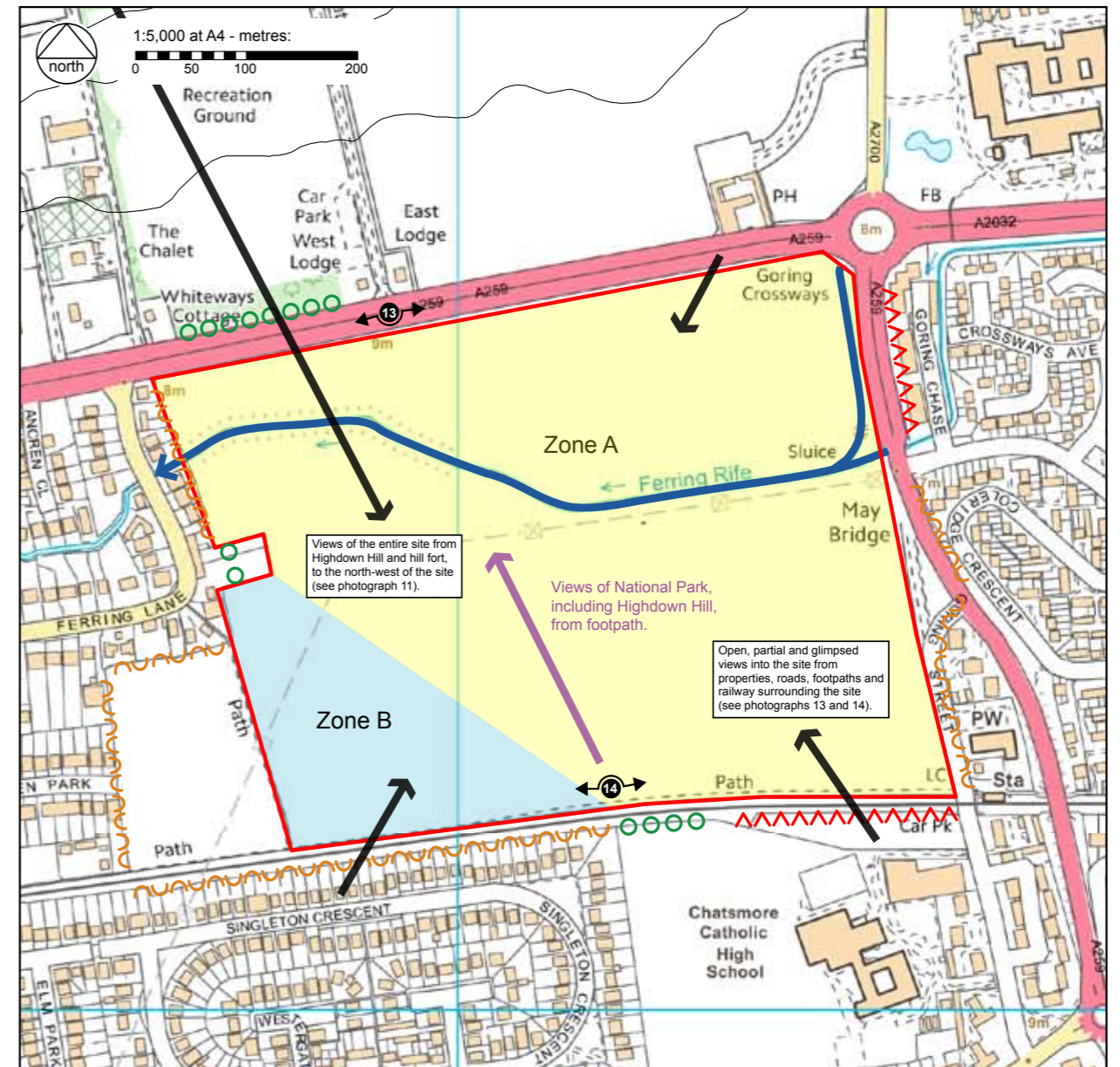


Figure 22: Site 5 Analysis

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KEY

Site boundary	Filtered urban edge
Zone A	Hard urban edge
Zone B	Separation between settlements
Contours (5m intervals)	Significant watercourse
Ridgelines / spurs	Key views into the site
Valley feature	Key views out from the site
Prominent slope	Photograph locations
Containment e.g. boundary vegetation / woodland	

natural habitats through which it flows, which in combination are considered to form a significant part of a wider habitat of district value.

