

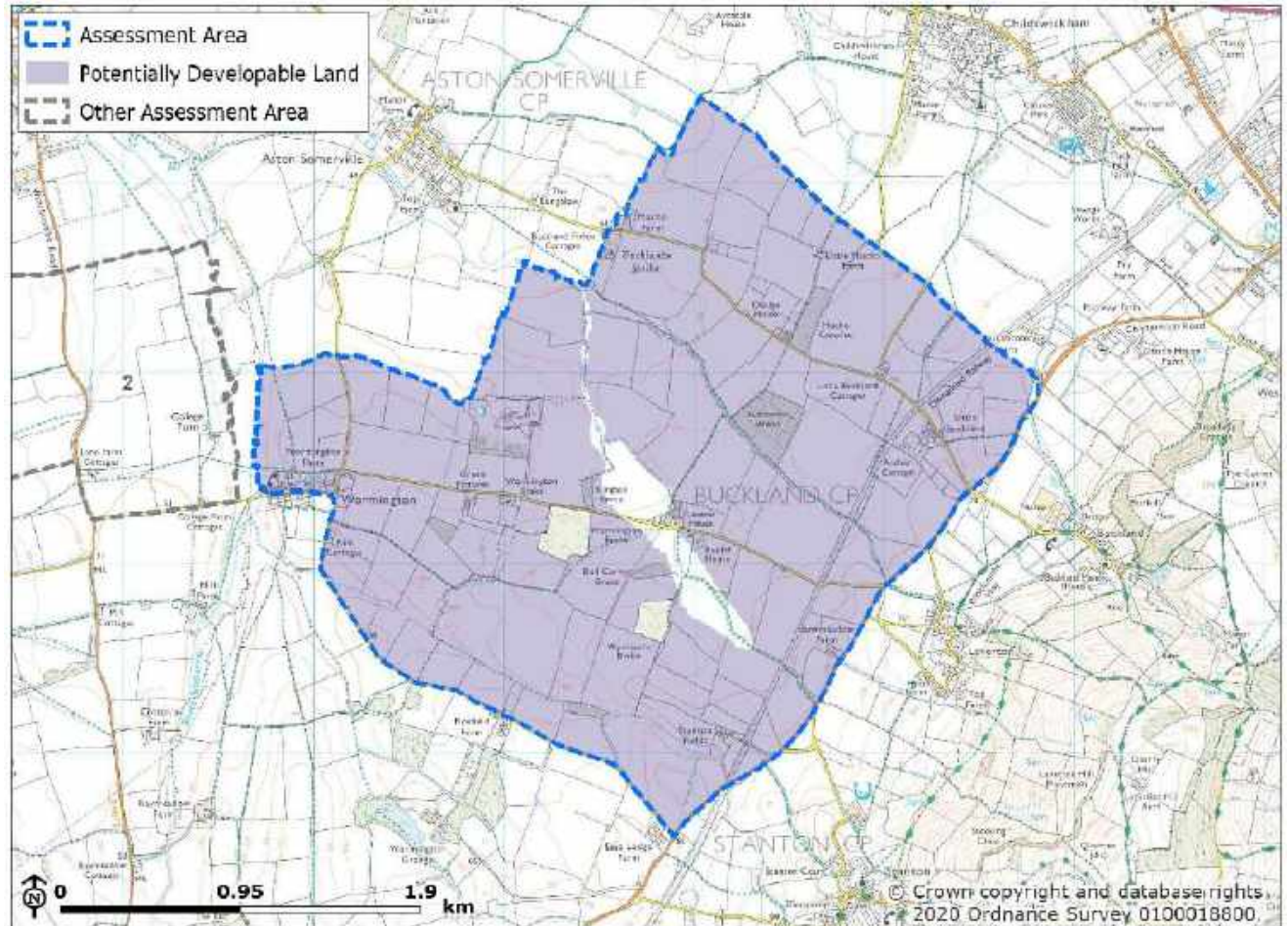
Assessment Area 1 – New Settlement: Land between Wormington and Laverton

Assessment Area Ref: 1

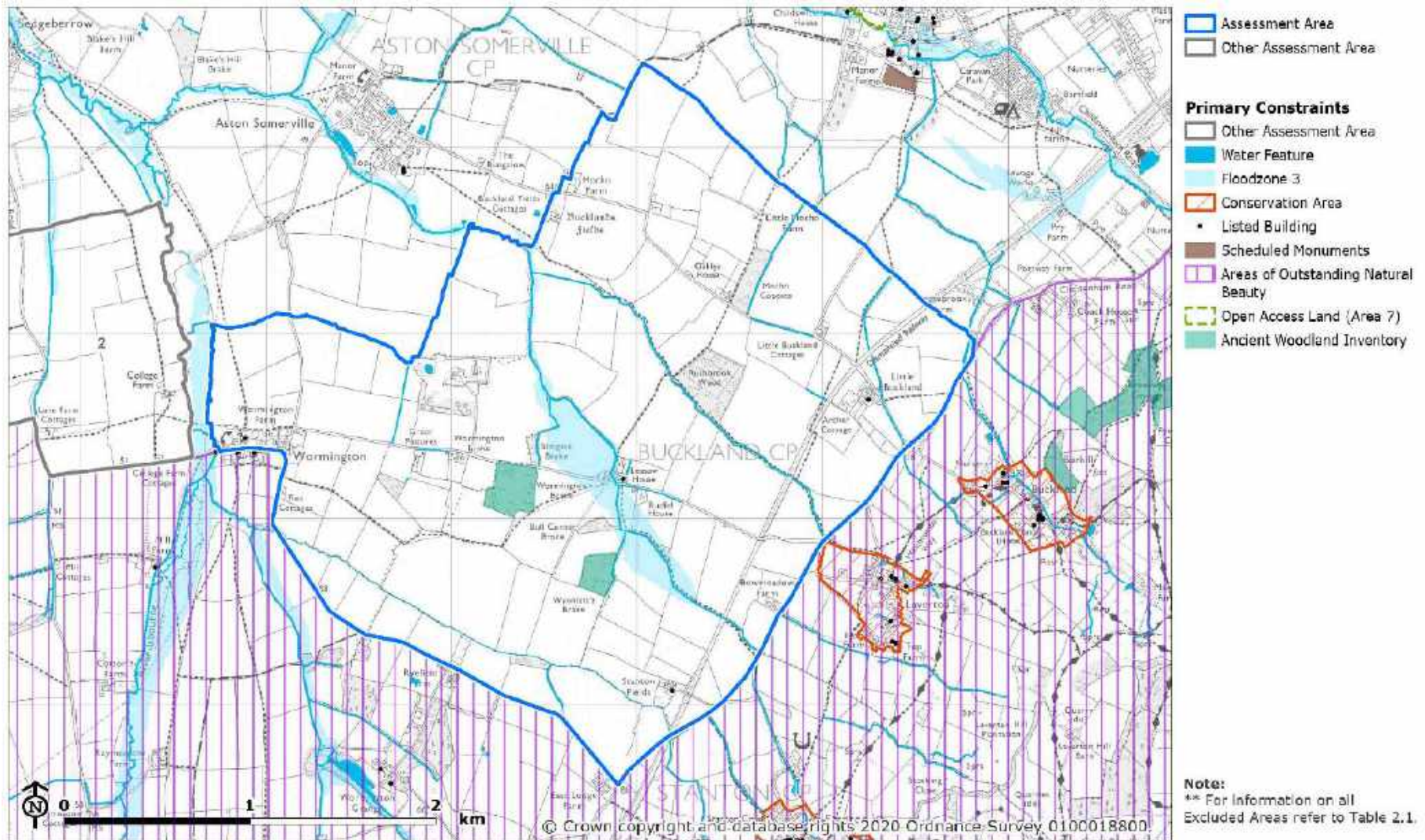
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

Area: ~828ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are five listed buildings within the assessment area. These are all grade II, save for the grade II* Church of St Catherine in Wormington. The other listed buildings comprise three former farmhouses and a pair of cottages, which are dispersed across the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Cropmarks northwest of Little Buckland and at Bowmeadow Farm; Late Iron Age to Roman enclosures near Bull Corner Brake; A Roman site east of Little Buckland; 	<p>The eastern edge of the assessment area is sensitive due primarily to the presence of two listed buildings and Laverton Conservation Area.</p> <p>The western edge is similarly sensitive due to the potential for harm to the Buckland Field Cottages and the Church of St Catherine at Wormington, as well as the other grade II listed buildings just beyond the assessment area in Wormington. The non-designated moated site and medieval settlement may also be of more than local significance.</p> <p>Slightly south of the centre of the assessment area, the ancient woodland and grade II listed Leasow House are key constraints. Beyond the southern edge of the assessment area there are sensitivities including the RPGs and grade II* Wormington Manor and stables, along with its non-designated former parkland.</p> <p>Any new development would need to be kept separate from the existing historic rural settlements at Laverton and Wormington, the heritage significance of which is manifest in the designated assets they contain.</p> <p>Given the limited space left between the distribution of designated assets within and beyond the assessment area significant negative effects are likely in the event of any new settlement being developed. However, it may be possible to accommodate a small</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Roman features near Slingate Brake; - Medieval settlement remains including a moated site at Wormington; - Extensive ridge and furrow earthworks across the whole area; - Two non-designated built heritage assets: Wormington Manor and the former St Catherine's Rectory (now part of Wormington Grange); - The routes of the Winchcombe District turnpike and the former Great Western Cheltenham and Honeybourne Railway; and, - A WWII crash site near Bucklands Fields and the sites of a number of search light batteries. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape comprised of a mix of less irregular, regular and less regular enclosures. Much of this 	<p>village built at the lower end of the development quantum with only minor negative effects. The least constrained area for such a development would potentially be to the north of Rushbrook Wood.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>partly reflects former unenclosed cultivation patterns and so has some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. The HLC also records some early surviving woodland (ancient woodland) and a historic settlement at Wormington.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • Tewkesbury Conservation Area abuts that eastern edge of the assessment area. There are two more conservation areas – Buckland Conservation Area and Stanton Conservation Area – to the east of the assessment area. Dumbleton Conservation Area is situated to the west of the assessment area. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> There are a limited number of listed buildings in the wider vicinity of the assessment area. Those most susceptible to setting change include a series of grade II listed buildings in Wormington which stand adjacent to the assessment area, and the grade II* Wormington Grange and Stables to the south of the assessment area. There are two Registered Parks and Gardens – both containing several listed buildings - to the south of the assessment area: Stanway House Park and Toddington Manor Park. The former extends up a steep hill slope meaning that inter-visibility that affects the experience of the RPG is possible. Topography and intervening vegetation suggest that the other RPG would not be susceptible to setting change. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The former parkland to the grade II* Wormington Manor remains legible to the south of the assessment area. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Two areas of Ancient Woodland (Wormington Brake and Wynniatts Brake), which are also Key Wildlife Sites, located in the central region, south of Laverton Meadow Farm. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No assets within 250m of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> No international or national designations within 2km of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> IRZs associated with the SSSIs of the local landscape overlap with the assessment area but none list residential development as a land use of risk. <p>Negligible effects may occur for all development size options as there is potential for all scales of development to be accommodated over 250m from local designations and over 2km of national designations.</p>	<p>Development, including any supporting access infrastructure, should avoid isolating wooded habitats present across the assessment area. Maintenance of the hedgerow network could be complemented by diversification of the habitat mosaic, such as introduction of species-rich grasslands and wetland features.</p> <p>There is potentially sufficient space in the northern half of the assessment area (to the north of the B4632) to accommodate all potential development sizes over 250m from local designations and over 2km from national designations.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Soil Quality	<p>The vast majority of the assessment area is located on grade 3 agricultural land. However, there is an area of approximately 39ha of developable land that is grade 2 located within the assessment area boundary in the vicinity of Bowmeadow Farm in the south-east. There is also approximately 18ha of developable land adjacent to the south-western boundary of the assessment area that is classified as grade 4.</p> <p>There is potential for development to result in the loss of a substantial amount of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all development size options. However, the effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is potential for development at all scales to avoid grade 2 agricultural land as this is restricted to a comparatively small part of the eastern half of the overall assessment area. The majority of remaining land in the assessment area is grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects have been identified in relation to water quality.</p>	N/A ¹			

¹ N/A represents 'Not Applicable'.

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Flood Risk	<p>The entirety of the assessment area is located on greenfield land apart from sparsely distributed local roads and residential/agricultural use buildings. Part of the settlement of Wormington is also located in the westernmost part of the assessment area.</p> <p>There are small areas (<10ha) of developable land that are within Flood Zone 2 adjacent to the River Isbourne, which flows from north to south through the area. In addition, there is a further small area (<10ha) of Flood Zone 2 adjacent to the westernmost boundary of the assessment area.</p> <p>However, there is potentially sufficient space to accommodate all development scales outside of Flood Zone 2. As such, negligible effects may occur in relation to flood risk.</p>	<p>There is potentially sufficient space to accommodate all scales of development to the northeast or southwest of the River Isbourne, outside Flood Zones 2 and 3.</p>			
Mineral Resources	<p>The assessment area is not located within any Mineral Safeguarding Areas.</p> <p>As such, negligible effects have been identified in relation to mineral resources for all development size options.</p>	N/A			
Noise	<p>There is no land within the assessment area boundaries located within an area recognised as having noise levels in</p>	N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours</p> <p>Noisy area.</p> <p>As such, effects in relation to noise are considered likely to be negligible for all development size options.</p>				
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, effects have been identified as negligible in relation to odour for all development size options.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Rural agricultural character, with limited built development. Open and expansive due to gently undulating landform. Intervisibility with Cotswolds AONB. Pockets of BAP Priority habitat deciduous woodland. High levels of tranquillity. <p>As such, landscape sensitivity is high for large villages and towns as the key characteristics and qualities of the landscape may be highly sensitive to development at these scales. Landscape sensitivity is reduced</p>	H	H	M-H

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
to moderate-high for small villages as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.			

Summary of Constraints and Landscape Sensitivity

Large parts of the assessment area are free from the majority of environmental constraints. A small or large village could potentially be accommodated in the northeastern half of the assessment area (to the northeast of the River Isbourne), avoiding the majority of constraints. This area is occupied by grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. Although there may potentially be sufficient land to the northeast of the River Isbourne to accommodate the largest development size option, it is likely to result in higher impacts on the setting of Laverton Conservation Area to the east.

Small and medium villages could also potentially be located to the southwest of the River Isbourne. However, a small village may be more suitable in this location due to the presence of two Key Wildlife Site. A small village may be a more suitable scale in terms of landscape also, due to the character and qualities of the landscape being highly sensitive to the larger development scales. There is no significant spatial variation in landscape sensitivity throughout the assessment area.

The potential impacts on heritage assets are a key consideration for this assessment area: it may not be possible to avoid significant negative effects upon these for any development scales and locations. However, it may be possible to accommodate a small village built at the lower end of the development quantum in the north east of the area with only minor negative effects.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the B4632 to the east providing links to Broadway, Evesham and Cheltenham, and an unclassified road connecting to the B4078 to the west which links to the A46, providing links to Tewkesbury to the south west and Evesham to the north.</p> <p>There are no 'critical junctions' (as identified in the JCS Transport Evidence Base) within the immediate vicinity of the assessment area, with the closest being the A46 Ashchurch Rd / A46 / A435 Teddington Hands Roundabout to the west. The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests</p>	

Criterion	Rationale	Score
	forecast that this junction will operate within its design capacity in 2031 (at between 60% and 70% Ratio to Flow Capacity during the AM and PM peak periods). However, the A46 continues west through Ashchurch, with several junctions (including that with the M5) which the same modelling forecasts will operate close to, or beyond, their design capacities in 2031.	
Access to employment	Number of workplaces (jobs) accessible within 45 minutes = 189 A very low number of workplaces (jobs) can currently be accessed by PT from the assessment area, with the area currently served by a low-frequency PT service.	
	Number of workplaces (jobs) accessible within 30 minutes = 198,514 Access from the assessment area to employment by car scores relatively low within the defined travel times, although the local road network provides good linkages to key urban centres.	
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area has limited access to key services. Only education facilities are accessible within a 20-40min travel time by public transport, while all urban centres and healthcare facilities are beyond 60 mins travel time using existing public transport services.	
Private car use by commuters	% Driving a Car or Van = 69% Car based commuter trips currently account for an average of 69% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with other assessment areas, private car still represents the primary method of travel to work and reflects the area's rural nature and low frequency PT services.	
Proximity to sustainable transport networks	The assessment area is outside of the 5km catchment of a rail station and is currently served by low frequency PT services.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000- 10,000 dwellings)	Score: Small village (1,500- 5,000 dwellings)
Strategic Infrastructure	Wastewater	There is limited existing sewerage infrastructure in the area. Due to the size of the receiving watercourses it is likely that there will be environmental constraints to obtaining a permit to discharge larger volumes from the works to the nearby watercourse, based on current technology.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required at higher scales of growth, with the cost of downstream reinforcement to be borne by developer			
	Rail transport	Not proximate to rail stations or lines.			
	Bus transport	Within 500m of existing low frequency bus route but distant from key destinations so difficult to effectively improve quality of bus provision.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	25,000	15,000
Viability	High	High	High	High	High	Medium

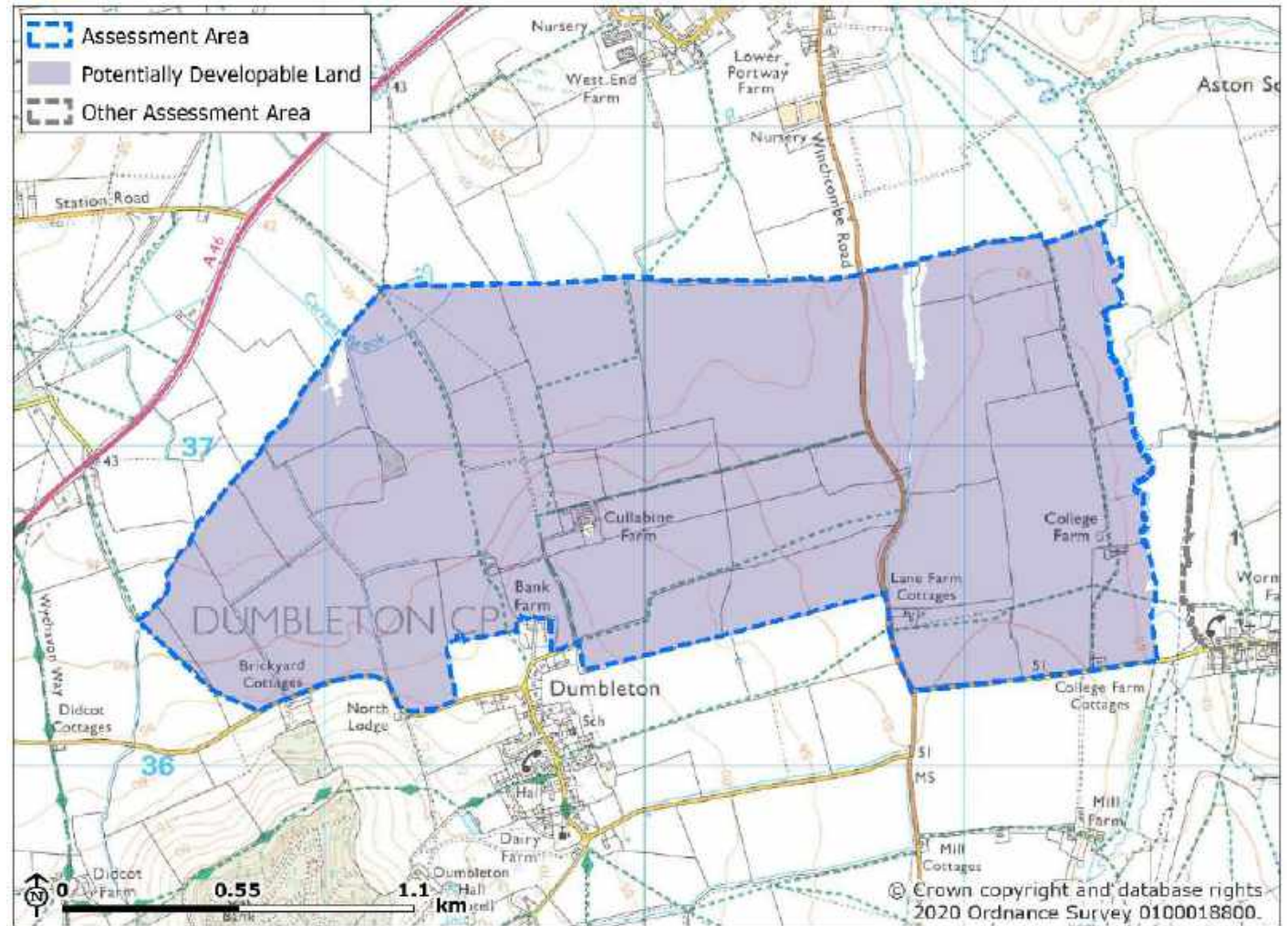
Assessment Area 2 – New Settlement: Land North of Dumbleton (B4078 corridor)

Assessment Area Ref: 2

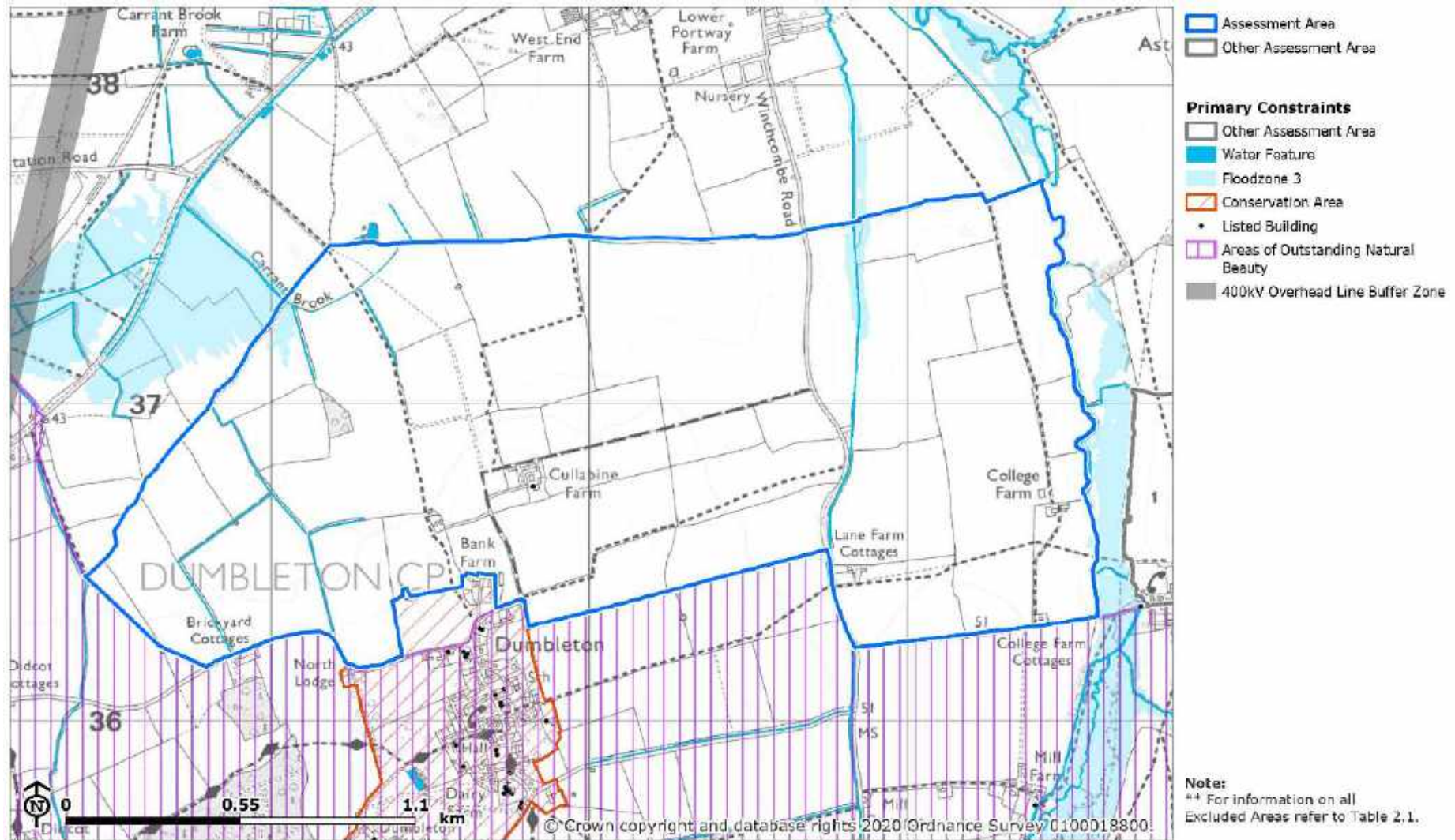
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

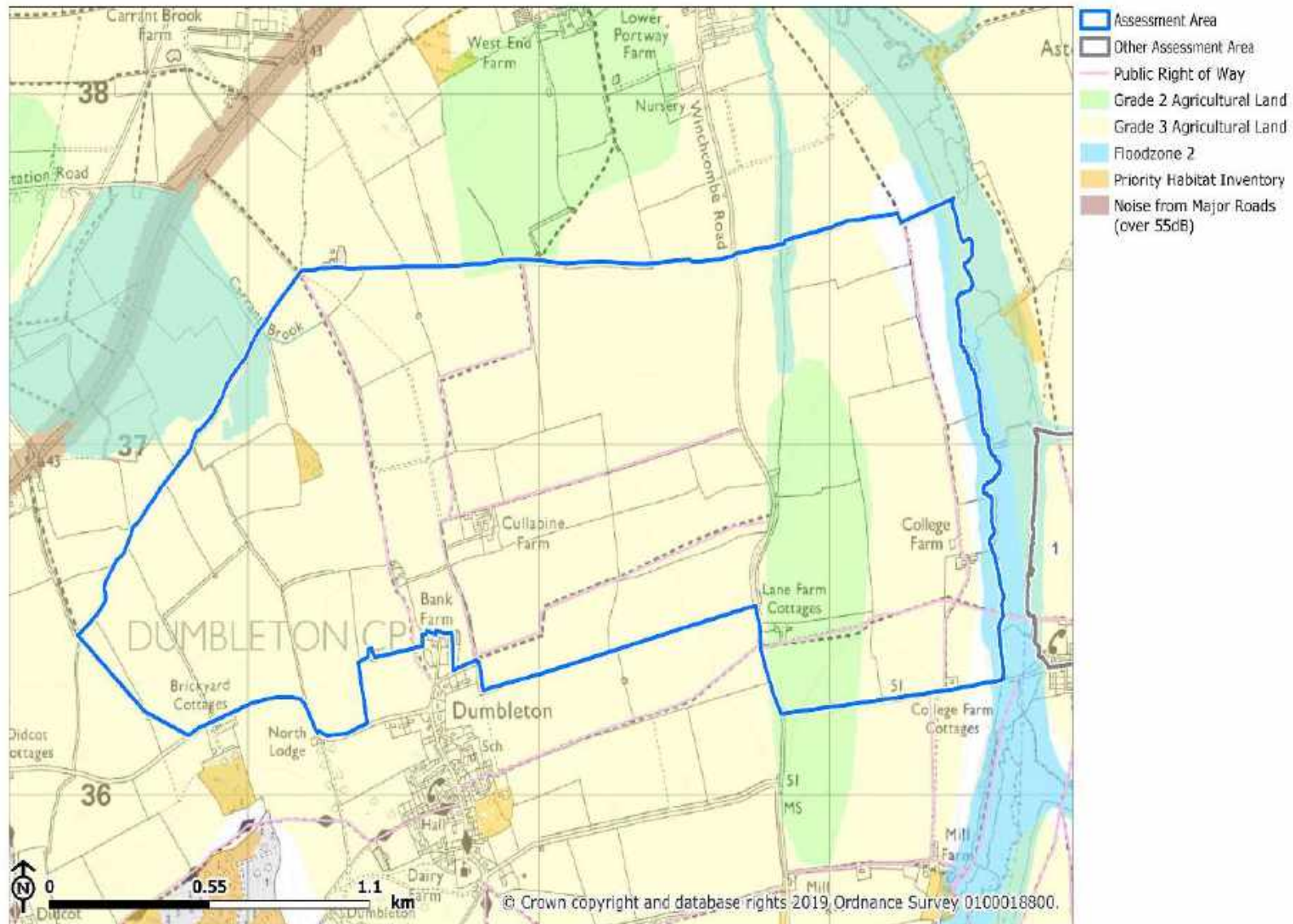
Area: ~338ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There is one grade II listed building – Cullabine Farm -within the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes many non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Multi-period site at Bank Farm, with evidence of Bronze Age, Iron Age, Roman, early medieval and medieval activity including burials and a moated site; A multi-period prehistoric to Roman site to the west of Wormington Village; Possible alignment of a Roman and possibly prehistoric route from Droitwich to Lechdale (the Salt Way); Several cropmarks including a possible barrow or hut circle; 	<p>Within the assessment area the grade II listed Cullabine Farm is a key sensitivity, but there are assets beyond the assessment area that are also highly sensitive to change. To the southwest of the assessment area is Dumbleton Conservation Area with its many listed buildings, especially the grade II* Dumbleton Hall, which is in an elevated position; to the southeast of the assessment area is the small rural village of Wormington. The rural setting of these assets is likely to contribute to the legibility of their significance, meaning that development would result in harm. The setting of Cullabine Farm and the conservation area overlap meaning that the area between them both is especially sensitive.</p> <p>In terms of non-designated assets, Bank Farm, located just north of Dumbleton Conservation Area, is an area of archaeological sensitivity with remains that may be of more than local importance. Depending on its survival the moated site could require preservation in-situ.</p> <p>With the exception of the Salt Way, the remaining known archaeology is focused to the east of the assessment area and Winchcombe Road, which follows the route of the former turnpike road. The multi-period nature of the archaeology suggests that some remains may also be of more than local</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Littleton deserted medieval settlement (DMV); - Fairly extensive ridge and furrow earthworks; - Turnpike road. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates an agricultural landscape comprised entirely of less regular enclosure that partly reflects former unenclosed cultivation patterns. This has some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • Dumbleton Conservation Area – which contains a number of listed buildings including the grade I Church of St Peter and grade II* Dumbleton Hall - is immediately adjacent to the 	<p>importance; particularly the DMV, although this has been ploughed flat.</p> <p>Given these constraints, development would probably be best placed to the northeast of the assessment area, although there would be archaeological impacts and potentially setting impacts too. Since the archaeology may be of more than local importance, a significant negative effect has been predicted. However, further assessment and fieldwork may reveal the effects to be less significant for the development of a small village at the lower end of the development range.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>southern edge of the assessment area.</p> <ul style="list-style-type: none"> The rural settlement of Wormington is east of the assessment area, containing a number of listed buildings including the grade II* Church of St Catherine. Further southeast there are two grade II* buildings: Wormington Grange and stables. There are large numbers of listed buildings at Ashton under Hill and Sedgeberrow, but it is unlikely that any have a relationship with the assessment area. To the south of the assessment area is the grade I Toddington Manor and its grade II listed RPG which includes further listed buildings. Meaningful setting change to any of these assets seems unlikely but would need to be verified in the field. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER identifies two Gloucestershire Gardens and Landscape Trust sites to the south of the assessment area. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Intervening topography and vegetation suggest that effects to the site at Wormington Grange are unlikely. However, the Dumbleton Hall Pleasure grounds extend up Dumbleton Hill, which means it may be inter-visible with the assessment area and susceptible to setting change.</p>				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No assets within 250m of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Alderton Hill Quarry) 1.7km south. Also a Key Wildlife Site and registered site of geological importance. <p>IRZs:</p> <ul style="list-style-type: none"> IRZs associated with the SSSIs of the local landscape overlaps with the assessment area but none list residential development as a land use of risk. 	<p>Any development in the south west of the assessment area should allow sufficient buffering and mitigation to ensure potential indirect impacts on the wooded priority habitats of Dumbleton Hill are avoided.</p> <p>Similar applies to the wooded riparian habitat of the River Isbourne which flows along the eastern boundary.</p>	<p>N/A</p>		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Negligible effects may occur for both applicable development size options as there is potentially sufficient space within the assessment area to accommodate these scales of development over 2km from the national designation to the south. Detailed development design and other mitigation measures may also reduce the potential for adverse effects.				
Soil Quality	<p>The vast majority of the assessment area is located on Grade 3 agricultural land. However, there is an area of Grade 2 agricultural land along the eastern side of the B4078 in the eastern half of the assessment area, amounting to approximately 31ha. There is also approximately 19ha of Grade 4 agricultural land directly adjacent to the full length of the eastern boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. Significant negative effects may occur for both applicable development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	There is potential for both applicable development sizes to avoid the loss of grade 2 agricultural land by being located in the western half of the assessment area. However, the remaining land in the assessment area is still grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.	N/A	?	?
Water Quality	The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.	N/A	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	As such, negligible effects are considered likely in relation to water quality for all applicable development sizes.				
Flood Risk	<p>The entirety of the assessment area is located on greenfield land, apart from the B4078, which passes through the eastern half of the assessment area from north to south, and sparsely distributed local roads and residential/agricultural development.</p> <p>There are small areas (<10ha) of the assessment area located within Flood Zone 2 on the western boundary in close proximity to Carrant Brook and on the eastern boundary adjacent to the River Isbourne.</p> <p>However, there is potentially sufficient space in the assessment area to accommodate all development scales outside Flood Zone 2.</p>	There is potential for both the applicable development scales to be set back from the small areas of Flood Zone 2 adjacent to the assessment area boundaries.	N/A		
Mineral Resources	<p>The assessment area is not located within any Mineral Safeguarding Areas.</p> <p>As such, negligible effects have been identified for all development sizes in relation to mineral resources.</p>	N/A	N/A		
Noise	There is no land within the assessment area boundaries located within an area recognised as having noise levels in	N/A	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>As such, effects in relation to noise have been identified as negligible for all development scales.</p>				
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A	N/A		

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity: Town/city (10,000+ dwellings)	Sensitivity: Large village (5,000-10,000 dwellings)	Sensitivity: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Rural agricultural character, with limited built development. Open and expansive due to gently undulating landform. Intervisibility with Cotswolds AONB. Pockets of BAP Priority habitat deciduous woodland. High levels of tranquillity. <p>As such, landscape sensitivity is high for a large village as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale. Landscape sensitivity is reduced to moderate-high for small village as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	N/A	H	M-H

Summary of Constraints and Landscape Sensitivity

Overall, a large proportion of the assessment area is free from the majority of constraints. Heritage assets and landscape sensitivity may however present a substantial development constraint.

Although there is sufficient land within the assessment area to accommodate a large village, the heritage assessment indicates that this scale of development may result in significant negative effects particularly with respect to Dumbleton Conservation Area adjacent to the southern boundary and a listed building in the central region. Additionally, the landscape assessment indicates that the area is highly sensitive to the large village scale of development. Development impacts overall would potentially be lowest for a small village in the northern part of the assessment area, sited to the west of the B4078 so as to avoid grade 2 agricultural land in the north east and maintaining a green buffer with the River Isbourne which flows along the eastern boundary. Land in the north is still grade 3 but it is not clear if it is grade 3a or the lower quality grade 3b.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the B4078 which links to the A46, providing links to Tewkesbury to the south west and Evesham to the north.</p> <p>There are no critical junctions (as identified in the JCS Transport Evidence base) within the immediate vicinity of the area, with the closest being the A46 Ashchurch Rd / A46 / A435 Teddington Hands Roundabout to the west. The JCS Transport Evidence Base's strategic transport modelling Do Nothing and Do Minimum tests suggest this junction is likely to function with sufficient capacity to accommodate some future development. However, the A46 continues west through Ashchurch with several junctions (including that with the M5) which are forecast operate close to, or beyond, their design capacities in 2031 so may become busier still unless high quality public transport alternatives are introduced to serve these destinations.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 224</p> <p>A very low number of workplaces (jobs) can currently be accessed by PT from the assessment area, with the area currently served by a low-frequency PT service.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 214,636</p>	

Criterion	Rationale	Score
	Access from the assessment area to employment by Car scores relatively low , based on its travel time to key urban / employment centres, although the area is well-connected to the local road network.	
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area has poor accessible to key service within the set travel times by PT.	
Private car use by commuters	<p>% Driving a Car or Van = 69%</p> <p>Car based commuter trips currently account for an average of 69% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with other assessment areas, private car still represents the primary method of travel to work and reflects the area's rural nature and low frequency PT services.</p>	
Proximity to sustainable transport networks	The assessment area is outside of any rail station's 5km catchment area and the nearby village of Dumbleton is currently served by one return bus service (one bus each way) to a local urban centre on Mondays, Thursdays and Fridays.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000- 10,000 dwellings)	Score: Small village (1,500- 5,000 dwellings)
Strategic Infrastructure	Waste water	There is limited existing sewerage infrastructure in the area. Due to the size of the receiving watercourses it is likely that there will be environmental constraints to obtaining a permit to discharge larger volumes from the works to the nearby watercourse, based on current technology.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer	N/A		
	Rail transport	Not proximate to rail stations or lines.	N/A		
	Bus transport	Within 500m of existing low frequency bus route but distant from key destinations so difficult to effectively improve quality of bus provision.	N/A		
	Cycle transport	Close to existing cycle network but too distant from key destinations to realise a significant increase in cycle trips.	N/A		

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	N/A	N/A
Viability	High	High	High	High	N/A	N/A

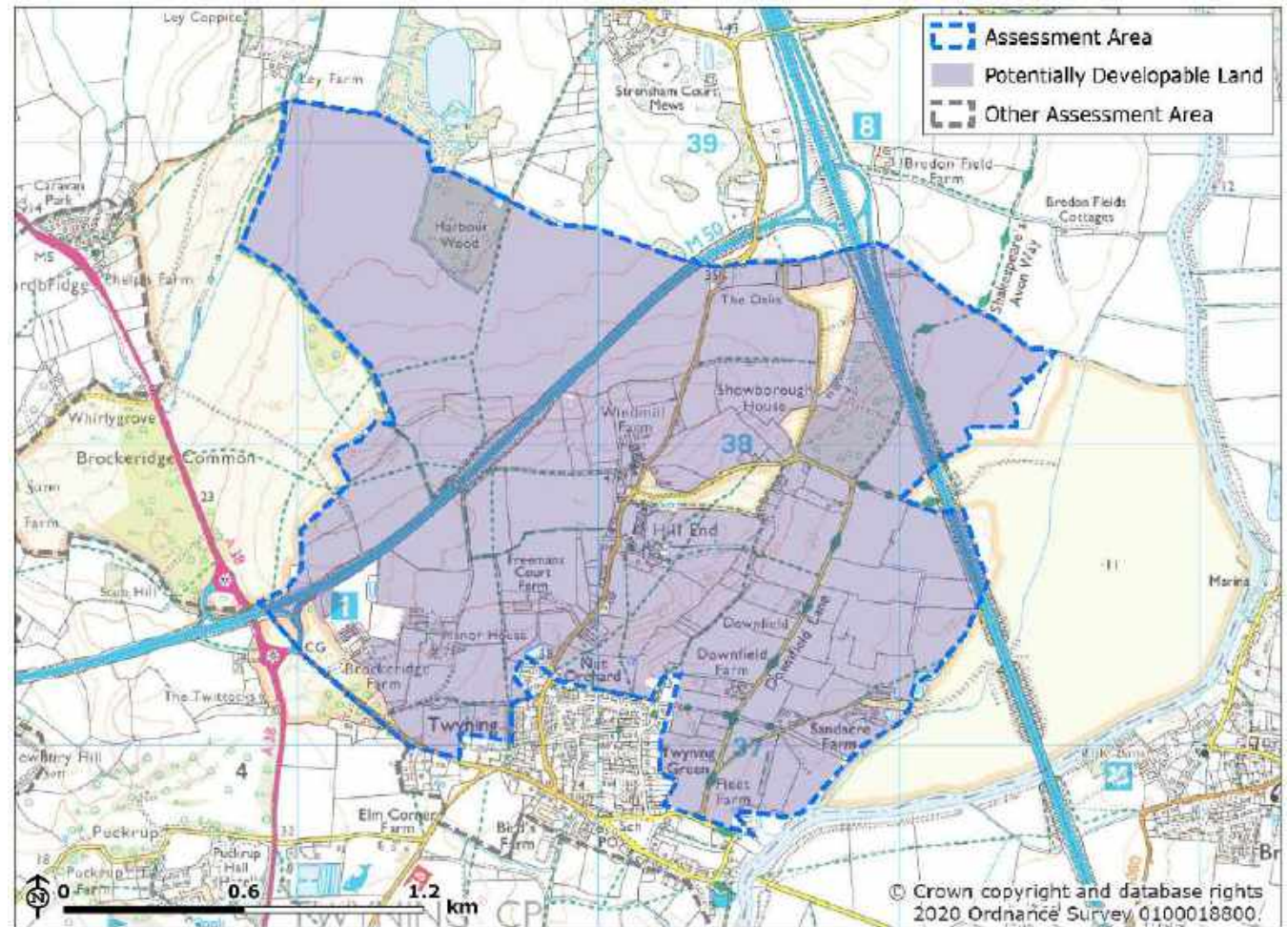
Assessment Area 3 – New Settlement: Land South West of M5, Junction 8

Assessment Area Ref: 3

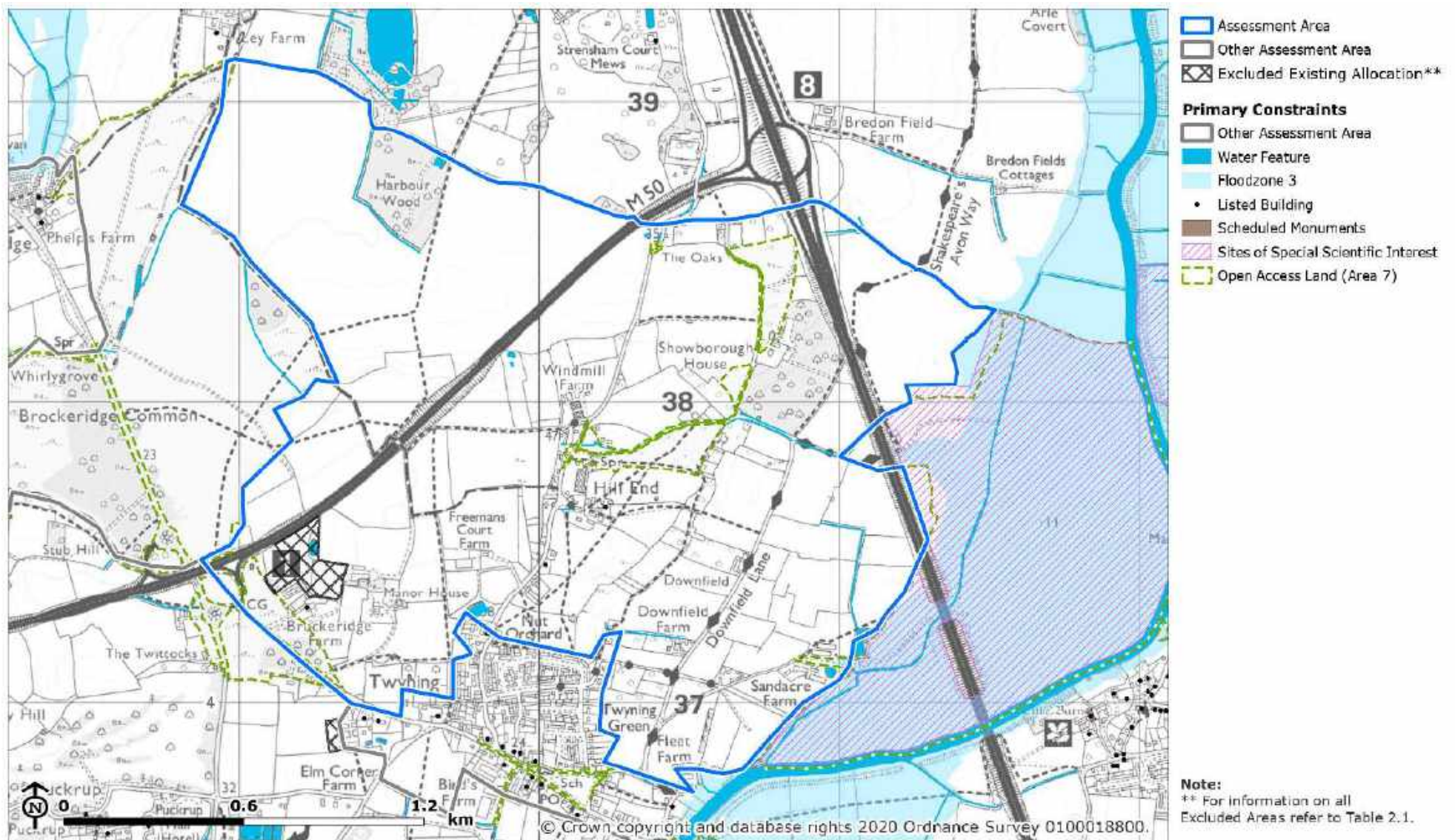
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