Visual Assessment

- 5.81 **Zone A** is open to view from Highdown Hill and its hill fort within the South Downs National Park to the north, and forms a prominent part of the middle distance within the view (see photograph 11). The zone is seen in context with existing settlement on three sides and the English Channel on the horizon, and forms an effective gap in the view of development along the coastal plain. The view of open space continues slightly south of the railway line into the school playing fields to the south-east of the site.
- 5.82 The zone is also visible from high ground within the National Park to the east of High Salvington (see photograph 12), and at a greater distance from Cissbury Ring, which is a Scheduled Ancient Monument hill fort within the National Park to the north of Worthing.
- 5.83 At closer range, Zone A is open to view from footpaths 2121 and 2121/1, from the A259 (see photograph 13), and although partially filtered by vegetation in places, is visible from properties and railway passengers which face onto the site. The zone forms effective separation between Goring and Ferring when travelling along the A259 road. There are uninterrupted views to the National Park, including Highdown Hill from public footpath 2121 along the southern edge of the site (see photograph 14).

- 5.84 The visual sensitivity of the **Zone A** is judged to be **Major**. This rating feeds into the overall sensitivity assessment table on page 52.
- 5.85 Zone B is visible from high ground within the National Park (see Photograph 11). However, Zone B, along with adjacent land within Arun District to the west, is partially contained to the north by vegetation along the north-western site boundary, and forms a less prominent part of the visual separation between Goring and Ferring than Zone A.
- 5.86 The visual sensitivity of Zone B is judged to be Moderate. This rating feeds into the overall sensitivity assessment table on page 52.



Photograph 11 (Sites 4 and 5) Looking south from Highdown hill fort.

Site 5: Chatsmore Farm (WB08152)



Photograph 12 (Sites 5, 6, 7 and 8) Looking south-west, from South Downs National park west of High Salvington.



Photograph 13 (Site 5) Looking east to south from the A259. Continues right



Continued from left. Looking south to west.

Footpath 2121, along southern site boundary, adjacent to the railway line

Dwellings off Ferring Lane to the west of the site

Highdown Hill

South Downs National Park

Ferring Rife

A259 road



Photograph 14 (Site 5) Looking west to north from footpath 2121. Continues right.



Continued from left. Looking north to east.

Site 5 Zone A Sensitivity

5.87 Each element of the sensitivity assessment for Site 5 Zone A, and an overall judgement based on a 5 point scale, are set out below.

Inherent Landscape quality (intactness and condition)	Ecological sensitivity	Inconsistency with existing settlement form/pattern	Contribution to separation between settlements	Contribution to the setting of surrounding landscape/settlement	Views (visual sensitivity)	Potential for mitigation <small>(inverse score i.e. high potential for mitigation = low sensitivity, therefore low score)</small>	Overall sensitivity judgement	
							01-07 = Negligible 08-14 = Slight 15-21 = Moderate 22-28 = Substantial 29-35 = Major	
3	4	2	5	4	5	4	28	
Limited intact boundary features or vegetation along Ferring Rife, but recorded by Natural England as grade 1 agricultural land.	The majority of the zone consists of habitats of negligible conservation interest. However, Ferring Rife and the corridor of semi-natural habitats through which it flows, are in combination considered to form a significant part of a wider habitat of district value.	Development of the zone would not set a precedent in terms of extent of development on the coastal plain in the locality, but would remove the northern gap between Goring and Ferring.	Zone provides an essential sense of separation between Goring and Ferring, despite development to the south.	Provides an open aspect in an otherwise developed coastal plain and connection to the South Downs National Park.	The zone is prominent in views from Highdown Hill within the South Downs National Park, and is visible from Cissbury Ring. The site is visible at closer range from surrounding viewpoints, and provides openness and settlement separation when viewed from the A259 between Ferring and Goring. There are uninterrupted views to the National Park from public footpath within the south of the site (see visual assessment).	Maintain open visual dimension of the gap, with the exception of the south-west corner of the site where there is potential to recreate hedges along boundaries. Enhance riparian vegetation along Ferring Rife without damaging openness of main views.	SUBSTANTIAL	

Site 5 Zone B Sensitivity

5.88 Each element of the sensitivity assessment for Site 5 Zone B, and an overall judgement based on a 5 point scale, are set out below.

Inherent Landscape quality (intactness and condition)	Ecological sensitivity	Inconsistency with existing settlement form/pattern	Contribution to separation between settlements	Contribution to the setting of surrounding landscape/settlement	Views (visual sensitivity)	Potential for mitigation <small>(inverse score i.e. high potential for mitigation = low sensitivity, therefore low score)</small>	Overall sensitivity judgement	
							01-07 = Negligible 08-14 = Slight 15-21 = Moderate 22-28 = Substantial 29-35 = Major	
3	2	1	3	3	3	4	19	
Limited intact boundary features, but recorded by Natural England as grade 1 agricultural land.	The majority of the zone consists of habitats of negligible conservation interest.	Development of the zone would be 'infill' between surrounding housing, but would not result in the loss of the gap between Goring and Ferring.	Part of the wider separation between Goring and Ferring, but has a less prominent contribution than Zone A.	Provides an open aspect to surrounding settlement.	The zone is visible from Highdown Hill within the South Downs National Park, but is more contained than Zone A and forms a less prominent part of the visual separation between Goring and Ferring (see visual assessment).	Potential to recreate hedges along existing boundaries, and to plant new hedgerow and tree groups along the boundary with Zone A, to form a robust vegetated edge to settlement if the zone is developed.	MODERATE	

Site 5 Zone A Value

5.89 Each element of the value assessment for Site 5 Zone A, and an overall judgement based on a 5 point scale, are set out below.