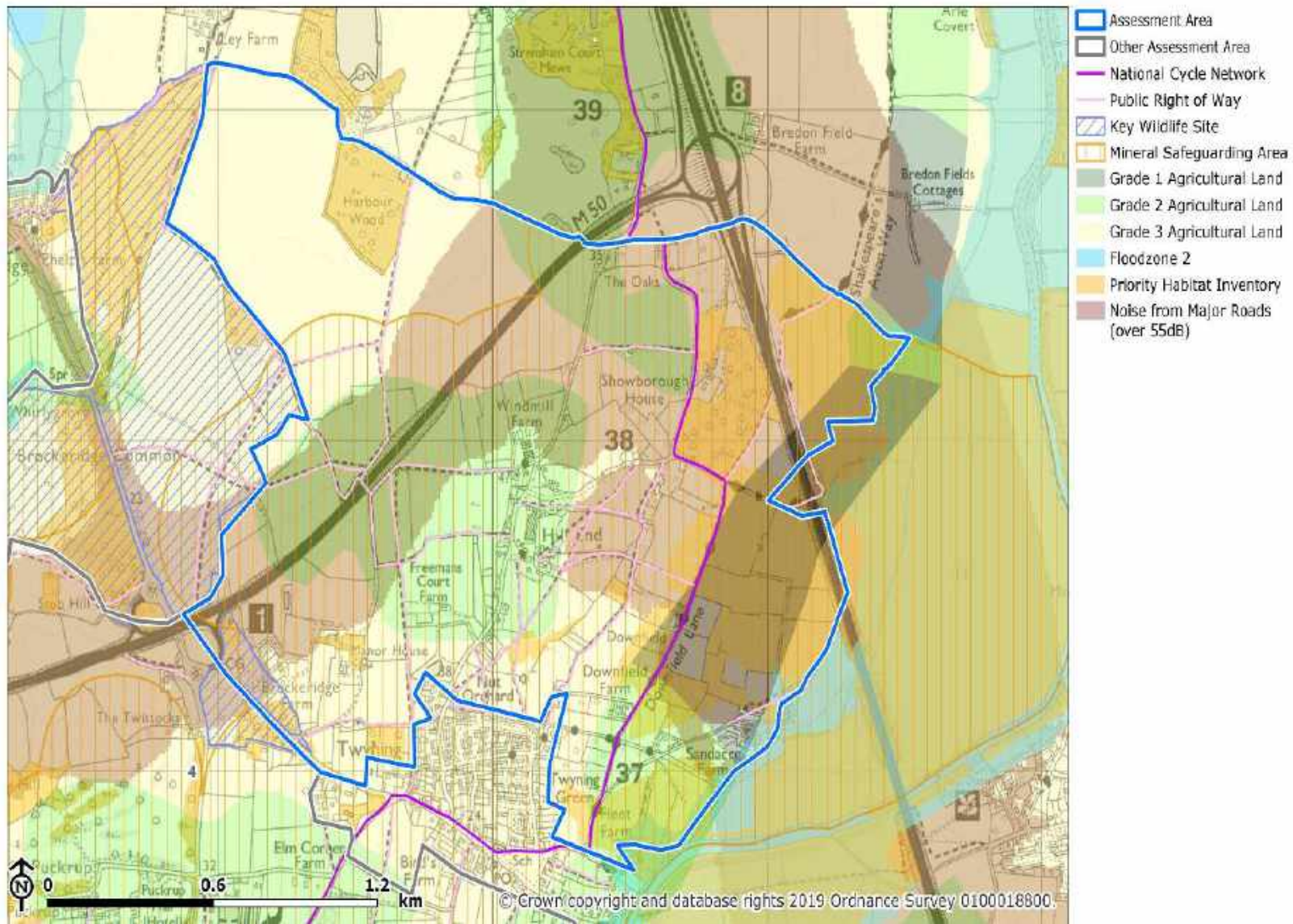
Area: ~380ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are three grade II listed buildings: two farms and a cottage. These lie to the north and east of Twyning. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> A cropmark enclosure and possible prehistoric to Roman features; Pits identified by geophysical survey; Two medieval settlements along the M50; Sites of a manor house and cider mill; Possible merestones; and A few areas of post-medieval quarrying. 	<p>The listed buildings represent the key sensitivities of the area, with the two farmhouses being susceptible to harm as a result of the loss of their agricultural setting.</p> <p>The non-designated assets appear to be of local significance meaning that impacts to them are likely to be minor negative.</p> <p>Given the sensitivities of the area development is likely to be best placed to the north of Hill End Farm. This area could probably accommodate a small village with minor negative effects.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> The HLC indicates a primarily agricultural landscape comprised mostly of less irregular, enclosures that partly reflects former unenclosed cultivation patterns. These have some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. There is also an area of early (but not ancient) woodland to the north of the assessment area and to the south, an area of former ornamental landscape. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are a large number of grade II listed buildings in 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Twyning to the south of the site but other than Fleet Farmhouse none appear to be susceptible to setting change.</p> <ul style="list-style-type: none"> There are further listed buildings at Bredon (including the grade I listed Church of St Giles), Upper Strensham and Stratford and Ripple but none appear to be particularly susceptible to setting change as a result of development of the assessment area. There is a scheduled Iron Age Hill Fort to the southeast of the assessment area on Towbury Hill. It does not appear to have a meaningful relationship with the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				
Ecological and	Assets within the assessment area:	The eastern portion of the site is particularly sensitive given the wetland habitats, and risk of impact pathways, that may be present.	N/A	*	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Geological Environment	<ul style="list-style-type: none"> Key Wildlife Site (Brockeridge Common) overlaps with the south-west of the assessment area. Floodplain grazing marsh priority habitat adjacent to the eastern boundary, which is connected to the SSSI to the east. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SSSI (Upham Meadow and Summer Leasow) adjacent to the full length of the eastern boundary. Remainder of Brockeridge Common Key Wildlife Site adjacent to the full length of the western boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Rectory Farm Meadows) 470m to the north-east. SSSI/SAC (Bredon Hill) 2km to the north-east. <p>IRZs:</p> <ul style="list-style-type: none"> The eastern half of the assessment area is located within IRZs associated with Upham Meadow and Summer Leasow SSSI to the east, which cite residential development of 100 units or more as a risk. 	<p>Accordingly, buffers around the sensitive wetland priority habitats may be appropriate to include as sensitive design principles with respect to any future development within the adjacent central portion of the assessment area.</p> <p>Green infrastructure provision, serving to avoid or minimise potential recreational impact on Key Wildlife Sites and/or priority habitats, should seek to optimise connectivity and diversification of the habitat mosaic; woodland copses, orchards, hedgerows, grasslands and ponds, for example, would all be appropriate to the local landscape character.</p> <p>A small village or large village at the lower end of the spectrum could potentially be accommodated in the western half or central region of the assessment area resulting in reduced minor negative effects compared to a larger scale development.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Minor negative effects may occur for a both development scales as there is potential for them to avoid encroaching on the local designation to the west, but development would still fall within 2km of national designations.</p>				
Soil Quality	<p>The largest proportion of the assessment area is grade 3 agricultural land. However, there are four areas of grade 2 land in the central and eastern region of the assessment area, equating to approximately 110ha in total. In addition, there is approximately 36ha of grade 1 agricultural land adjacent to the eastern boundary of the assessment area.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for both applicable development sizes. The effects are uncertain for a small village, however, as there is potential for this scale of development to be located on solely grade 3 land – it is not clear from available data if this is grade 3a or the lower quality grade 3b.</p>	<p>There is potential for a small village to avoid the loss of grade 2 agricultural land by being located in the north-west of the assessment area. However, this area is still grade 3 and therefore development at this location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or the lower quality grade 3b.</p>	N/A		?
Water Quality		N/A	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>The assessment area is not located within any drinking water safeguarding zones or source protection zones.</p> <p>As such, negligible effects have been identified for both applicable development sizes in relation to water quality.</p>				
Flood Risk	<p>The majority of the assessment area is greenfield. The M50 bisects the western half of the assessment area from north to south and a small settlement (Hill End) is located in the central region of the assessment area. There are also several local roads and areas of agricultural development in the eastern half of the assessment area.</p> <p>There is approximately 6ha of land on the south-eastern boundary of the assessment area that is located within Flood Zone 2.</p> <p>There is potentially sufficient space to accommodate both applicable scales of development outside Flood Zone 2. As such, negligible effects are expected in relation to flood risk.</p>	<p>There is potentially sufficient space for both applicable development sizes to be located in the western half of the assessment area, outside Flood Zone 2.</p>	N/A		
Mineral Resources		<p>There is potentially sufficient space in the north-western part of the assessment area to accommodate a small village outside MSAs,</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>The majority of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur in relation to mineral resources for a large village. Negligible effects may occur for a small village as there is potentially sufficient space to accommodate this scale of development outside MSAs.</p>	<p>which would avoid the sterilisation of mineral resources.</p> <p>It may also be possible to accommodate larger development scales without the sterilisation of mineral resources by extracting minerals prior to development.</p>			
Noise	<p>There is approximately 100ha in the central region of the assessment area that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M50 passing through the assessment area from northeast to southwest. There is approximately a further 90ha adjacent to the eastern boundary that is also within a noisy area due to the presence of the M5.</p> <p>Significant negative effects may occur under for a large village as it is likely that this scale of development could not be accommodated without encroaching into the noisy area. Negligible effects may occur for a small village as there is potentially sufficient space to</p>	<p>There is potentially sufficient space in the northwest of the assessment area to accommodate a small village outside of Strategic Noise Buffers.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	accommodate this scale of development outside the noisy area.				
Odour	No odour-related spatial policies apply to the assessment area.	N/A	N/A		
	As such, negligible effects have been identified in relation to odour for all applicable development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key sensitivities include:</p> <ul style="list-style-type: none"> • Steep valley landform of the River Severn to the west and the River Avon to the east creating a strong sense of place. • Strong rural character with small nucleated villages. • Shakespeare's Avon Way long distance recreational route. • Long distance views. <p>As such, landscape sensitivity is high for a large village as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale. Landscape sensitivity is reduced to moderate-high for a small village as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	N/A	H	M-H

Summary of Constraints and Landscape Sensitivity

Overall, there is almost no land within the assessment area that is free from multiple constraints.

The central region and eastern half of the assessment area is particularly constrained by grade 1 and grade 2 agricultural land, listed buildings, and a SSSI to the east; a noisy area and MSA are also present. Although mitigation may be possible in relation to noise and mineral resources, development of a large village in this area would likely result in significant negative effects on multiple constraints. It may, however, be possible to accommodate a small village to the northwest of the assessment area whilst avoiding a number of constraints. This area is adjacent to a Key Wildlife Site outside the assessment area boundaries and is comprised of grade 3 agricultural land, although it is not clear if it is grade 3a or the lower quality grade 3b. In terms of landscape, the small village scale may result in reduced adverse impacts on the characters and qualities of the landscape compared to a larger development scale. However, landscape sensitivity is still considered to be moderate-high in the small village scenario.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to M5 Junction 8 via the M50 Junction 1, which is in close proximity to the north east of the assessment area, and provides direct links to Worcester to the north and Tewkesbury/Ashchurch to the south. The A38 runs along the western boundary of the assessment area and provides access into Tewkesbury and Ashchurch.</p> <p>Major roads and critical junctions (including M50 Junction 1 and M5 Junction 8) in the vicinity of the assessment area were not assessed by the JCS Transport Evidence Base strategic transport modelling work. As such, it is not possible to determine the forecast extent of strategic highway network capacity in these locations in the future.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 9,598</p> <p>A low number of workplaces (jobs) can currently be accessed by public transport from the assessment area, which is currently only served by a low-frequency bus service.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 212,432</p> <p>Access from the assessment area to employment by car scores relatively low when compared to other development areas, due to its distance (and travel time) from key employment / urban centres.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area is accessible to some key services (education and healthcare) within between 0-20 and 20-40 mins travel time by public transport services.	
Private car use by commuters	% Driving a Car or Van = 74% Car based commuter trips currently account for an average of 74% of journeys in LSOAs covered by the assessment area, which is likely due to the area's proximity to the strategic road network, low frequency bus service and distance to the nearest rail station (Ashchurch for Tewkesbury).	
Proximity to sustainable transport networks	The area is partially within the 5km catchment of Ashchurch for Tewkesbury Rail Station, which is served by low-frequency rail and bus services. A National Cycle Route current runs through the centre of the area, providing active travel links to Tewkesbury and Worcester, with opportunities to enhance links as part of any future development scheme.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	There is limited existing sewerage infrastructure in the area. Due to the size of the receiving watercourses it is likely that there will be environmental constraints to obtaining a permit to discharge larger volumes from the works to the nearby watercourse, based on current technology.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to	N/A		

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
		10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	Load is acceptable	N/A		
	Rail transport	Within 5km of Ashchurch mainline station although presently no direct bus service to it. Provision of a bus link could result in higher levels of rail patronage.	N/A		
	Bus transport	Within 500m of existing low frequency bus route and close enough to Tewkesbury to mean that improvements in frequency could result in higher levels of bus patronage. Joint development with assessment area 4 could increase prospects of securing investment required to deliver bus improvements.	N/A		
	Cycle transport	On existing cycle network and close enough to Tewkesbury to mean that improvements could result in reasonably high numbers of cycle trips. Joint development with assessment area 4 could increase prospects of securing investment required to deliver cycle improvements.	N/A		

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	N/A	N/A
Viability	High	High	High	High	N/A	N/A

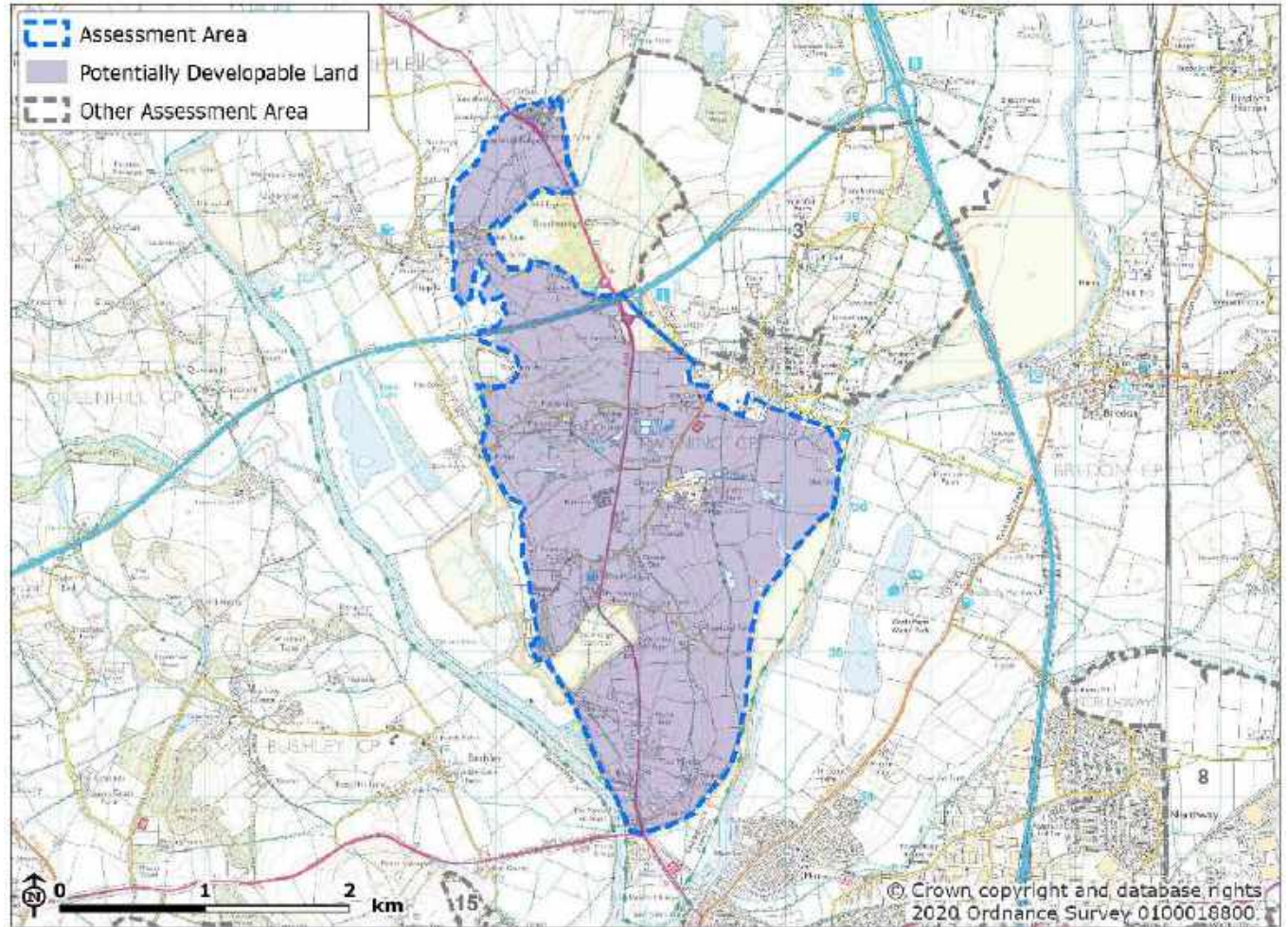
Assessment Area 4 – New Settlement: Land North of Tewkesbury

Assessment Area Ref: 4

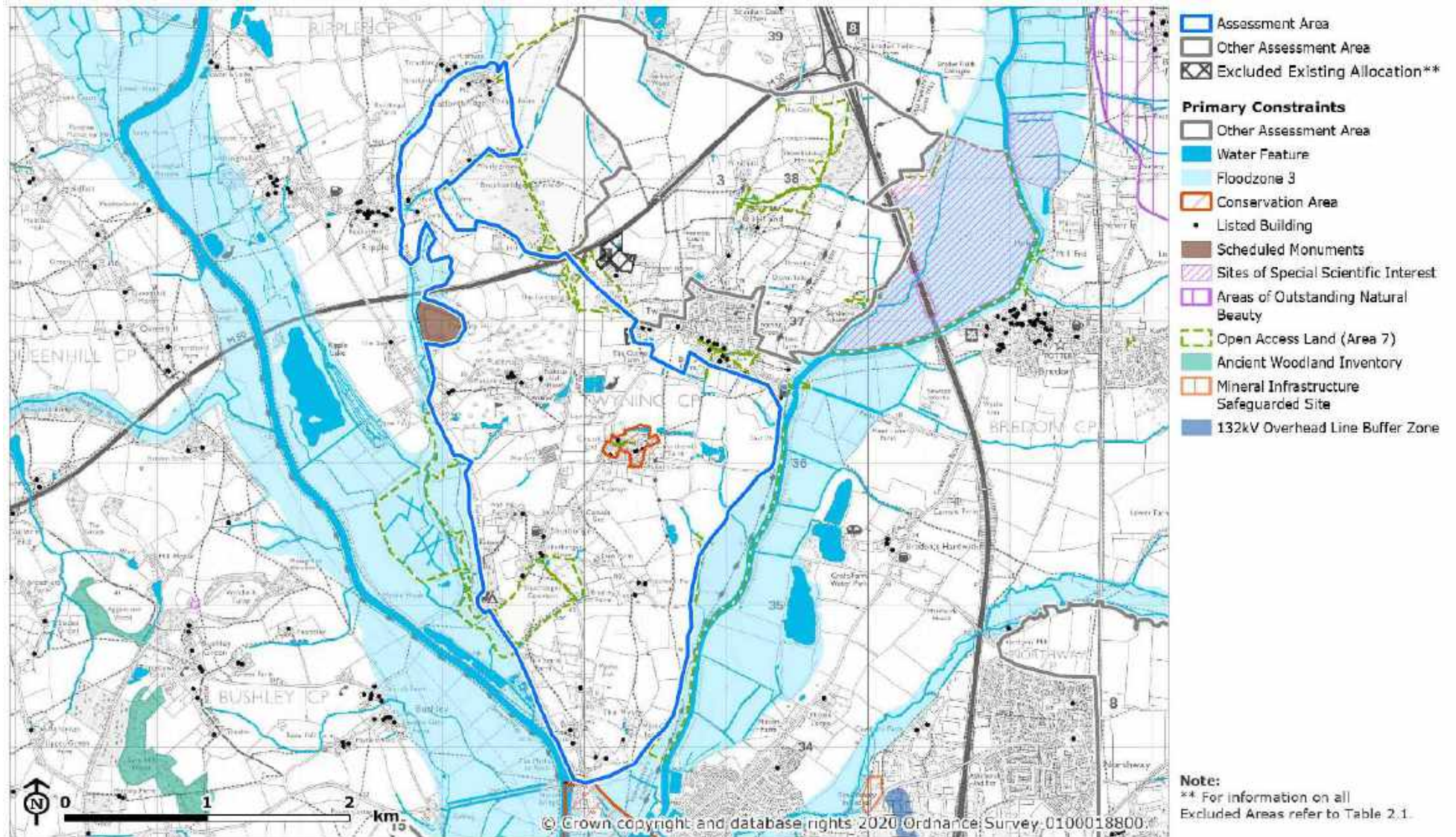
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

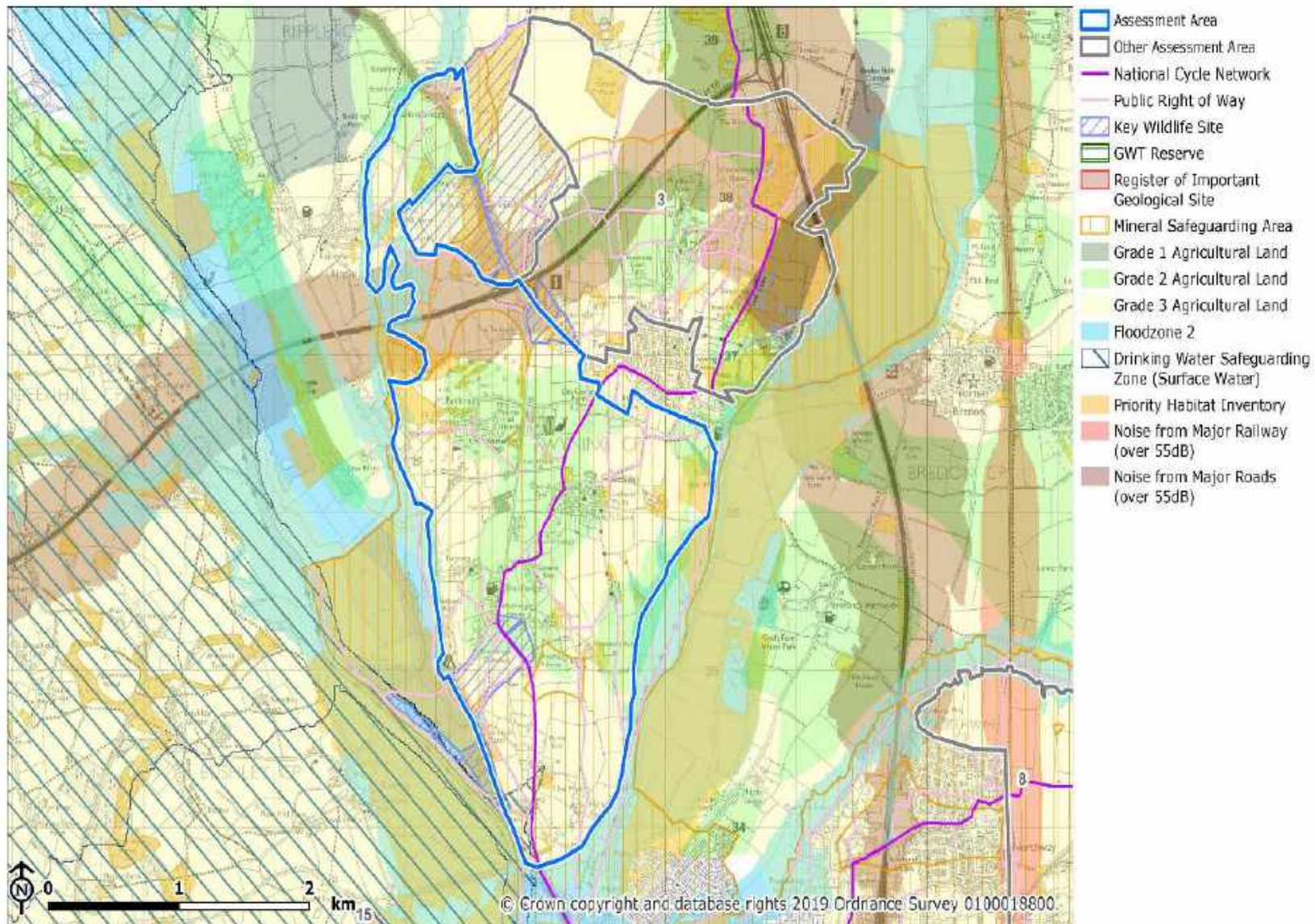
Area: ~612ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 34 listed buildings within the assessment area. These are all grade II save for the grade II* listed King John’s Castle, which lies to the south amongst other listed buildings also associated with Mythe Court, and Church of St Mary Magdalene in Churchend. The other listed buildings include farmhouses, cottages, agricultural buildings, detached houses, two country houses and associated estate buildings, a converted water tower and a mile stone. Churchend Conservation Area is within and wholly surrounded by the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes many non-designated assets within the assessment area. These include, but are not limited to: 	<p>The assessment area includes a large number of high value assets – Church End Conservation Area and the listed buildings - that would be sensitive to change. These are widely distributed with clusters at The Mythe; Shuthonger; Church End and Puckrup Towbury and Stratford Bridge. In conjunction with the spatial distribution of designated assets sensitive to setting change beyond the assessment area (e.g. at Towbury, Ripple, Twyning and Tewkesbury), there are no areas large enough to accommodate a new settlement of any of the stated sizes without giving rise to significant negative effects.</p> <p>In addition to the potential for effects to the designated assets there are many non-designated assets that would be susceptible to harm. These include remains that may be of more than local significance, for example, the undated enclosure that lies adjacent to Towbury could have some historical/ functional relationship with it. The significance of the early medieval minster at Twyning and the motte and bailey may likewise be more than local. As such, there is the potential for significant negative effects in relation to some of the non-designated archaeology.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • Undated rectangular enclosures and linear features; • A possible prehistoric or Roman settlement near Elm Corner Farm; • Site of an early medieval minster at Twyning; • Medieval settlements at Ripple, Twyning and to the north of Mythe and west of Shuthonger; • A medieval motte and bailey near Mythe; • A medieval road between Ripple and Tewkesbury; • Site of a medieval chapel and burials near Mythe; • Fairly extensive ridge and furrow earthworks; • An extant Roman Catholic Church and the sites of a number of post-medieval buildings; and • Post-medieval quarries. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape comprised of 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>some unenclosed pasture and a mix of irregular, less irregular and less regular enclosures. Much of this partly reflects former unenclosed cultivation patterns, although some areas have been subject to boundary reorganisation. Those that remain intact have some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <ul style="list-style-type: none"> Other landscape elements include an active recreational site (golf course). <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> Tewkesbury Conservation Area immediately abuts the southern edge of the assessment area. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> The western edge of the assessment area partially surrounds a scheduled Iron Age Hillfort on Towbury Hill. There are a large number of listed buildings in the wider vicinity of the assessment area. Those that may be particularly susceptible to setting change include the grade I Church of St Mary, Ripple; a series of grade II listed farmhouses and agricultural buildings in Twyning. <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being particularly susceptible to setting change.</p>				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Key Wildlife Site (Shuthonger Common) in the south-west of the assessment area. Key Wildlife Site (Mythe Railway) on the on the south-western boundary. Also a GWT reserve. Key Wildlife Site (Brockeridge Common) overlapping the north-eastern boundary of the assessment area. 	<p>In accordance with the mitigation hierarchy, application of buffers to protect wetland habitats associated with the Severn in the south west of the site, and the Avon in the east, may be appropriate to avoid potential impact.</p> <p>Development and associated access infrastructure should seek to avoid fragmentation of the hedgerow / woodland network within the assessment area.</p>	*	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> Register of Important Geological Site (The Red Cliff, Mythe Hill) on the southern boundary of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Key Wildlife Site (Mythe Composite Site) adjacent to the south-western boundary. Remainder of Brockeridge Common Key Wildlife Site adjacent to the north-eastern boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Upham Meadow and Summer Leasow) 600m to the east. SSSI (Severn Ham) 680m to the south. SSSI (Upton Ham) 1.8km to the north-west. <p>IRZs:</p> <ul style="list-style-type: none"> There are areas in the south and east of the assessment area that are located within IRZs associated with Severn Ham SSSI and Upham Meadow and Summer Leasow SSSI respectively, which flag residential development of 100 units or more as a risk. 	<p>Opportunity to diversify the intervening grassland mosaic should be explored, reflecting the soil types present.</p> <p>There may be opportunities to accommodate a small settlement over 250m from local designations and over 2km from national designations in the south to the east of Shuthonger in the southern half of the assessment area. There may also be potential to accommodate a larger development scale in this area, but it would likely fall within 2km of the Severn Ham SSSI to the south.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Minor negative effects may occur under the large and medium development size options as there is potential to accommodate these scales of development without intersecting with local designations, but they would still fall within 2km of national designations. Negligible effects may occur under the smallest development size option as this scale of development could potentially be accommodated over 250m from local designations and over 2km from national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>There is approximately 160ha of grade 2 agricultural land in the central region of the assessment area and approximately a further 40ha of grade 2 land on the eastern boundary. The majority of the remaining land in the assessment area is grade 3 agricultural land. There are small pockets (<5ha) of grade 4 agricultural land adjacent to the western and eastern boundaries.</p> <p>There is potential for development to result in the loss of high quality agricultural land. Significant negative effects may occur in relation to soil quality under all development sizes. The effects are uncertain under the smallest development size option as this scale of</p>	<p>There is potential for a small village to avoid the loss of grade 2 agricultural land by being located in the south or north-west of the assessment area. However, these areas are still comprised of grade 3 agricultural land and therefore development at these locations still has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or the lower quality grade 3b.</p>			?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	development could potentially be accommodated on just grade 3 land, but it is not clear if it is grade 3a or the lower quality grade 3b.				
Water Quality	<p>There is approximately 8ha of land on the south-western boundary of the assessment area that is located within a drinking water safeguarding zone.</p> <p>However, there is potentially sufficient space to accommodate all development size options outside of the drinking water safeguarding zone. As such, negligible effects may occur in relation to water quality.</p>	There is potential for all development size options to be located set back from the south-west boundary of the assessment area.			
Flood Risk	<p>The majority of the assessment area is greenfield. There are three small settlements (Church End, Shuthonger and Puckrup) located in the central region of the assessment area as well as the settlement of Stratfordbridge located in the northernmost region. The A38 bisects the assessment area from north to south and the M50 passes through the northern half of the area. There are also smaller local roads and areas of agricultural development in the central region of the assessment area.</p> <p>There are small (<20ha) areas of developable land adjacent to the north-western boundary of the assessment area that are located within Flood Zone</p>	There is potential for the small and medium development size options to avoid Flood Zone 2 by being set back from the western and eastern boundaries. It is likely that the largest settlement size option would have to be delivered as a broken-up development to avoid areas of Flood Zone 2.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>2. In addition, there are further small areas (<10ha) of land in the Flood Zone 2 on the western and eastern boundaries.</p> <p>However, there is sufficient space within the assessment area to accommodate all development scales outside of Flood Zone 2. As such, negligible effects may occur in relation to flood risk.</p>				
Mineral Resources	<p>Almost the entirety of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur for all development sizes in relation to mineral resources.</p>	<p>There are two pockets of land that are not located within a MSA in the south and north of the assessment area. However, neither of these are of a sufficient size to accommodate a new settlement.</p> <p>It may be possible to accommodate development without the sterilisation of mineral resources if minerals are extracted prior to development.</p>	*	*	*
Noise	<p>There is approximately 50ha of land in the north-west of the assessment area that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the M50 passing through the assessment area. In addition, there is a further smaller area (<10ha) of land in the northernmost part of the assessment area that is also located within a noisy area due to the presence of the A38.</p>	<p>There is sufficient space in the southern half of the assessment area to accommodate all development scales outside of the noisy areas in the north.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	However, there is sufficient space within the assessment area to accommodate all development scales outside of the noisy area. As such, negligible effects may occur in relation to noise.				
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Steep valley landform of the River Severn to the west and the River Avon to the east creating a strong sense of place. Setting to scheduled monument, Conservation Areas and listed buildings. Large areas of adjacent common land. Long distance views. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales.</p>	H	H	M-H

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
Landscape sensitivity is reduced to moderate-high for the small village scenario as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.			

Summary of Constraints and Landscape Sensitivity

Overall, there is little potential within the assessment area to accommodate a new settlement without giving rise to significant negative effects on environmental constraints. In particular, there are multiple heritage assets within settlements throughout the area as well as large areas of grade 2 agricultural land. Although there is sufficient land that is not grade 2 or within close proximity of ecological designations in the southernmost part of the assessment area to accommodate a small village, there are a number of listed buildings in the area and Tewkesbury Conservation Area lies to the immediate south. Almost the entirety of the area is also within a Mineral Safeguarding Area, although it may be possible to mitigate adverse impacts on mineral resources through extraction prior to development. In terms of landscape, development has the potential to result significant adverse impacts on the character and quality of the landscape. Impacts may be reduced at the small village scale, but would still be moderate-high.

Accessibility

Criterion	Rationale for Score	Score
Capacity of the road network	<p>The assessment area is connected to M5 Junction 8 via the M50 Junction 1, which is located to the north of the assessment area, and provides direct links to Worcester to the north and Tewkesbury/Ashchurch to the south. The A38 runs through the centre of the assessment area and provides access into Tewkesbury and Ashchurch.</p> <p>Major roads and critical junctions (including M50 Junction 1 and M5 Junction 8) in the vicinity of the assessment area were not assessed by the JCS Transport Evidence Base strategic transport modelling work. As such, it is not possible to determine the forecast extent of strategic highway network capacity in these locations in the future.</p>	

Criterion	Rationale for Score	Score
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 849</p> <p>A low number of workplaces / employment areas can currently be accessed by public transport from the assessment area, with a low frequency bus service currently serving the assessment area but travel times to key employment areas exceeding 45mins.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 217,597</p> <p>Access from the assessment area to employment by Car scores relatively low, which is likely attributed to travel times to key employment areas being over 30 mins.</p>	
Access to other key services and facilities	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to educational and healthcare sites between 0-20 and 20-40 mins travel time by public transport services, whilst access to key urban centres takes over 40 mins travel time.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 74%</p> <p>Car based commuter trips currently account for an average 74% of journeys in LSOAs covered by the assessment area, which is likely due to the assessment area's proximity to the strategic road network and low frequency bus service and distance to the nearest rail station (Ashchurch for Tewkesbury).</p>	
Proximity to sustainable transport networks	<p>The area is partially within the 5km catchment of Ashchurch for Tewkesbury Rail Station, which is served by low-frequency rail and bus services. A National Cycle Route current runs through the centre of the area, providing walking and cycling links to Tewkesbury and Worcester, with scope to enhance these as part of any future development proposal.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	There is existing sewerage infrastructure in this area although significant investment would be required. Environmental permit increases are likely to be obtainable. Water supply network exists in the area and issues are not expected.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable			
	Rail transport	Within 5km of Ashchurch mainline station although presently no direct bus service to it. Provision of a bus link could result in higher levels of rail patronage.			
	Bus transport	Within 500m of existing low frequency bus route and close enough to Tewkesbury to mean that improvements in frequency could result in higher levels of bus patronage (depending on potential to increase capacity of highway network). Joint development with assessment area 3 could increase prospects of securing investment required to deliver bus improvements.			

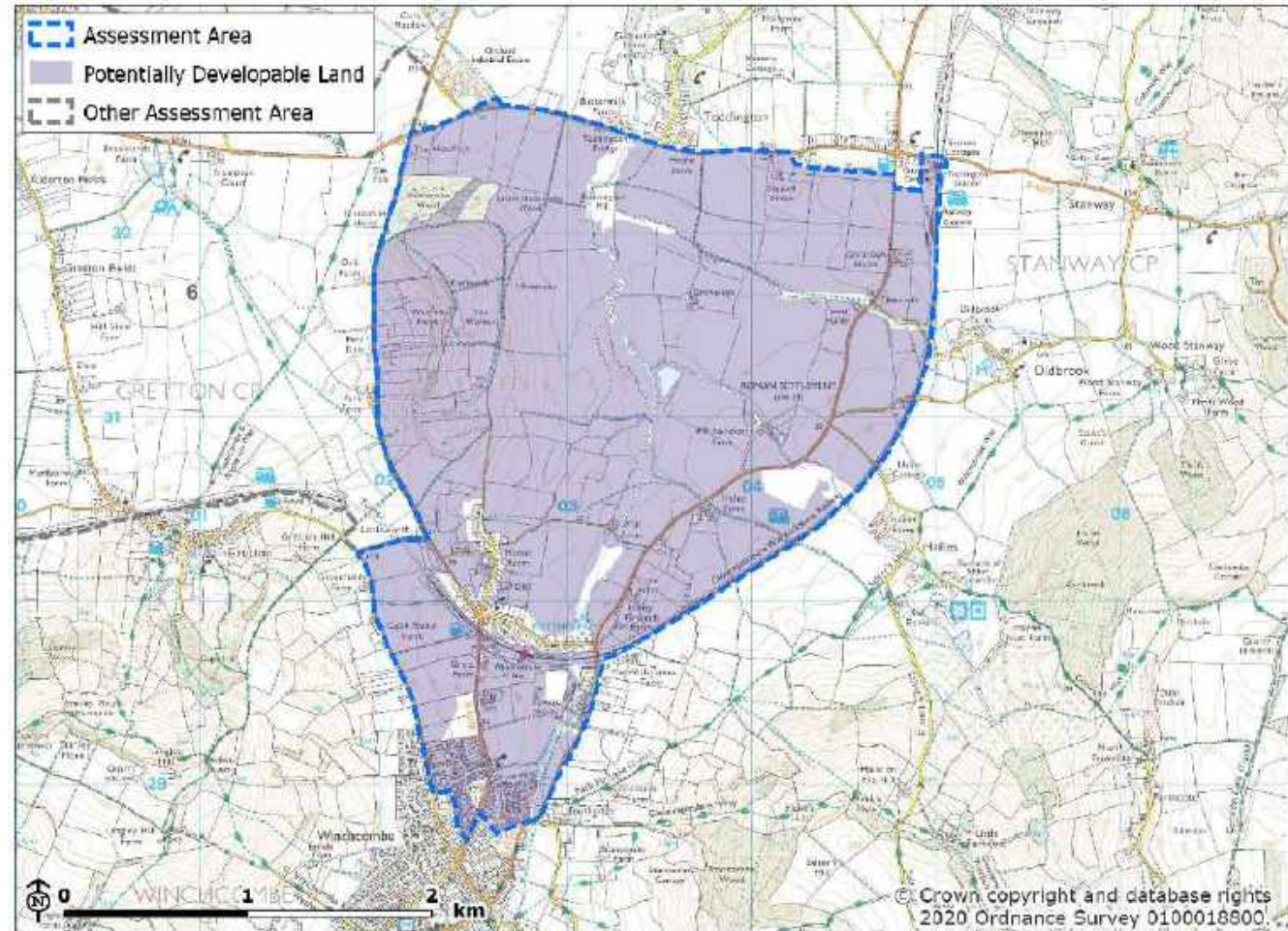
Assessment Area 5 – New Settlement: Land north of Winchcombe

Assessment Area Ref: 5

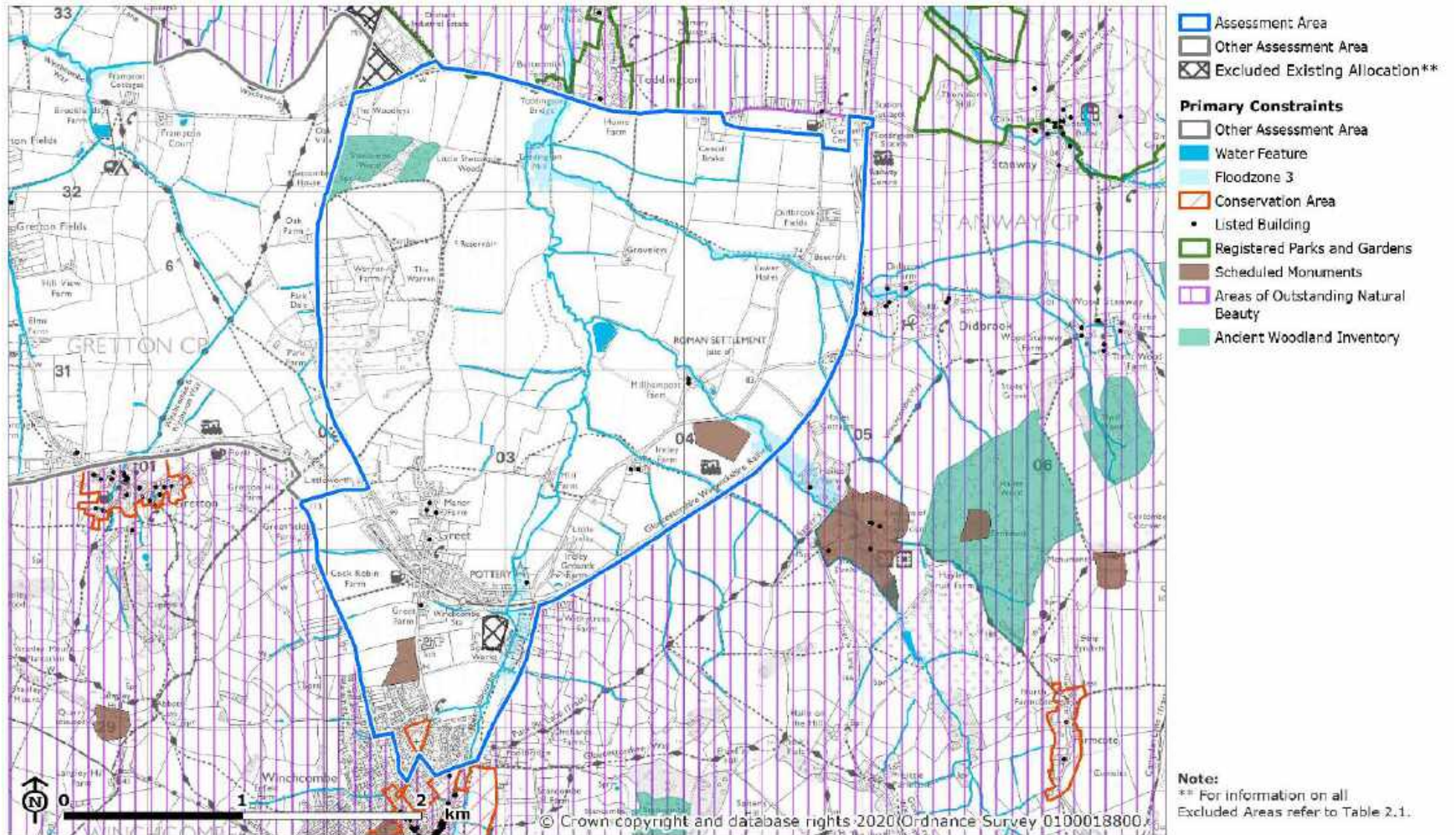
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

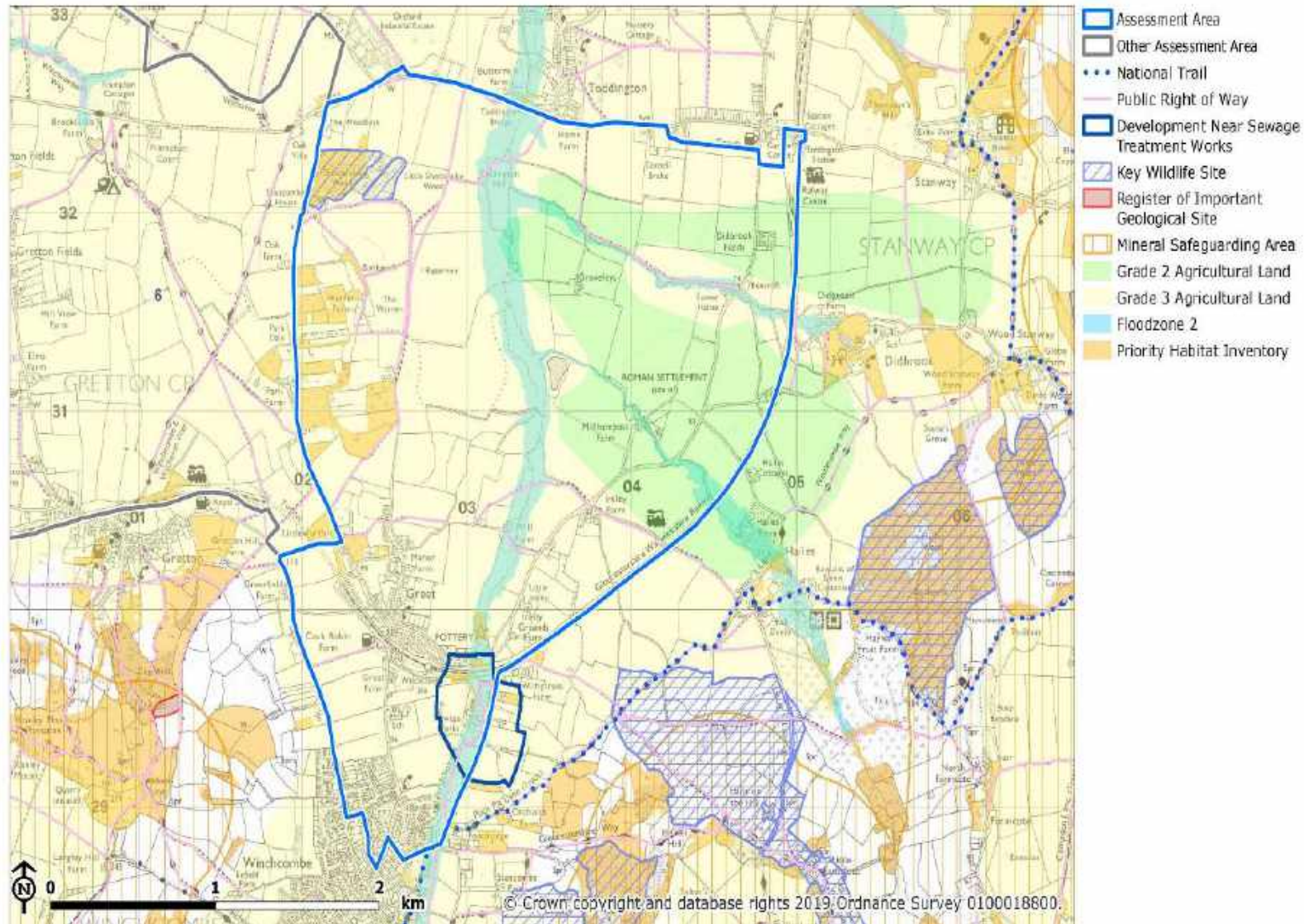
Area: ~804ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The assessment area contains 10 grade II listed buildings in and around Greet. Except for two Dovecotes and a bottle kiln, they are all farmhouses and cottages. There are two scheduled monuments – both Roman sites – within the southern half of the assessment area at Milhampost and Winchcombe. The grade II Toddington Manor registered park and garden (RPG) directly abuts – and is slightly overlapped by – the northern edge of the assessment area. The southern end of the assessment area overlaps with and is adjacent to Winchcombe Conservation Area (albeit that this is because this part of the 	<p>The southern part of the assessment area (to Milhampost) is particularly sensitive due to the presence of the listed buildings, two scheduled monuments and Winchcombe Conservation Area. Gretton Conservation Area and the scheduled monuments at Hailes also lie adjacent to this area.</p> <p>The northern edge of the assessment area is also highly sensitive due to the presence of Toddington RPG and the listed buildings within and around it. Much of the assessment area was formerly part of Toddington Park, and it remains partially legible as such. Development of this area could affect not just this non-designated area but also the significance of the RPG.</p> <p>The assessment area also has three particularly sensitive areas of archaeological interest: 1) the prehistoric to Roman settlements in Greet; 2) the prehistoric to Roman settlement near Millhampost; and 3) the prehistoric/ undated settlement near Warren Farm. All of these areas may contain assets of more than local significance (e.g. regional or national importance), with the first two including remains that may relate to the nearby scheduled Roman sites, and the last site including a possible hillfort.</p> <p>In addition to being particularly susceptible to physical change the extant non-designated buildings (e.g. Warren Farm, a Corn Mill at Toddington and a WWII pillbox in Greet) would</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>assessment area has already been developed).</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER indicates that there are many non-designated assets within the assessment area. These include, but are not limited to: <ul style="list-style-type: none"> - A Bronze Age roundhouse and several pits near the scheduled Roman site at Winchcombe; - Bronze Age pits east of Warren Farm; - A possible Iron Age hill fort and area of ditch and enclosure marks north of Warren Farm; - There are two areas of undated enclosure/ linear features east of Warren Farm; - Undated earthwork ditches and banks east of Warren Farm; - Multiple areas of cropmarks at Millhampost indicating prehistoric and Roman settlement, which may be associated with the nearby 	<p>be susceptible to setting change. As would the hillfort near Warren Farm, which may be inter-visible with scheduled hillforts to beyond the study area to the east and west.</p> <p>Given the sensitivities of the assessment area it is likely that all of the new settlement options would give rise to significant negative effects. However, there may be some potential for a very small village (e.g. up to ~2000 dwellings) around the pond west of Millhampost Farm to avoid significant negative effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>scheduled Roman settlement;</p> <ul style="list-style-type: none"> - Investigations either side of Greet Road, near the scheduled Roman site have revealed Mesolithic and Neolithic pits, Iron Age enclosures, as well as Roman and undated features; - The Salt Way a Roman road, and possibly prehistoric route from Droitwich to Lechlade; - Medieval site near Millhampost, now destroyed; - Medieval or later bank near Millpost Farm; - Medieval chapel site, New Town; - Field name evidence for a possible gallows and burial site in New Town; - Extensive ridge and furrow earthworks; - Site of a signal box and corn mill; - Extant buildings include Warren Farm (arts and craft buildings once 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>belonging to the Toddington Estate), a Corn Mill at Toddington and a WWII pillbox in Greet;</p> <ul style="list-style-type: none"> - Winchcombe District and Tewkesbury turnpike roads; - Post-medieval features south of Winchcombe School; - Former GWR line now the GWSR heritage railway; - Post-medieval quarries; - Earthworks interpreted as the remains of a WWII searchlight battery in Greet. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape comprising a mix of less irregular and less regular enclosures, as well as regular enclosures and woodlands cleared in the post-medieval period. The less irregular and less regular enclosures partly reflect former unenclosed cultivation patterns and so could include hedgerows that qualify as important under the archaeology 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>and history criteria of The Hedgerow Regulations 1997.</p> <ul style="list-style-type: none"> The HLC also indicates two areas of former post-medieval ornamental landscape. In actual fact both are part of a much larger extension of Toddington RPG that continued south, almost to Greet. Some parkland planting remains. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> Toddington RPG contains several listed buildings including the grade I Toddington Manor and the grade II* gatehouse, which is also scheduled. Approx. 250m northeast of the assessment area is the grade I Stanway House RPG. It includes several listed buildings including the grade I listed Stanway House, wall and gates and gatehouse, as well as a grade II* and scheduled tithe barn. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Meaningful setting change is unlikely given the intervening vegetation/ development.</p> <ul style="list-style-type: none"> To the east there are several designated assets around Hailes, including the grade I and scheduled Hailes Abbey and the scheduled hill fort in Hailes Wood. Whilst the abbey is unlikely to have a meaningful relationship with the assessment area, there are several other scheduled hill forts to that west of the site and inter-visibility may be key to their significance. Gretton Conservation Area also lies to the west of the assessment area. Again, meaningful setting change is unlikely. <p><i>Non-designated</i></p> <p>To the immediate east of Park Farm, which was formerly part of the Toddington Estate.</p>				
Ecological and	Assets within the assessment area:	Any spatial distribution of development within the assessment area will be required to provide suitable avoidance/mitigation measures to			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Geological Environment	<ul style="list-style-type: none"> Two areas of Ancient Woodland (Shetcomb Wood) in the north-western corner. Also designated as a Key Wildlife Site. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No assets within 250m of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> No international and national assets within 2km of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> No IRZs overlap with the assessment area. <p>Negligible effects may occur for all development sizes as there is potentially sufficient space within the assessment area to accommodate all scales of development over 250m from local designations and over 2km from national designations.</p>	<p>maintain the areas of Ancient Woodland in the north-west, the networks of wooded priority habitats on the western boundary, and wooded river corridors. The presence of these ecological constraints in the western half of the assessment area may act as a limiting factor to larger scale development, although a smaller town should be able to be accommodated without developing in close proximity to the north western corner.</p>			
Soil Quality	<p>The majority of the assessment area is located on grade 3 agricultural land. However, the eastern half of the assessment area contains two large areas of grade 2 agricultural land that extend from the easternmost boundary</p>	<p>There is potential for small and large villages to avoid the area of grade 2 agricultural land by being situated in the western half of the assessment area. However, the remaining land within the assessment area is still grade 3 and therefore development at any location has the potential to result in the loss of high quality</p>		?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>to the centre, amounting to approximately 180ha.</p> <p>There is potential for development to result in the loss of high quality agricultural land. Significant negative effects may occur in relation to soil quality under all development size options. The effects are uncertain under the small and medium development size options as they could potentially be accommodated on grade 3 land, but it is not clear if it is grade 3a or the lower quality grade 3b. It is unlikely that the largest development size option could be accommodated without encroaching into grade 2 land.</p>	<p>agricultural land, depending on whether it is grade 3a or grade 3b.</p>			
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are considered likely for all development size options in relation to water quality.</p>	<p>N/A</p>			
Flood Risk	<p>The majority of the assessment area is greenfield, but the B4632 passes from north to south through eastern half of the assessment area, the settlement of Greet is located in the southern half of the assessment area and there are sparsely distributed areas of residential/agricultural development throughout the assessment area.</p>	<p>There is potential for small and large villages to be located in the western half of the assessment area, avoiding Flood Zone 2. There may be potential for a small village to be located in the eastern half of the assessment area, either to the north of both watercourses, between them or in the south eastern corner.</p> <p>Although there is potentially sufficient land within the assessment area overall to</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>The River Isbourne passes through the centre of the assessment area and the area around it is located within Flood Zone 2. There are also two tributaries of the River Isbourne that extend from the main watercourse through the eastern boundary of the assessment area, which are also located within Flood Zone 2. There is around 50ha of developable land in total within the assessment area that is located within Flood Zone 2.</p> <p>Significant negative effects may occur in relation to flood risk at the largest development scale as there is insufficient space to accommodate this scale outside of Flood Zone 2 as a continuous development. Negligible effects may occur in relation to flood risk at the small and medium development capacities as there is potentially sufficient space to accommodate these scales of development outside of Flood Zone 2.</p>	<p>accommodate over 10,000 dwellings outside Flood Zone 2, avoidance of this Flood Zone would likely involve some fragmentation of development at this 'town' scale.</p>			
Mineral Resources	<p>The assessment area is not located within any Mineral Safeguarding Areas.</p> <p>As such, the effects of all development size options in relation to mineral resources have been identified as negligible.</p>	N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Noise	<p>The assessment area does not contain any land located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>As such, the effects in relation to noise have been identified as negligible for all development sizes.</p>	N/A			
Odour	<p>There is approximately 15ha of land located in the in the southern part of the assessment area adjacent to Winchcombe that is within an 'odour restricted zone'.</p> <p>However, there is potentially sufficient space within the assessment area for all development size options to be located outside of this zone.</p>	There is potential for all development sizes to be located to the north of Winchcombe, outside of the 'odour restricted zone'.			