Landscape designations	Ecological and other designations (eg. heritage, flood zone etc)	Local distinctiveness	Any historic/cultural/literary associations	Contribution to setting of 'outstanding assets'	Recreation and public access/locally valued spaces	Perceptual aspects (eg. scenic quality, tranquillity, and remoteness)	Overall value judgement
							01-07 = Negligible 08-14 = Slight 15-21 = Moderate 22-28 = Substantial 29-35 = Major
4	3	4	1	4	4	3	23
Adjacent to the South Downs National Park to the north.	Adjacent to the Highdown Conservation Area and several listed buildings. The Environment Agency's Flood Zones 2 and 3 covers a significant portion of the site along Ferring Rife.	Visual connectivity with Highdown and the South Downs National Park to the north. The zone has a degree of distinctiveness locally in that it is part of one of the few open gaps in settlement along the coastal plain.	Borders southern extension of Highdown Conservation Area, on the other side of the A259.	Forms an undeveloped setting to the South Downs National Park.	Public footpaths along the southern boundary, with views of the National Park, and Goring railway station within close proximity to the south-east. Centre of the site, including along Ferring Rife, is used for dog walking.	Limited due to land use and surrounding human influence, but provides a relief to surrounding built up areas and open undeveloped views north towards the National Park.	SUBSTANTIAL

Site 5 Zone B Value

5.90 Each element of the value assessment for Site 5 Zone B, and an overall judgement based on a 5 point scale, are set out below.

Landscape designations	Ecological and other designations (eg. heritage, flood zone etc)	Local distinctiveness	Any historic/cultural/literary associations	Contribution to setting of 'outstanding assets'	Recreation and public access/locally valued spaces	Perceptual aspects (eg. scenic quality, tranquillity, and remoteness)	Overall value judgement
							01-07 = Negligible 08-14 = Slight 15-21 = Moderate 22-28 = Substantial 29-35 = Major
4	2	4	1	4	4	3	22
Within close proximity of the South Downs National Park to the north.	Within close proximity of listed building to the north. The Environment Agency's Flood Zones 2 and 3 are also close to the north.	Visual connectivity with Highdown and the South Downs National Park to the north. The zone has a degree of distinctiveness locally in that it is part of one of the few open gaps in settlement along the coastal plain.	Close proximity to Highdown Conservation Area, on the other side of the A259.	Forms a part of an undeveloped setting to the South Downs National Park.	Public footpaths along the southern and western boundaries, with views of the National Park, and Goring railway station within close proximity to the east.	Limited due to land use and surrounding human influence, but provides a relief to surrounding built up areas and open undeveloped views north towards the National Park.	SUBSTANTIAL



Green Infrastructure

Landscape

- 5.91 Key considerations should include (see plan left):
1. Maintain undeveloped landscape as part of effective separation between Goring-by-Sea and Ferring, and break in settlement when viewed from the north, particularly the area defined by the dashed line on plan.
 2. Enhance riparian vegetation along Ferring Rife, without effecting openness of the main views.
 3. Protect public rights of way, including link to Goring-by-Sea railway station.
 4. Strengthen boundary vegetation, in particular along the A259 road, without damaging the the main open view.
 5. Potential to plant new woodland tree belt to form robust vegetated edge to settlement, and replace or provide new public footpath to edge of settlement to maintain views to the National Park, if Zone B of the site is developed.

Ecology

- 5.92 Features of local and district value should be retained and where appropriate enhanced through management and complimentary habitat creation. Ways in which this could be achieved include:
- Enhancement of the Ferring Rife corridor through bank reprofiling, creation of side channels and backwaters, management of scrub to reduce overshading, provision of complimentary native scrub, tree and hedgerow planting, marginal and aquatic planting, and management of non-native invasive species.
 - Enhancement of wildlife corridors through appropriate management and complimentary planting to improve existing features, and creation of new linear semi-natural habitats such as species-rich hedgerows and treelines.
 - Creation of a range of habitats with high wildlife interest within areas of public open space such as species-rich grassland, native scrub, hedgerows, woodland and wetlands.
 - Creation of new opportunities for roosting bats and nesting birds through provision of bird and bat boxes on existing trees and new buildings.
 - Use native species typical of the local area in landscape planting where appropriate to do so. Where possible these should be sourced from stock of local provenance.
 - Prioritising the use of plants which benefit native wildlife within formal landscaping schemes, including nectar- and pollen-rich and fruit- and nut-producing species.