Landscape Sensitivity

Overview of Sensitivity	Landscape sensitivity: Town/city (10,000+ dwellings)	Landscape sensitivity: Large village (5,000-10,000 dwellings)	Landscape sensitivity: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Open and expansive agricultural character. • Well-established hedgerow boundaries. • Setting to historic features including scheduled monuments registered parks and gardens and listed buildings. • Long distance views from elevated ground. • Rural and removed perceptual qualities. • Overlooked from the adjacent Cotswolds AONB. <p>As such, landscape sensitivity is high for a town/city and large village as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for small villages as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

Overall, land in the west (west of the River Isbourne) of the assessment area avoids the majority of constraints. However, larger Development Types may result in significant negative effects on heritage assets in this area. This is due to them being likely to encroach into the northern part of the assessment area where there is a Registered Park and Garden adjacent to the area boundary; and into the southern region where there are a number of designated assets within the settlement of Greet. The northeast also contains a Key Wildlife Site into which a larger Development Type may encroach. This part of the assessment area is comprised of grade 3 agricultural land also, but it is not clear if it is grade 3a or the lower quality grade 3b.

The historic environment assessment suggests that a very small village in the eastern half of the assessment area, to the west of Millhampost Farm (grade II listed) has the greatest prospect of avoiding significant negative effects upon heritage assets. However, development in this location would result in the loss of some grade 2 agricultural land. In terms of landscape, the delivery of a small village may result in reduced adverse impacts on the character and qualities of the landscape compared to the larger development scales. However, landscape sensitivity for the small village scale is still moderate-high.

Accessibility

Criterion	Rationale for Score	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the B4077 (northern boundary), B4078 (western boundary) and the B4632 (east of site).</p> <p>There are no 'critical junctions' (as identified in the JCS Transport Evidence Base) within the immediate vicinity of the area, with the closest being the A46 Ashchurch Rd / A46 / A435 Teddington Hands Roundabout to the west. The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at between 60% and 70% Ratio to Flow Capacity during the AM and PM peak periods). However, the A46 continues west through Ashchurch, with several junctions (including that with the M5) which the same model forecasts suggest will operate close to, or beyond, their design capacities in 2031, so may become busier still unless high quality public transport alternatives are introduced to serve these destinations.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 40,595</p> <p>A relatively high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with bus services operating along key arterial routes into nearby urban centres.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 232,323</p> <p>Access from the assessment area to employment by Car scores relatively low, which is attributable to longer journey times to key employment sites.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (urban centres and healthcare) between 20 and 40 mins and education sites between 0-20 mins travel time by PT services.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 70%</p> <p>Car based commuter trips currently account for an average of 70% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with some other</p>	

Criterion	Rationale for Score	Score
	assessment areas, private car still represents the primary method of travel to work and reflects the area's rural nature and low frequency PT services.	
Proximity to sustainable transport networks	The assessment area is outside of the 5km rail station catchment, but is served by a number of PT services along key arterial routes. Whilst not directly on a National Cycle Route, the assessment area is in close proximity to the Cotswold Way / Winchcombe Way recreational walking routes.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	There is limited existing sewerage infrastructure in the area. Due to the size of the receiving watercourses it is likely that there will be environmental constraints to obtaining a permit to discharge larger volumes from the works to the nearby watercourse, based on current technology.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer			

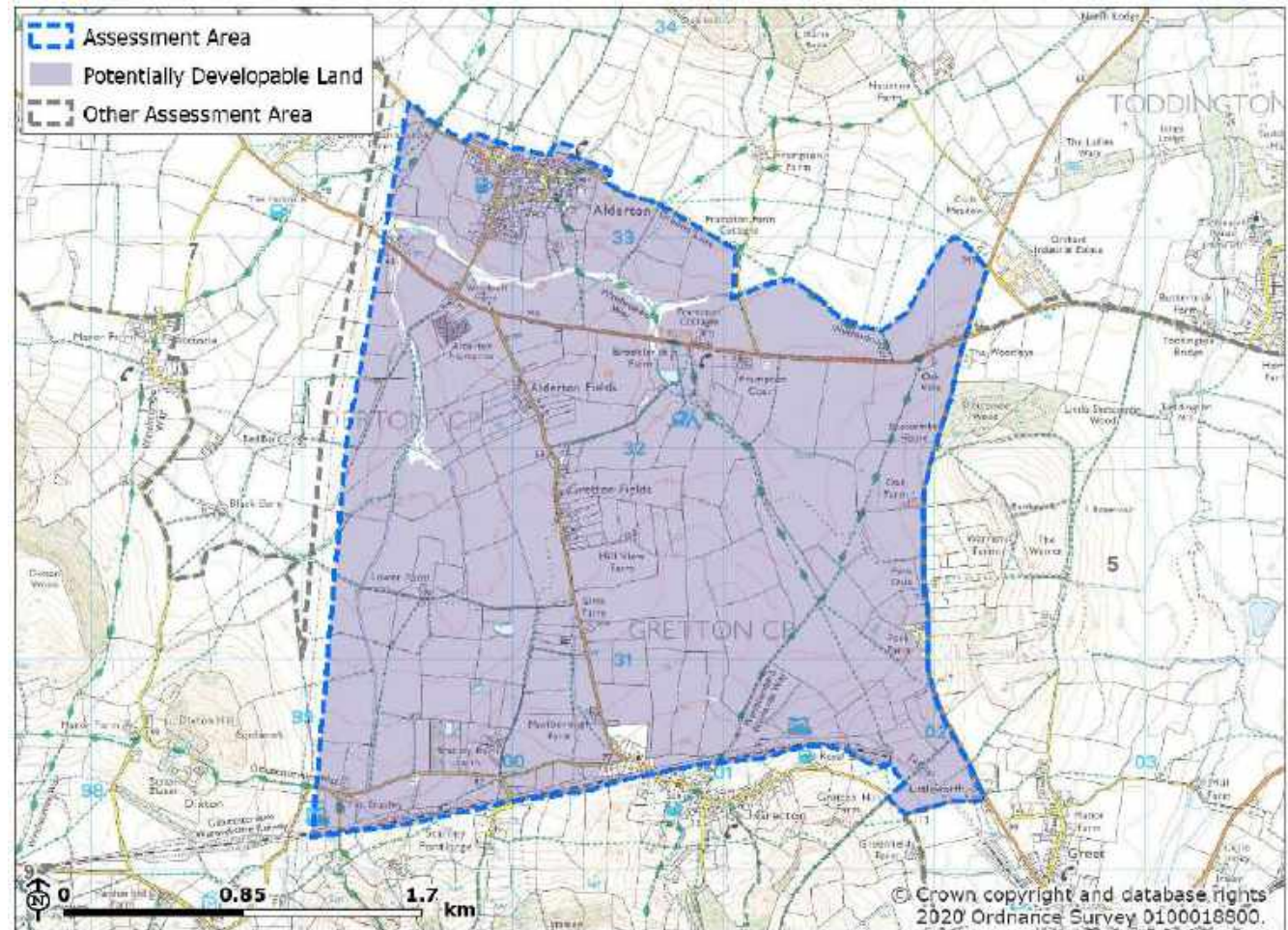
Assessment Area 6 – New Settlement: Land between Alderton and Gretton

Assessment Area Ref: 6

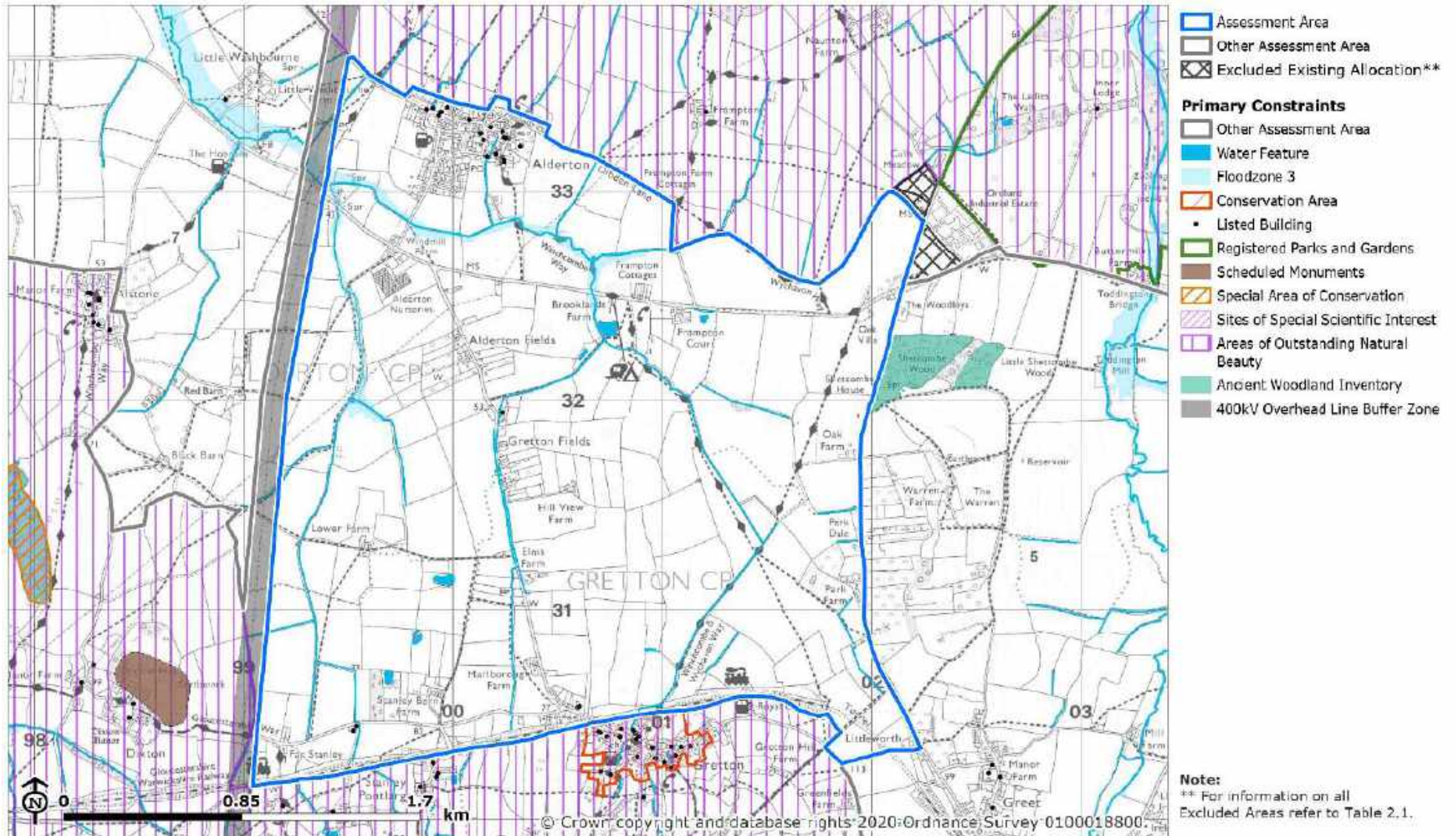
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

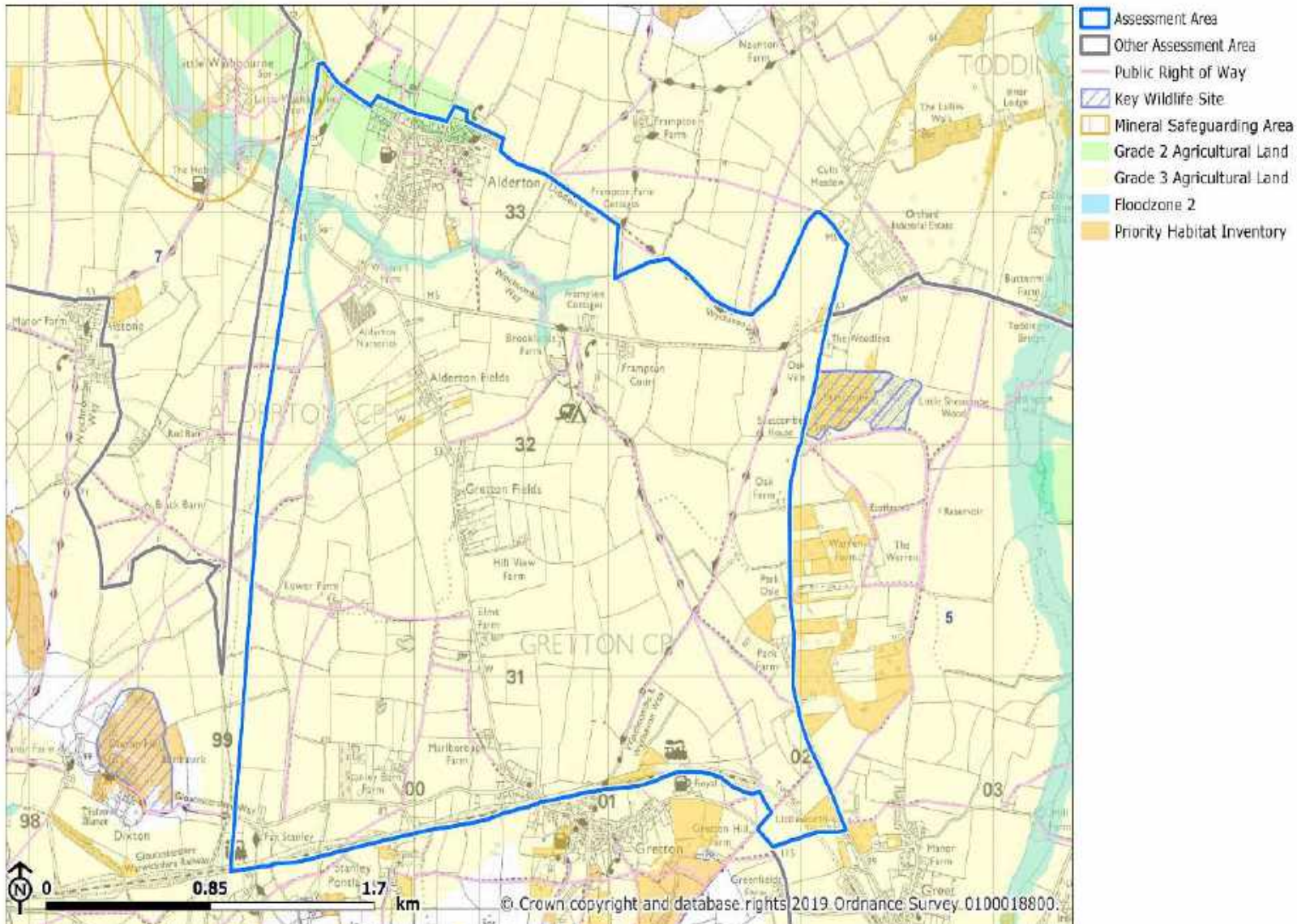
Area: ~770ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • The assessment area contains 21 listed buildings: one of these is grade II* listed and the remainder are all grade II. Most of the listed buildings are located to the north of the assessment area, within the settlement of Alderton. However, there are some outliers further south. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records a number of non-designated assets in the assessment area, including: <ul style="list-style-type: none"> - Prehistoric and Romano-British settlement; - Possible prehistoric enclosure cropmark; - Four or five small mounds of unknown date, near Stanley Farm; 	<p>Although the assessment area contains a number of listed buildings it is assumed that in accordance with section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, these will not be subject to physical change/ loss. However, these buildings and the designated assets in the wider area of the assessment area could be significantly adversely affected as a result of setting change. Further assessment would be required to understand the potential for mitigating these effects, as well as those that may arise to the listed buildings, scheduled monuments and Registered Park and Garden in the wider area.</p> <p>Development that results in the coalescence of existing historic settlements at Alderton, to the northwest of the assessment area, and Gretton and Stanley Pontlarge, just beyond it to the south, should be avoided to maintain their separate character/ identity and to preserve the character and legibility of Gretton Conservation Area.</p> <p>Toddington RPG makes the north-eastern corner of the assessment area sensitive, although intervening development suggests a limited potential for setting change.</p> <p>The scheduled hillfort on Dixton Hill makes the southwest corner of the assessment area sensitive to development. Similarly, the non-designated defended settlement on The</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Iron-Age, Anglo-Saxon, medieval and post-medieval features SE of Alderton; - Possible trackway; - Possible windmill site; and - Extant post-medieval structures including Alderton Methodist Chapel, and three milestones. <p><i>Historic Landscape Character</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural landscape comprised of regular and semi-irregular enclosure. The latter – which makes up most of the eastern half of the assessment area between Gretton and Alderton - has some value as a result of its time-depth, partly reflecting former unenclosed cultivation patterns. Such areas may contain hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets in the wider area that could be susceptible to setting change:</p>	<p>Warren makes the eastern edge of the assessment area sensitive.</p> <p>The HER includes non-designated built heritage assets that could be susceptible to both physical and setting change. In this regard the mounds identified in the southeast corner of the assessment area are, perhaps, most constraining. If burial mounds they could be of medium to high significance, depending on their survival, meaning that change could result in a significant negative effect.</p> <p>To avoid/ minimise harm any development would need to avoid conflation between Alderton, Stanley Pontage and Gretton Conservation Area. If development is located centrally it may be possible to avoid setting issues relating to the designated and non-designated heritage assets within and beyond the assessment area, and also to avoid physical change to the non-designated mounds. However, the area likely to be available for development would be small, i.e. only likely to be able to accommodate a very small village. For this reason, a significant negative effect with has been given but indicated as uncertain.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a large number of listed buildings of all grades in the wider area of the assessment area that may be susceptible to setting change. These are often associated with other high value designated assets that would be susceptible to setting change such as Gretton Conservation Area (immediately adjacent to the southern boundary of the assessment area) and the Great Winterbourne Conservation Area (1km northwest of the assessment area), as well as the grade II Toddington Manor Registered Park and Garden (RPG) (northeast of the assessment area). • To the west of the assessment area are two Scheduled Monuments - Dixton Hill and The Knolls Camp – both of which are reportedly Iron Age Hillforts. Dixton Hill may also include a Norman Motte and Bailey. Further scheduled hillforts lie to the southwest, south and east. These assets typically have 				

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	<p>important topographic and visual associations that may be affected by development. There are also two scheduled Roman sites to the southeast and east of the assessment area. These are less likely to have a relationship with the assessment area that may be affected by development.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • Non-designated assets recorded by the HER that may be susceptible to setting change include a possible Iron Age defended settlement to the east on The Warren. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> • No assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> • There is an area of Ancient Woodland (Shetcomb Wood) adjacent to the north-eastern boundary of the assessment area, which is also designated as a Key Wildlife Site. <p>International and National Assets within 2km:</p>	<p>Any development will be set back from the area of Ancient Woodland adjacent to the north-eastern boundary of the assessment area, and sensitively designed to avoid potential adverse direct or indirect impacts.</p> <p>Any spatial variation of development in the assessment area will be required to provide suitable mitigation measures to ensure that the wooded river corridor network is maintained, the connectivity of hedgerows and woodlands is optimised. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p>	<p>*</p>		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> SAC/SSSI (Dixton Wood, designated for invertebrates, especially associated with deadwood habitats) c1km to the west of the assessment area. . Alderton Quarry Hill SSSI lies c1.2km north and Cleeve Common SSSI lies c3.4km south west. Both are designated principally for geological value. <p>IRZs:</p> <ul style="list-style-type: none"> The western part of assessment area 6 lies within the IRZ for Dixton Wood. Land uses of risk relate primarily to those affecting air quality rather than residential development per se. <p>Minor negative effects may occur under the largest development size option as it is likely that this scale of development would fall within 2km of national designations. Negligible effects may occur under the small and medium development size options as there is potential for these scales of development to be located over 250m from local designations and over 2km from national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>	<p>In general terms, options for mitigation may include provision of alternative green spaces in and around development sites to accommodate increased recreational demand and/or buffering of priority habitats and designated wildlife sites.</p> <p>The magnitude of recreational demand, and associated impacts, will be proportionally less with the smaller development size options.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Soil Quality	<p>The vast majority of the assessment area is located on grade 3 agricultural land. However, there is approximately 9ha of grade 2 agricultural land located in the north-west corner of the assessment area, adjacent to the assessment area boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>Due to the area of Grade 2 agricultural land within the assessment area being restricted to a relatively small parcel of land at the edge of the assessment area, it is likely that all development sizes would be able to avoid this grade.</p> <p>The remainder of the assessment area is grade 3 agricultural land and therefore any development has the potential to result in the loss of high quality agricultural land, dependent upon whether the land is grade 3a or grade 3b.</p>	?	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects have been identified in relation to water quality for all development sizes.</p>	N/A			
Flood Risk	<p>The majority of land within the assessment area is greenfield. However, the settlement of Alderton is located in the northernmost part of the assessment area and the B4077 passes through the northern half of the assessment area from west to east. Additionally, there are sparsely distributed local roads and</p>	<p>There is sufficient space in the southern half of the assessment area to accommodate all development sizes outside Flood Zone 2.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>residential/agricultural buildings throughout the assessment area.</p> <p>The northern half of the assessment area contains a small amount of developable land (<5ha) in Flood Zone 2 due to the presence of Carrant Brook that runs through the assessment area.</p> <p>There is sufficient space within the assessment area to accommodate all development sizes outside Flood Zone 2. As such, negligible effects have been identified relation to flood risk.</p>				
Mineral Resources	<p>The assessment area only contains a small fraction of land located in a Mineral Safeguarding Area (MSA) in its north western corner.</p> <p>As such, effects in relation to mineral resources have been identified as negligible for all development size options.</p>	<p>All development scenarios can be accommodated without affecting the north western tip of the site.</p>			
Noise	<p>The assessment area does not contain any land located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>As such, effects in relation to noise are considered likely to be negligible for all development size options.</p>	<p>N/A</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Landscape Sensitivity	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key sensitivities to development:</p> <ul style="list-style-type: none"> • Open and expansive character. • Well-established hedgerow boundaries especially along river tributaries. And diverse BAP priority habitats. • Setting to historic features including scheduled monuments registered parks and gardens and listed buildings. • Long distance views from elevated ground. • Rural and removed perceptual qualities. • Overlooked from the adjacent Cotswolds AONB. <p>As such, landscape sensitivity is high in relation to the towns/cities and large villages as the key characteristics and qualities of the landscape are highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high in the case of small villages as there may be less potential for adverse effects on landscape at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

The northern and southern margins of the assessment area are particularly sensitive to development. In the north, the settlement of Alderton is located on the north-western boundary and contains multiple listed buildings, and Toddington Manor (a Registered Park and Garden) is located in close proximity to the north-eastern boundary. The settlements of Gretton (containing multiple listed buildings within a Conservation Area) and Stanley Pontlarge (containing several listed buildings) are adjacent to the southern boundary and Dixton Hill Camp (a Scheduled Monument) is in close proximity to the south-western boundary.

Overall, the least sensitive area to development may be in the central region, to the south of the B4077 and to the east of Gretton Fields. A small village could potentially be accommodated at this location that would avoid the majority of constraints within the assessment area. This area is comprised of grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. Although there is potentially sufficient space to accommodate a large village at this location, this would result in more significant impacts on the setting of heritage assets around the north and south of the assessment area. Additionally, landscape sensitivity is high for the large village scale and reduced to moderate-high for the small village scale.

Accessibility

Criterion	Rationale for Score	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the B4077 (northern boundary) and B4078 (eastern boundary).</p> <p>There are no 'critical junctions' (as identified in the JCS Transport Evidence Base) within the immediate vicinity of the area, with the closes being the A46 Ashchurch Rd / A46 / A435 Teddington Hands Roundabout to the west. The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at between 60% and 70% Ratio to Flow Capacity during the AM and PM peak periods). However, the A46 continues west through Ashchurch, with several junctions (including that with the M5) which the same modelling forecasts will operate close to, or beyond, their design capacities in 2031so may become busier unless high quality public transport alternatives are introduced to serve these destinations.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 33,006</p> <p>A relatively high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with bus services operating along the key arterial routes in proximity to the assessment area.</p>	

Criterion	Rationale for Score	Score
	<p>Number of workplaces (jobs) accessible within 30 minutes = 223,168</p> <p>Access from the assessment area to employment by Car scores relatively low, which is attributable to the travel time / distance from key employment areas.</p>	
<p>Access to other key services and facilities by public transport</p>	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (urban centres and healthcare) between 20 and 40 mins and education sites between 0-20 mins travel time by public transport services.</p>	
<p>Private car use by commuters</p>	<p>% Driving a Car or Van = 72%</p> <p>Car based trips currently account for an average of 72% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with other assessment areas, private car still represents the primary method of travel to work and reflects the area's rural nature and low frequency public transport services.</p>	
<p>Proximity to sustainable transport networks</p>	<p>The assessment area is outside of any 5km rail station catchment, but is served by a number of bus services along key arterial routes into local urban centres. Whilst not directly on a National Cycle Route, the assessment area is in close proximity to the Cotswold Way / Winchcombe Way recreational walking routes, providing opportunities for enhanced links from any future development schemes.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	There is limited existing sewerage infrastructure in the area. Due to the size of the receiving watercourses it is likely that there will be environmental constraints to obtaining a permit to discharge larger volumes from the works to the nearby watercourse, based on current technology.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer			
	Rail transport	Not proximate to rail stations or lines.			
	Bus transport	Within 500m of existing low frequency bus route and close enough to Cheltenham to mean that improvements in frequency could result in some increases in bus patronage levels. However, capacity of logical bus corridor likely to restrict potential to increase service provision significantly.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	25,000	15,000
Viability	High	High	High	High	High	Medium

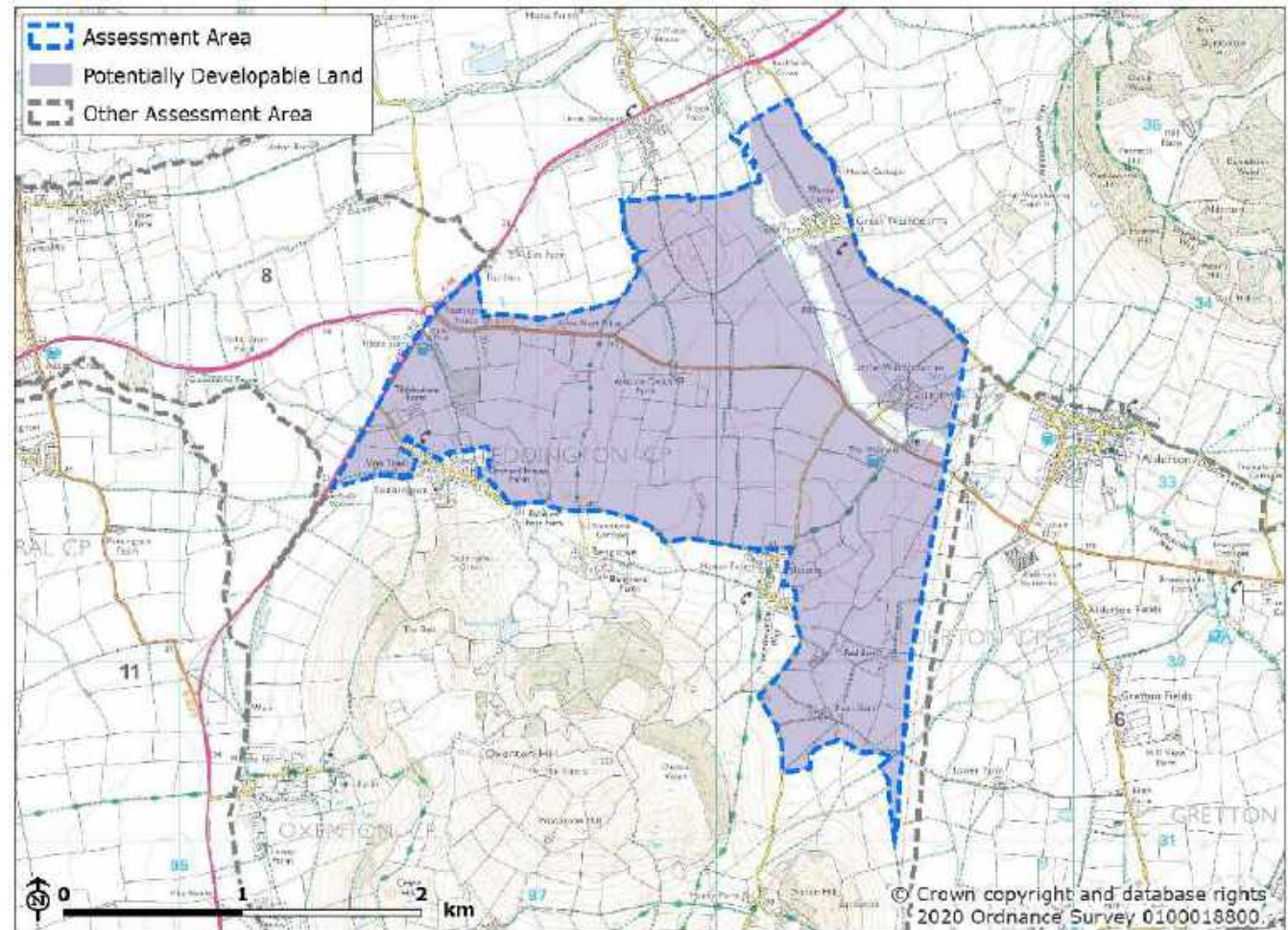
Assessment Area 7 – New Settlement: Land east of Tewkesbury (B4077 corridor)

Assessment Area Ref: 7

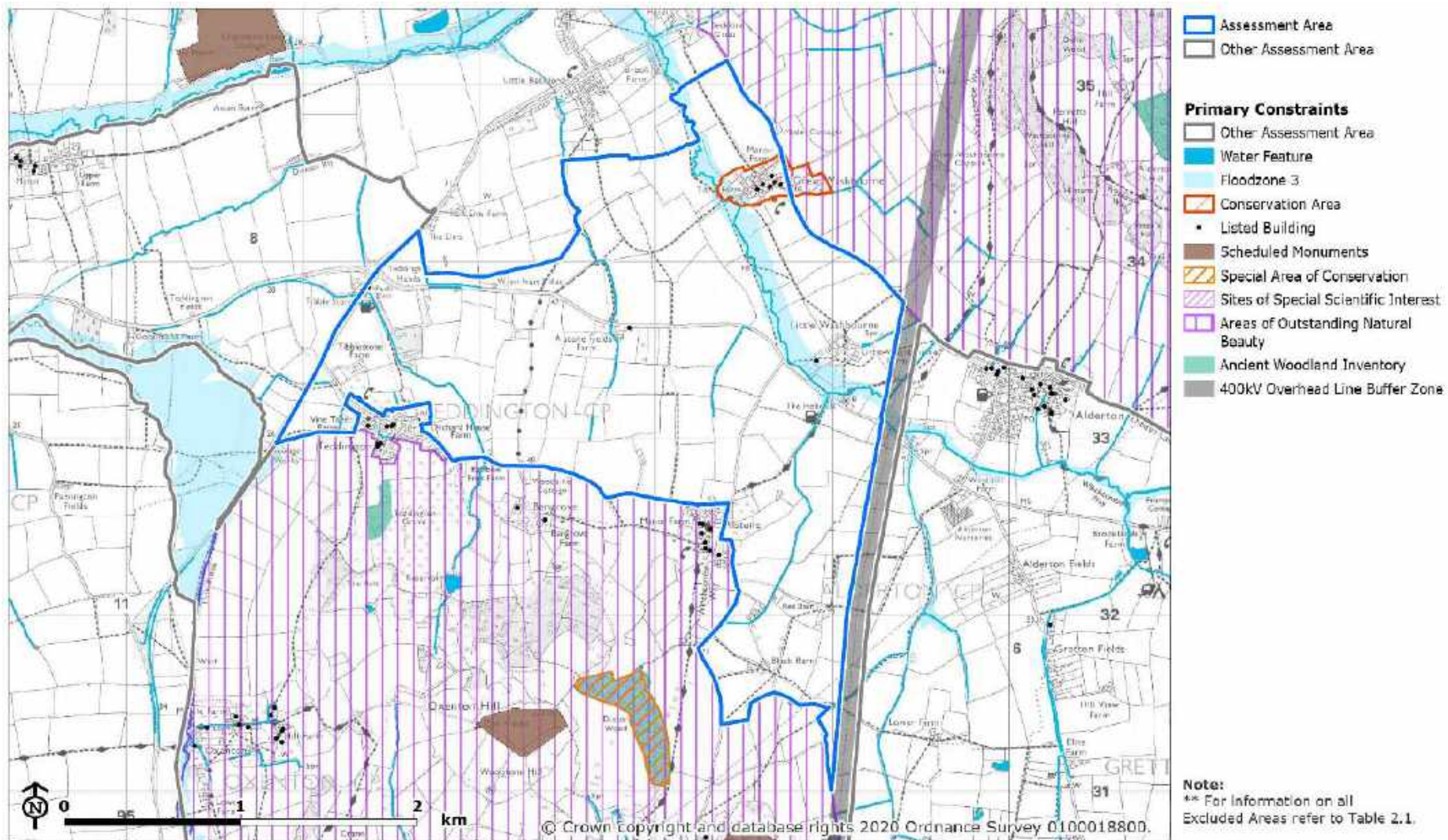
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

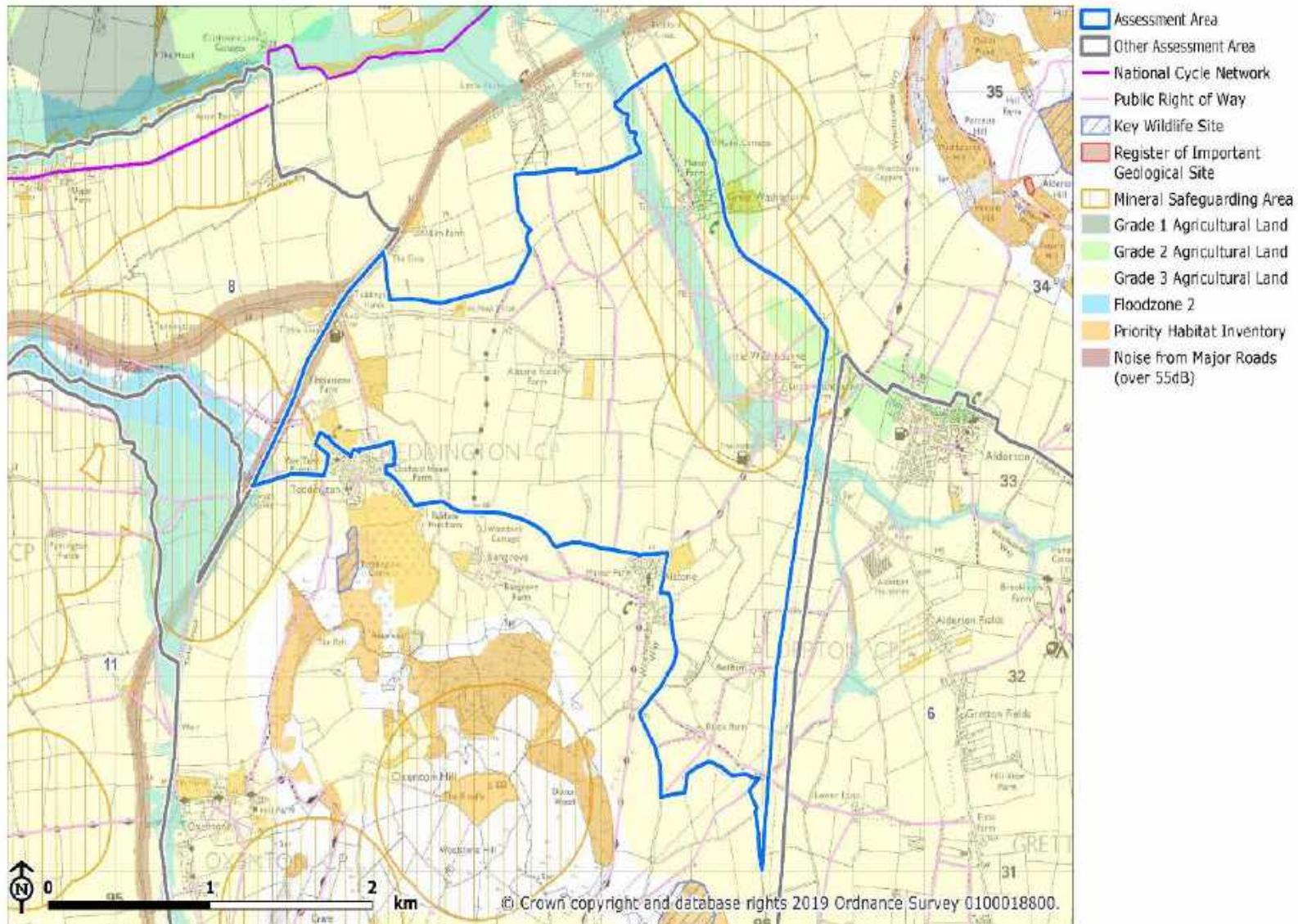
Search Area: ~560ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are ten listed buildings in the assessment area. Most are located within the Great Washbourne Conservation Area, but there are four outliers, including the grade II* Church of St Mary in Little Washbourne, a house, and a guide post. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a limited number of non-designated assets within the search area. These include: An undated circular cropmark near Washbourne and further features near Tibblestone Farm; Cropmarks of possible prehistoric or Roman enclosures near Great Washbourne; A moated site and possible deserted medieval village (DMV) at Great Washbourne; 	<p>The north-eastern part of the assessment area is highly sensitive due to the presence of Great Washbourne Conservation Area, and the listed buildings it contains. The non-designated moated site and possible DMV, add to the areas sensitivity. Effects to any of these assets would likely result in a significant negative effect.</p> <p>To the east, Little Washbourne is similarly sensitive due to the presence of the grade II* Church of St Mary and non-designated archaeological assets that could be of more than local significance e.g. the moated site and DMV.</p> <p>The southern edge of the assessment area is sensitive too, as a result of the listed buildings within the two historic settlements of Teddington and Alstone and the two scheduled hillforts.</p> <p>The central area of the assessment area contains two listed structures – the White House, and the Teddington signpost. Whilst highly susceptible to physical change the risk of these assets experiencing meaningful setting change as a result of development is low. On the assumption that these structures are retained, there may be the potential to accommodate a new small village of up to c.4000 dwellings with minor negative effects (or a larger settlement if expanded across the A46 into assessment area 8). However, since</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • A moated site and possible DMV at Little Washbourne; • A disused medieval or later trackway; • Extensive ridge and furrow earthworks; • Post-medieval buildings at Little Washbourne; • Two turnpike roads; and • The site of a WWII storage depot. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape comprised of a mix of less irregular, regular and less regular enclosures. Much of this partly reflects former unenclosed cultivation patterns and so has some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The 	<p>the full number of dwellings for a small village is unlikely to be possible without significant negative effects, the score remains an uncertain significant negative.</p> <p>Any new settlement would need to avoid coalescing with the existing historic settlements in the area and affecting their character.</p>			

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	<p>Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are numerous listed buildings in the wider vicinity of the assessment area. These are clustered at historic settlements e.g. Alderton, Alstone, Teddington and Beckford. Of these, the grade II* Church of St Margaret and Manor Farm in Alstone; the grade I Church of St Nicholas in Teddington have been identified as being most susceptible to setting change. • There are two scheduled Iron Age Hillforts to the south of the assessment area. <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being particularly susceptible to setting change.</p>				
Ecological and	Assets within the assessment area:	Any spatial distribution of development within the assessment area will be required to provide suitable avoidance/mitigation	*	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Geological Environment	<ul style="list-style-type: none"> There are no designated assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No assets within 250m of the assessment area. <p>National and International Assets within 2km:</p> <ul style="list-style-type: none"> SAC/SSSI (Dixton Wood) 400m south, one of several wooded habitats across the steep slopes south of Teddington. Also designated as Ancient Woodland. SSSI (Alderton Hill Quarry) 1.5km north-east, part of the larger woodland mosaic south of Dumbleton. Also a registered site of geological importance. SSSI (Beckford Gravel Pit) 1.2km north. <p>IRZs:</p> <ul style="list-style-type: none"> IRZ of the surrounding SSSI extend across the assessment area but none list residential development as a land use of risk. <p>Minor negative effects may occur under the medium and large development size options as these scales of development could not be accommodated without falling within 2km of national designations. Negligible effects may</p>	<p>measures to maintain areas of priority habitat, minimising avoiding the severance or fragmentation of woodland, and interconnecting grassland and orchard habitats.</p> <p>A small settlement could be accommodated to the north of the B4077 over 2km from the national designation to the south, which may reduce the potential for adverse impacts.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>occur under the smallest development size option as there is potential to accommodate this scale of development over 2km from national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The vast majority of the assessment area is located on grade 3 agricultural land. However, there is approximately a 15ha pocket of grade 2 agricultural land located in the northernmost extent of the assessment area adjacent to the assessment area boundary and a 9ha pocket located in the north-eastern corner. In addition, there is also less than 5ha of grade 4 agricultural land on the south-western boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality at all development capacities. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is significant potential for development at all size options to avoid the areas of grade 2 agricultural land as they are restricted to small pockets of land on the north-eastern boundary. However, the majority of remaining land in the assessment area is still grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land, depending on whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality		N/A			

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	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are considered likely in relation to water quality at all development capacities.</p>				
Flood Risk	<p>The majority of land within the assessment area is greenfield. However, the settlement of settlement of Great Washbourne is located in the northernmost part of the assessment area and there B4077 passes through the assessment area from west-east. Additionally, there are sparsely distributed local roads and residential/agricultural buildings throughout the assessment area.</p> <p>In the northern half of the assessment area there are small areas (<10ha) of developable land located within Flood Zone 2 due to the presence of Carrant Brook passing through the assessment area.</p> <p>There is potentially sufficient space to accommodate all development size options outside of Flood Zone 2.</p>	<p>There is potential for development to be located in the west and south of the assessment area, avoiding land in Flood Zone 2.</p>			
Mineral Resources	<p>There is approximately 146ha of land in the north-eastern corner of the assessment area that is located within a</p>	<p>There is potentially sufficient space to the south of the B4077 to accommodate</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Mineral Safeguarding Area (MSA). In addition, there is small pocket of safeguarded land in the south-westernmost corner, amounting to approximately 9ha.</p> <p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur in relation to mineral resources under the largest development size option as it is likely that this scale of development could not be accommodated without intersecting with land within MSAs. Negligible effects may occur under the small and medium development size options as there is potentially sufficient space outside of MSAs to accommodate these scales of development.</p>	<p>development under the small and medium size options outside of MSAs.</p> <p>It may also be possible to accommodate larger scales of development without the sterilisation of mineral resources by extracting minerals prior to development.</p>			
Noise	<p>Land directly adjacent to the westernmost boundary of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>However, there is potentially sufficient space to accommodate all development capacities outside of this noisy area. As such, negligible effects may occur in relation to noise.</p>	<p>There is significant potential for all development capacities to be set back from the noisy area on the western boundary.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			

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Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Open and expansive agricultural character. • Well-established hedgerow boundaries. • Setting to historic features including scheduled monuments registered parks and gardens and listed buildings. • Long distance views from elevated ground. • Rural and removed perceptual qualities. • Overlooked from the adjacent Cotswolds AONB. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the small village scenario as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

Overall, the least constrained land in the assessment area lies in the southern half of the assessment area in the vicinity of Alstone Fields Farm (south of the B4077). There is potential to locate a small village in this location, whilst avoiding the majority of constraints. The area is comprised of grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. Portions of it are also within 2km from the national ecological designation to the south of the area.

Whilst there is sufficient space to accommodate a large village to the south of the B4077, it may not be possible to avoid significant negative effects on heritage assets located on the southern boundary in the settlements of Teddington and Alstone, and the ecological assets beyond, at this scale of development. A larger Development Type would encroach on the northern half of the assessment area also and likely result in significant negative effects on the setting of Great Washbourne Conservation Area. Additionally, landscape sensitivity is high at the large village scale compared to moderate-high at the small village scale.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	The assessment area is connected to the highway network via the B4077, which links to the A435 and A46 via the Ashchurch Rd / A46 / A435 Teddington Hands Roundabout to the west. The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at between 60% and 70% Ratio to Flow Capacity during the AM and PM peak periods). However, the A46 continues west through Ashchurch, with several junctions (including that with the M5) which the same modelling forecasts will operate close to, or beyond, their design capacities in 2031 so may become busier still unless high quality public transport alternatives are introduced to serve these destinations.	
Access to employment	Number of workplaces (jobs) accessible within 45 minutes = 14 A very low number of workplaces (jobs) sites can currently be accessed by public transport, with only a low-frequency bus service currently serving the assessment area.	
	Number of workplaces (jobs) accessible within 30 minutes = 227,681 Access from the assessment area to employment by Car scores relatively low , attributable to the travel time / distance from key employment areas.	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (urban centres and healthcare) between 20 and 40 mins from limited sections of the area and education sites between 0-20 mins travel time by PT services..	
Private car use by commuters	% Driving a Car or Van = 69% Car based commuter trips currently account for an average of 69% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with other assessment areas, private car still represents the primary method of travel to work and reflects the area's rural nature and low frequency of bus services.	
Proximity to sustainable transport networks	The assessment area is partially within the 5km catchment of Ashchurch for Tewkesbury Rail Station and is served by a low-frequency bus service. The assessment area is not directly on, but linked to strategic walk / cycle routes, including the National Cycle Network.	

Deliverability/Infrastructure

Criterion	Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water			
	Drinking water			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
		headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Within 5km of Ashchurch mainline station. Provision of a bus link could result in higher levels of rail patronage.			
	Bus transport	Served by a low frequency bus route and close enough to Cheltenham and Tewkesbury to mean that improvements in frequency could result in reasonably high levels of bus patronage serving station and the two key destinations. Improvements to bus accessibility would be needed at M5 J9 to avoid severance issues and this is only likely to secure levels of investment needed at higher scales of growth.			
	Cycle transport	Close to existing cycle network although outside of reasonable distance to enable significant increase in cycle trips (other than to station).			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	25,000	15,000
Viability	High	High	High	High	High	Medium

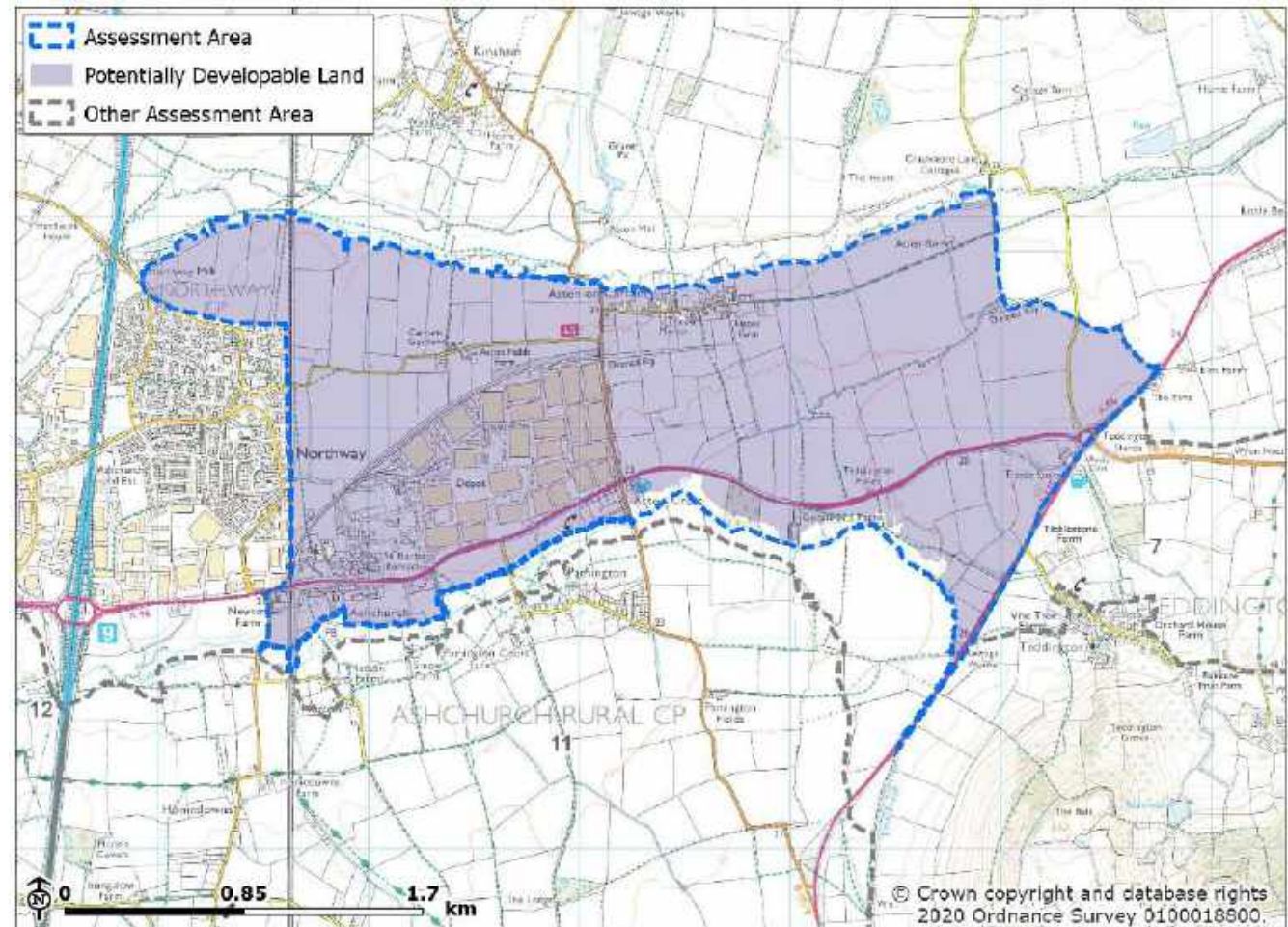
Assessment Area 8 – Urban extension: Northeast of Tewkesbury

Assessment Area Ref: 8

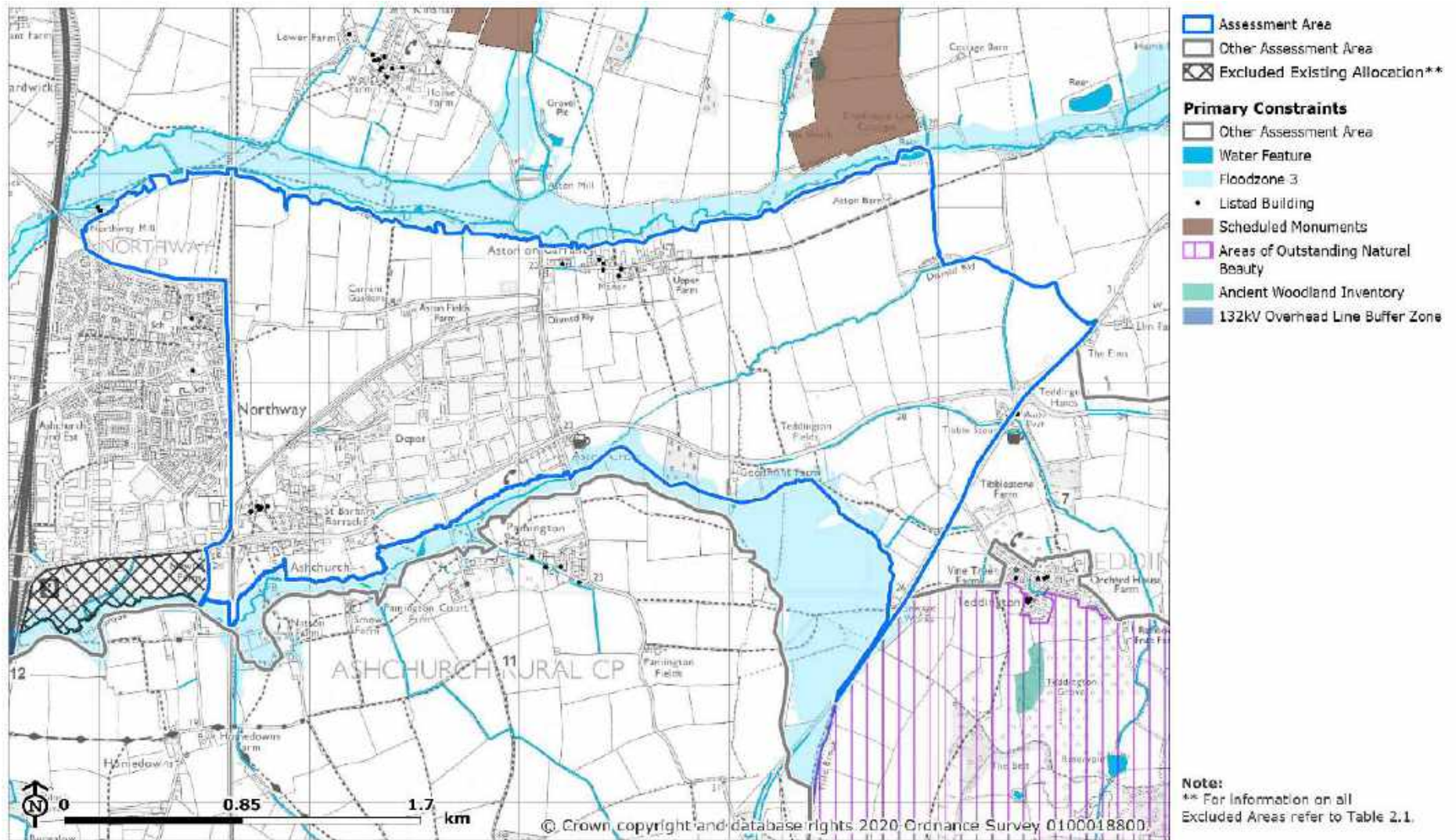
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

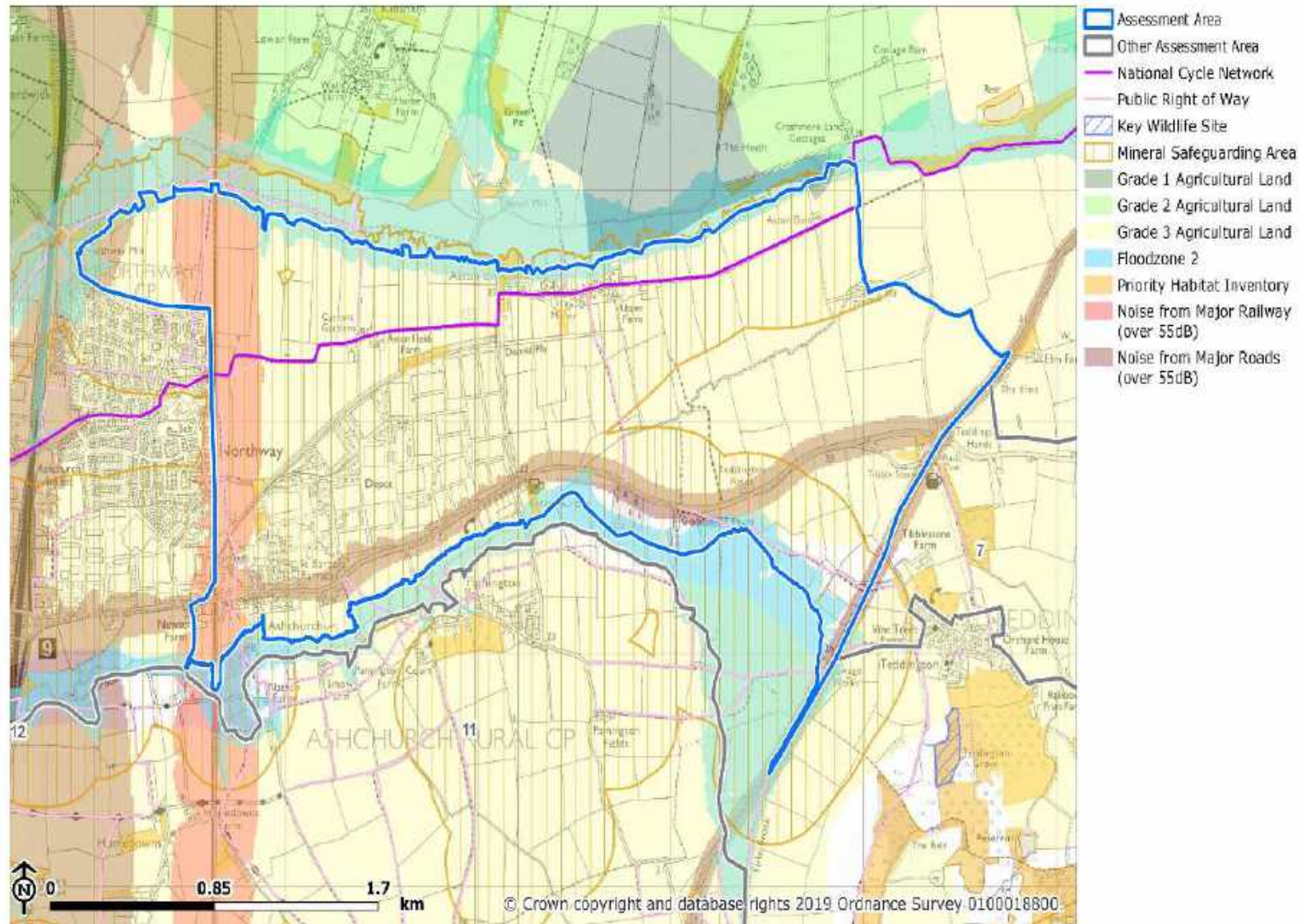
Area: ~666ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 14 listed buildings within the assessment area, all grade II except for the grade II* Church of St Nicholas, Ashchurch and the Manor, Aston on Carrant. The remaining grade II assets are generally located in the same two settlements and include a number of farmhouses, cottages, houses, a rectory, church monuments, a dovecote and a prehistoric monolith (the Tibblestone). <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Iron Age and Roman settlement, Ashchurch; Possible early medieval activity, Ashchurch; 	<p>The key sensitivities of the assessment area are the listed buildings. Those in Aston Carrant are susceptible to harm as a result of the loss of their rural/ agricultural setting. The historic rural character of the settlement could also be harmed.</p> <p>The listed prehistoric Tibblestone to the east may similarly be susceptible to setting change. It could also benefit from some public interpretation, enabling people to understand its significance.</p> <p>In contrast, the listed buildings at Ashchurch are less susceptible to such change as the settlement has already lost much of its rural setting via development to the east, south and west. To the north the ability to experience the remaining rural setting appears to be prevented by trees screening the railway, and a strong wooded field boundary.</p> <p>The listed buildings in Northway, which are surrounded by modern development, also seem less susceptible to meaningful setting change.</p> <p>There are non-designated assets that may be of more than local significance meaning that their physical change could result in a significant negative effect. Such assets include the moated sites near Northway Mill and Northway Court Farm. The area around Northway Mill is of further sensitivity as the</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Crop marks northeast of Chez Nous and near Aston Fields Farm; - Possible medieval moated site near Northway Mill; - Possible moat at Northway Court Farm and further medieval settlement at Carrant Brook Junior School, Northway; - Medieval settlement features, ditches and a watermill in Ashchurch; - Extensive ridge and furrow earthworks; - 19th century mill pond earthworks, Northway Mill (grade II listed); - Extant 16th century building in Ashchurch; and a 19th century Wesleyan Chapel in Aston Cross; - Post-medieval railways (still extant) and turnpike roads; - War memorial, Ashchurch; - Multiple military WWII sites including a Prisoner of War Camp (now site of St Barbara Barracks), vehicle depot, pillboxes and gun/ anti-aircraft posts in 	<p>mill buildings – which stand just beyond the northern boundary - are both listed - and there are non-designated earthwork remains of the mill’s pond that contribute to the buildings’ significance.</p> <p>The sensitivities of the assessment area are such that a medium extension, giving rise to minor negative effects, could probably be accommodated between Northway (avoiding the listed Mill buildings and pond earthworks) and Aston Fields Farm. There are also some areas that may be suitable for infill development along the M5 to the west and along part of the southern side of the A46 in Ashchurch. Development to the north of the A46, to the very east of the assessment area adjacent to assessment area 7, may also be feasible with only minor negative effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Ashchurch and one in Northway.</p> <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> The HLC indicates a primarily agricultural landscape comprised of a mix of less irregular, regular and less regular enclosures. Much of this partly reflects former unenclosed cultivation patterns and so has some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. This is interspersed by historic and modern settlement. A large portion of the assessment area is an active military site – St Barbara Barracks. <p>Assets beyond the assessment area that may be susceptible to setting change:</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p><i>Designated</i></p> <ul style="list-style-type: none"> There are a number of scheduled monuments to the north and south of the assessment area, but the assessment area is unlikely to contribute to their significance in a meaningful way. There are multiple listed buildings in the wider vicinity of the assessment area but few seem particularly susceptible to meaningful setting change as a result of development in the assessment area. Those susceptible include the grade II Northway Mill and Mill house. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p>	<p>Any spatial distribution of development in the assessment area will be required to maintain/enhance areas of priority habitat. These typically lie along or extend between field boundaries and potentially lend toward strengthening of linear features.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> No assets within 250m of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> No international or national assets within 2km. <p>IRZs:</p> <ul style="list-style-type: none"> IRZ of the surrounding SSSI overlap the assessment area but none list residential development as a land use of risk. <p>Negligible effects may occur for all development size options as they could potentially be accommodated over 250m from local designations and over 2km from national designations.</p>	<p>Development on in the brownfield region in the south-western region of the assessment area may have the most positive impact on ecology in the area due to the avoidance of greenfield land take.</p>			
Soil Quality	<p>The majority of the assessment area is located on grade 3 agricultural land. There is approximately 20ha of developable land on the south-eastern boundary of the assessment area that is classified as grade 4. There is also less than 5ha of grade 1 agricultural land on the north-eastern boundary of the assessment area.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to</p>	<p>Due to the extensive coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	soil quality at all development capacities. The effects are uncertain as there is no data distinguishing whether the grade 3 agricultural land is grade 3a or the lower quality grade 3b.				
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are considered likely in relation to water quality for all development size options.</p>	N/A			
Flood Risk	<p>The majority of the assessment area is greenfield, but the settlement of Aston on Carrant is located in the north-western corner. The A46 also passes through the southern half of the assessment area and there are areas of agricultural-residential development throughout the assessment area.</p> <p>There is a small amount (<5ha) of land adjacent to the southern boundary of the assessment area is located within Flood Zone 2 due to the presence of Tirlle Brook adjacent to the southern boundary. Additionally, there is also land directly adjacent to the full length of the northern boundary of the assessment area that is also located within Flood Zone 2 due to the presence of another watercourse outside the assessment area boundaries.</p>	There is significant potential for development under all size options to avoid land in Flood Zone 2 as these areas are restricted to directly adjacent to the assessment area boundaries.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	However, there is potentially sufficient space to accommodate all scales of development outside of Flood Zone 2.				
Mineral Resources	<p>The majority of land within the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development under the largest size option to result in the sterilisation of mineral resources as there is insufficient space to accommodate this scale of development outside of MSAs. As such, significant negative effects may occur under this development scenario. Negligible effects may occur under the smallest and medium size options as there is potentially sufficient space to accommodate these scales of development outside of MSAs.</p>	<p>There is approximately 100ha in the east of the assessment area that could potentially accommodate development at the smallest and medium size options outside of MSAs, avoiding the sterilisation of mineral resources. However, development located in this area may not be considered an urban extension given its degree of separation of Tewkesbury.</p> <p>It may be possible to accommodate larger scales of development without the sterilisation of mineral resources by extracting minerals prior to development.</p>	*		
Noise	There is an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours located in the southern half of the assessment area due to the A46 passing through the assessment area from west-east. There is also a further noisy area in the west of the assessment area due to a railway line passing through the area from north-south.	There is potential for all development size options to be set back from the noisy areas in the south and west and suitable mitigation may be possible to overcome noise related issues. However, setting development back from the sources of noise pollution may create a degree of separation from the settlement of Tewkesbury, limiting the areas function as an urban extension.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	However, there is potentially sufficient space to accommodate all development size options outside of noisy areas and therefore negligible effects may occur in relation to noise.				
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Provides setting to existing settlement. Intervisibility with AONB. Rural and agricultural landscape character. <p>As such, sensitivity is high under the large size option as the key characteristics and qualities of the landscape may be highly sensitive to change from residential development of this scale. Sensitivity is moderate at the medium size option as only some of the key characteristics and qualities of the landscape</p>	H	M	L-M

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
are sensitive to change from residential development of this scale. Sensitivity is low-moderate at the smallest size option as few of the characteristics and qualities of the landscape are sensitive to change from residential development at this scale.			

Summary of Constraints and Landscape Sensitivity

Land adjacent to the eastern boundary of the assessment area is unaffected by the majority of constraints. There is potential to locate a small or medium size extension in this location that would only result in the loss of grade 3 agricultural land, although it is not clear if it is grade 3a or the lower quality grade 3b. However, due to the degree of separation from the fringe of Tewkesbury (Northway), development at this location would be considered a new settlement rather than an urban extension. Development at this location also has the potential to result in significant negative effects on the setting of heritage assets in the settlement of Aston on Carrant.

Therefore, it may be more suitable to locate a medium extension type within or adjacent to the Northway. This area is occupied by land within a noisy area and a Mineral Safeguarding Area (MSA), but there may be potential to overcome any potential noise issues through suitable mitigation and it may also be possible to extract mineral resources prior to development. Although there are listed buildings within Ashchurch in this area, the potential for their setting to be adversely impacted by development is reduced given that their rural setting has already been lost by development to the west. There is sufficient space in the western half of the assessment area to accommodate a large extension type, but this may result in a degree of coalescence between Northway and Aston on Carrant to the east. Landscape sensitivity is high for the largest development scale, whilst it is moderate for the medium scale option and low-moderate for the small scale option as the characters and qualities of the landscape may be less adversely impacted. This is particularly likely to be the case on the land west of the B4079 north of the Northway.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	The assessment area is connected to the highway network via the A46 (Ashchurch Road) and the B4079, with critical junctions to the M5 (Junction 9) and along the A46 nearby. The M5 and B4079 run north-south and provide links to Bishops Cleeve and Cheltenham/Gloucester to the south, while the A46 and A438 link the assessment area to Tewkesbury town centre to the west.	

Criterion	Rationale	Score
	<p>The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecast that key junctions along the A46 through Ashchurch (including that with the M5) will operate close to, or beyond, their design capacities in 2031. They suggest limited capacity will exist to accommodate significant growth in this location without improved cycling and public transport links and/or supplementary capacity improvements to the A46 (proposed to be dualled and realigned to the South as part of JCS mitigation measures) and M5 Junction 9 (proposed to receive junction capacity upgrades through JCS mitigation).</p>	
<p>Access to employment</p>	<p>Number of workplaces (jobs) accessible within 45 minutes = 108,162. A high number of workplaces (jobs) can currently be accessed by PT from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 241,387 Access from the assessment area to employment by Car scores relatively low, likely attributed to the travel time / distance from key employment areas.</p>	
<p>Access to other key services and facilities by public transport</p>	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to a moderate range of key services (urban centres, schools and healthcare facilities) within 20 - 40 mins travel time by public transport services. Only a limited range of such facilities are within 20 mins travel time by public transport.</p>	
<p>Private car use by commuters</p>	<p>% Driving a Car or Van = 68% Car based commuter trips currently account for an average of 68% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with other assessment areas, private car still represents the primary method of travel to work and reflects the area's proximity to the strategic road network.</p>	
<p>Proximity to sustainable transport networks</p>	<p>The assessment area is within the 2.5km catchment of Ashchurch for Tewkesbury Rail Station and is served by lower-frequency rail and bus services. The assessment area is currently located along an existing National Cycle Route, providing a strategic longer-distance walking and cycling routes for active trips to Tewkesbury, Evesham and Gloucester.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Capacity improvements are likely to be required and could be incorporated into development of strategic plans to provide capacity for Ashchurch Garden Village proposal. Such improvements are likely to be significant at higher scales of growth.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required at higher scales of growth, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Within 2.5km of Ashchurch mainline station and with a low frequency bus route serving it. Improved frequency of bus services could result in higher levels of rail patronage.			
	Bus transport	New regular bus service to Tewkesbury is a near term prospect which would enhance service provision although further enhance would be needed. Improvements to bus accessibility would be needed at M5 J9 to avoid severance issues and only higher scales of growth likely to support this. Collective development with Ashchurch Garden Town (assessment area 11)			

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
		and/or areas to east (assessment areas 5, 6 and 7) could facilitate/justify significant investment in improvements, e.g. busway.			
	Cycle transport	Served by existing cycle network including Ashchurch station and Tewkesbury. Improvements to cycle accessibility would be needed at M5 J9 to avoid severance issues and only higher scales of growth likely to support this. Collective development with Ashchurch Garden Town (assessment area 11) and/or areas to east (assessment areas 5, 6 and 7) could facilitate/justify significant investment in improvements.			

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	35,000	35,000	30,000
Viability	High	High	High	High	High

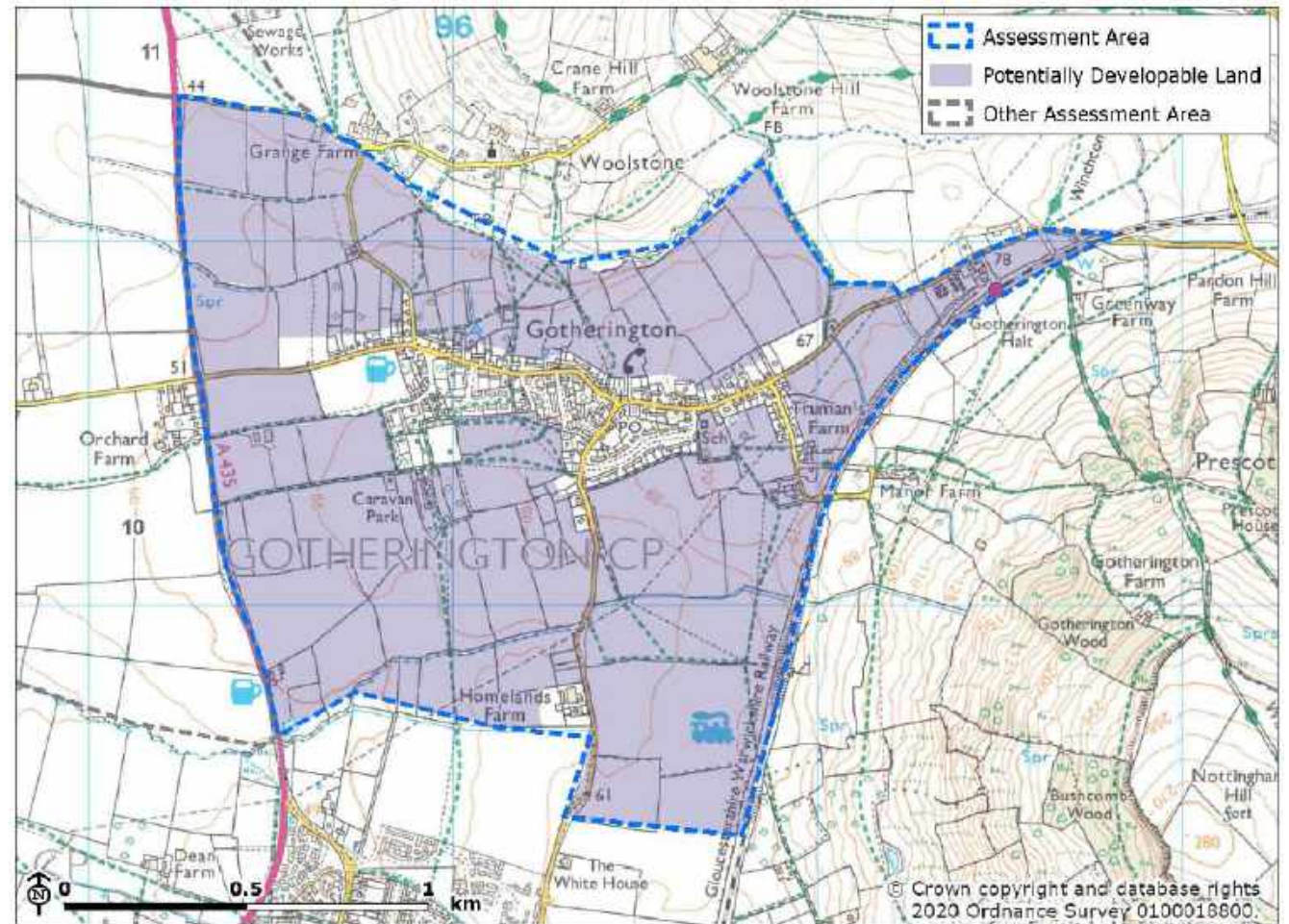
Assessment Area 9 – Urban extension: Land at Gotherington

Assessment Area Ref: 9

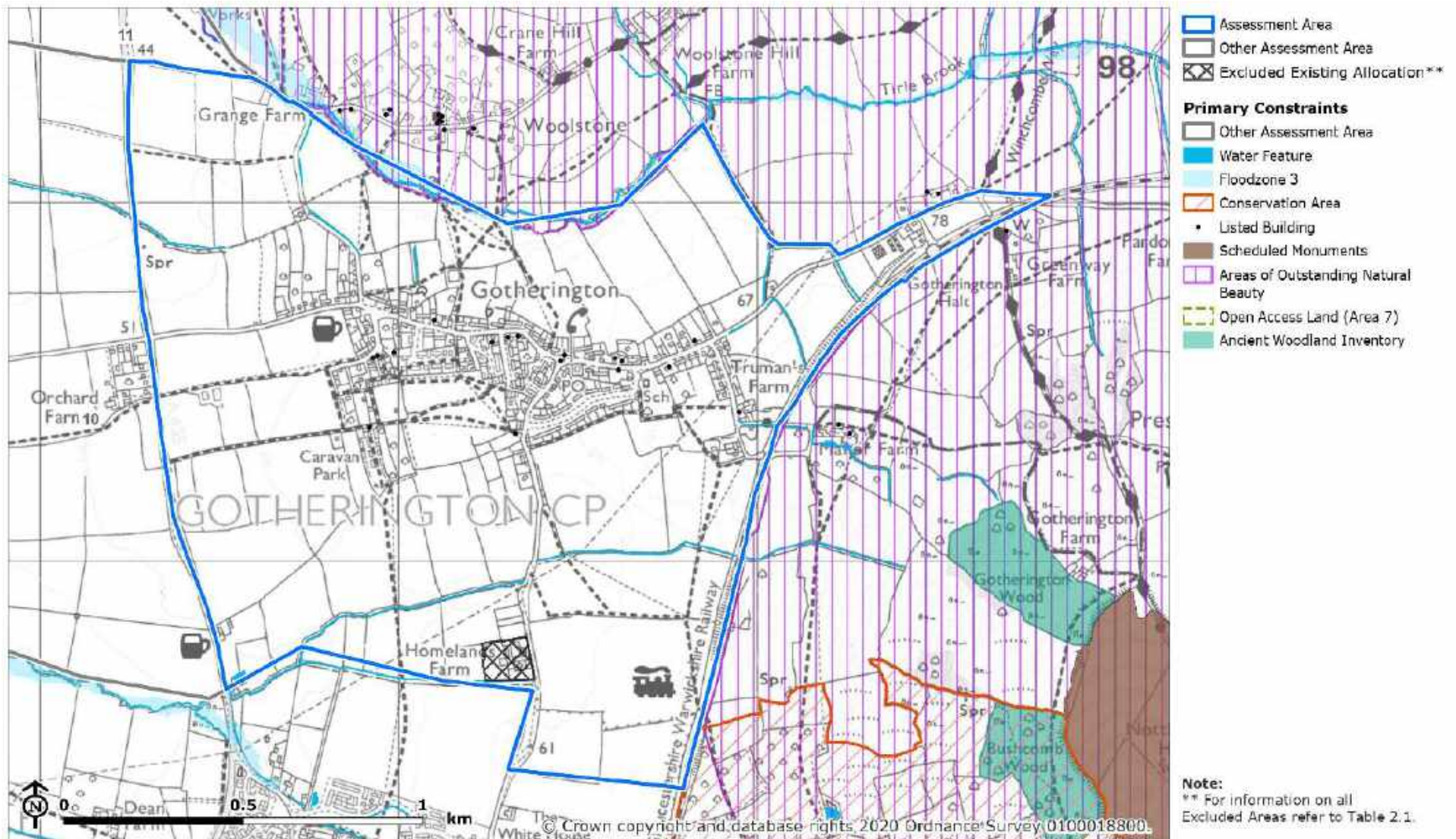
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

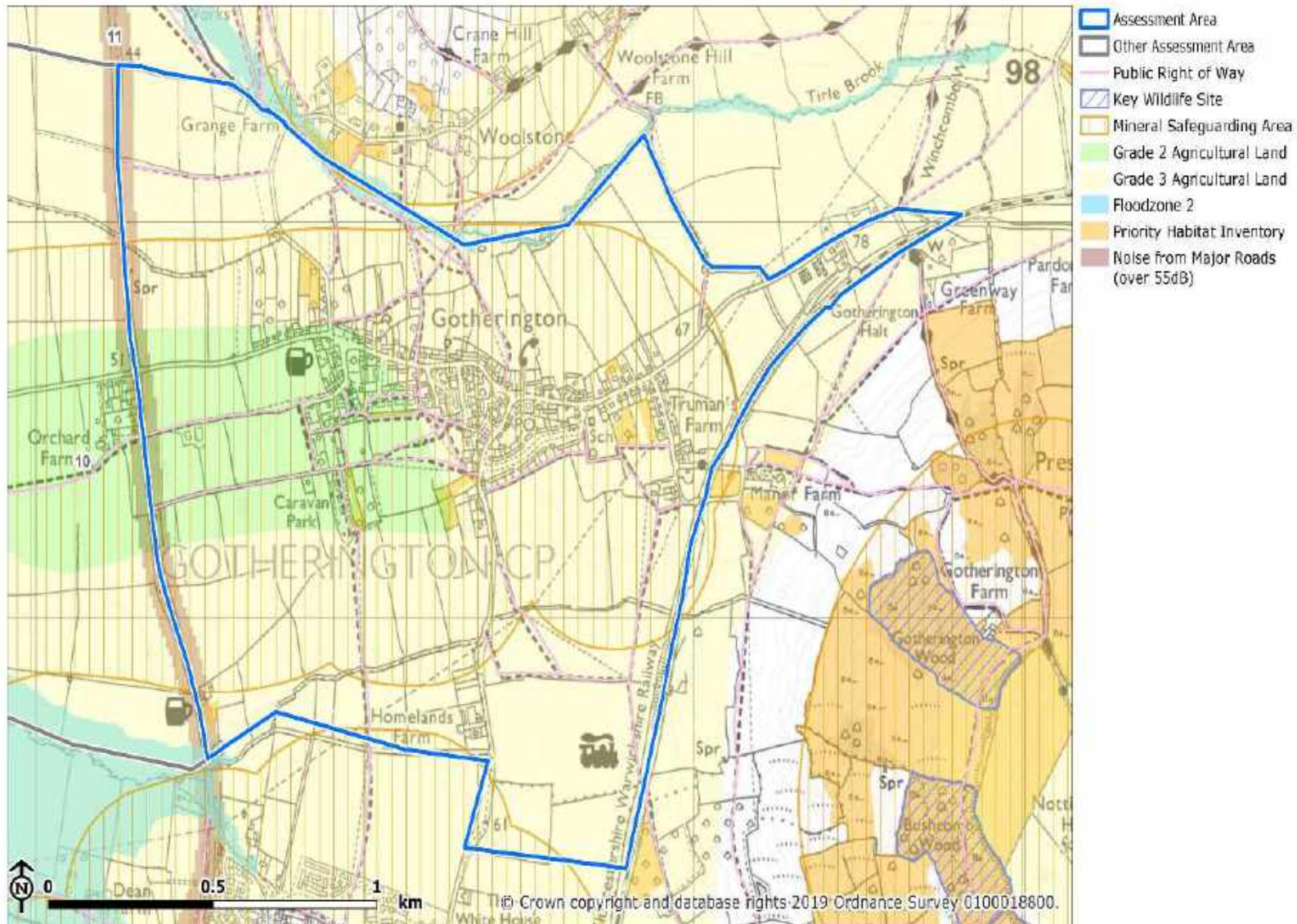
Area: ~270ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 17 grade II listed buildings in the assessment area. These include farmhouses, houses, cottages, agricultural buildings, and a war memorial. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Cropmarks of a prehistoric to Roman settlement, southeast of Gotherington, with Bronze Age and Iron Age enclosures excavated nearby; A medieval settlement and remains of a large earthwork moat in Gotherington; A medieval settlement at Woolstone; 	<p>The key sensitivities of the assessment area are the listed buildings in Gotherington. To a large extent these have been subsumed into fairly extensive modern development meaning that the originally rural settlement is now semi-suburban and in many cases does not contribute to their significance. However, those listed buildings that stand at the rural edges of the settlement e.g. Truman Farm would still be susceptible to setting change.</p> <p>The northern edge of the assessment area is sensitive due to the proximity of the historic settlement of Woolstone and its listed buildings.</p> <p>The area of Gotherington Halt is also sensitive due to the presence of nearby listed buildings, as well as the scheduled hill forts.</p> <p>The Woodmancote Conservation area and scheduled fort on Nottingham Hill make the eastern edge of the assessment area sensitive.</p> <p>To avoid/ minimise any harm development would be best located in the southwestern corner of the assessment area between Bishop's Cleeve and Gotherington. This area may be able to accommodate a small extension (possibly even a medium sized one at the lower end of the dwelling scale) with minor negative effects.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Extensive ridge and furrow earthworks; - Medieval to post-medieval settlement on Manor Lane and similar date enclosure north of Home Farm; - Extant buildings include Elm Cottage and Homelands Farm in Gotherington; - A Dovecote and barn at Moat Farm; - Post-medieval railway and turnpike roads; - A military (possibly WWII) storage depot; <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape comprised of a mix of less irregular, regular and less regular enclosures. Much of this partly reflects former unenclosed cultivation patterns and so has some time depth and could include hedgerows that qualify as important under the archaeology and 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • Woodmancote Conservation Area is immediately adjacent to the eastern edge of the assessment area. • There is a scheduled hill fort to the east of the assessment area on Nottingham Hill, and two more lie to the northeast on Dixton Hill and the Knolls. • There are a number of listed buildings to the north of the assessment area in Woolstone that may be susceptible to setting change, including the grade II* Church of St Martin De Tours. So too may the three grade II listed buildings to the northeast at Gotherington Holt. To the east, the grade II Manor Farm would probably retain 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>sufficient rural setting to remain legible.</p> <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being particularly susceptible to setting change.</p>				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No assets within 250m of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Dixton Wood) around 1.5km to the north-east <p>IRZs:</p> <ul style="list-style-type: none"> IRZ for the surrounding SSSI overlie the site but none list residential development as a land use of risk. <p>Negligible effects may occur under all development size options as there is potentially sufficient space for them to be located over 250m from local</p>	<p>Any spatial distribution of development within the assessment area will be required to maintain/enhance the areas of priority habitat within the assessment area, and provide sufficient green infrastructure to support the future residential population without possible compromise of priority habitats in the wider area, such as at Prescott.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	designations and over 2km from national designations.				
Soil Quality	<p>The majority of the assessment area is located on grade 3 agricultural land. However, there is a large (~70ha) pocket of grade 2 agricultural land located in the western half of the assessment area.</p> <p>There is potential for development to result in the loss of high quality agricultural land. Significant negative effects may occur in relation to soil quality for all development size options. The effects are uncertain under the small and medium development size options as there is potential to accommodate these scales of development on just grade 3 land, but it is not clear if it is grade 3a or the lower quality grade 3b. It is unlikely that a large extension type could be accommodated as a continuous development without intersecting grade 2 land.</p>	<p>There is potentially sufficient space for development at the small and medium size options to be located outside of the area of grade 2 agricultural land. However, the majority of the assessment area is still grade 3 and therefore development in the majority of the area has the potential to result in the loss of high quality agricultural land, depending on whether it is grade 3a or grade 3b.</p>		?	?
Water Quality		N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are considered likely in relation to water quality for all development size options.</p>				
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Gotherington is located in the central region of the assessment area (not included in developable land) and there is agricultural/residential use buildings sparsely distributed throughout the area.</p> <p>There are small areas (<5ha) of the assessment area on the south-western boundary and on the northern boundary that are located within Flood Zone 2 due to the presence of watercourses outside the assessment area boundaries.</p> <p>There is potentially sufficient space within the assessment area to accommodate all development size options outside of Flood Zone 2. As such, negligible effects may occur in relation to flood risk.</p>	<p>There is significant potential for development at all size options to avoid land in Flood Zone 2 as these areas are restricted to relatively small pockets of land at the edges of the assessment area.</p>	Yellow	Yellow	Yellow
Mineral Resources		<p>There is almost 40ha of land in the south of the assessment area not located within a MSA that could potentially accommodate development at</p>	Red *	Red *	Yellow

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>The majority of land within the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur under the medium and large development size options as these scales of development could not be accommodated without intersecting with MSAs. Negligible effects may occur under the smallest development size option as there is potentially sufficient space outside of MSAs to accommodate this scale of development.</p>	<p>the smallest size option. There is also land outside of MSAs in the north-west of the assessment area.</p> <p>It may also be possible to accommodate larger scales of development without the sterilisation of mineral resources if minerals are extracted prior to development.</p>			
Noise	<p>Land directly adjacent to the western boundary of the assessment area is within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A435 passing from north-south on the western boundary.</p> <p>However, there is potentially sufficient space to accommodate development at all capacities outside of this noisy area. As such, negligible effects may occur in relation to noise.</p>	<p>There is sufficient space within the assessment area for development to be set back from the Noisy areaarea of high noise on the western boundary.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • High level of intervisibility with Cotswolds AONB (almost surrounded). • Provides rural setting to Gotherington. • Risk of coalescence of small villages with larger urban settlements such as Gotherington with Bishop's Cleeve. <p>As such, sensitivity is high under the large and medium-sized options as the key characteristics and qualities of the landscape may be highly sensitive to development at these scales. Landscape sensitivity is reduced to moderate-high under the small size option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

Overall, the least constrained land in the assessment area is located in the southern half. There is potential to accommodate a small extension type in the south-eastern corner, which would avoid the majority of constraints. However, due to the presence of Woodmancote Conservation Area adjacent to the eastern boundary and a Scheduled Monument further to the east on Nottingham Hill, there is potential for development in this location to result in significant negative effects on the historic environment. As such, the south-west corner of the assessment area may also have potential to accommodate a small extension type. However, this area is occupied by land within a Mineral Safeguarding Area and a noisy area on the western boundary, but it may be possible to extract minerals prior to development and suitable mitigation may be possible to overcome any noise related issues. In addition, the whole of the south of the assessment area is comprised of grade 3 agricultural land that would be lost to development, but it is not clear if it is grade 3a or the lower quality grade 3b.

Accommodating a large and medium extension type in the southern half of the assessment area would be likely to result on adverse impacts on heritage assets within the settlement of Gotherington and also increase of coalescence between Bishop's Cleeve and Gotherington. The landscape sensitivity is reduced slightly for a small extension type as there may be reduced potential for coalescence of settlements, but it is still moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A435, along the western boundary, and Gretton Road, providing links to Bishops Cleeve and Cheltenham to the south and Tewkesbury to the north.</p> <p>The A435 / Finlay Way Roundabout is located 0.5 miles south of the area. The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate approaching and over its design capacity in 2031 (at between 76% and 102% Ratio to Flow Capacity during the AM and PM peak periods respectively).</p> <p>The A46 Teddington Hands Roundabout is located 3 miles north of the area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at between 60% and 70% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 48,595</p> <p>A relatively high number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	

Criterion	Rationale	Score
	<p>Number of workplaces (jobs) accessible within 30 minutes = 252,122</p> <p>Access from the assessment area to employment by car scores relatively high, due to the well-connected local road network to key urban centres / employment sites.</p>	
<p>Access to other key services and facilities by public transport</p>	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to education sites within 0-20 mins, healthcare sites within 20-40 mins and urban centres within 40-60 mins travel time by PT services.</p>	
<p>Private car use by commuters</p>	<p>% Driving a Car or Van = 68%</p> <p>Car based commuter trips currently account for an average of 68% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with other assessment areas, private car still represents the primary method of travel to work and reflects the area's rural nature and low frequency public transport services.</p>	
<p>Proximity to sustainable transport networks</p>	<p>The assessment area is partially within the 5km catchment of Ashchurch for Tewkesbury Rail Station and is served by frequent bus services. The assessment area is not directly on, but linked to strategic walk / cycle routes.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Capacity improvements are likely to be required the larger the development is. There may be constraints to obtaining a permit to discharge larger volumes to the nearby watercourse due to the size of the receiving watercourse. This increases with the size of development and, above 3,500 dwellings, these constraints are considered to be highly likely, based on current technology.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Within 5km of Ashchurch mainline station and with a low frequency bus route serving it. Improved frequency of bus services could result in higher levels of rail patronage. Higher scales of growth increase likelihood of securing levels of investment needed to expand bus network. This would be enhanced further if developed with assessment area 10.			

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	Bus transport	New regular bus service to Tewkesbury is a near term prospect which would enhance service provision although further enhance would be needed. Higher scales of growth increase likelihood of securing levels of investment needed to expand bus network. This would be enhanced further if developed with assessment area 10.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	35,000	35,000	30,000
Viability	High	High	High	High	High

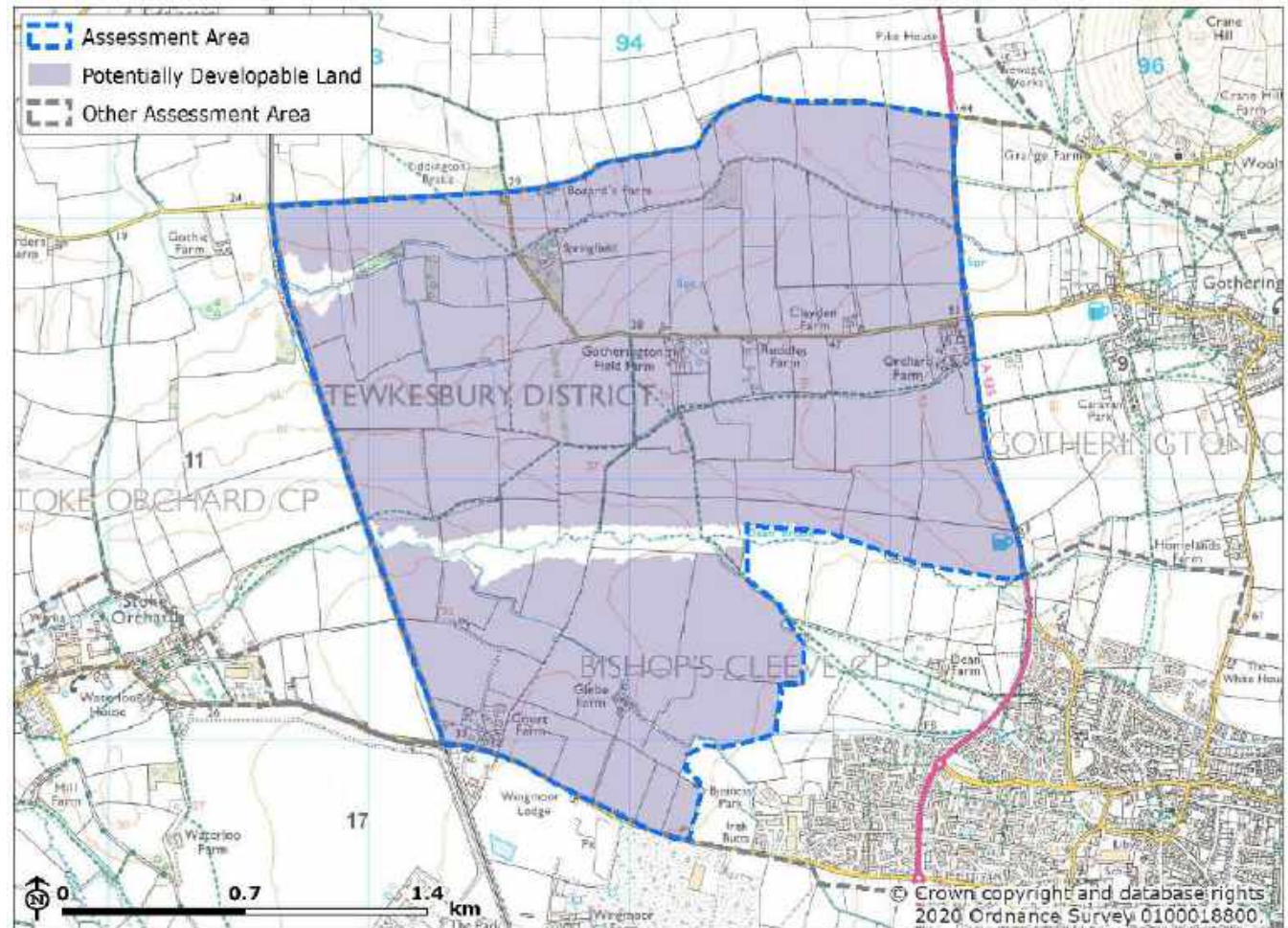
Assessment Area 10 – Urban Extension: Northwest of Bishops Cleeve

Assessment Area Ref: 10

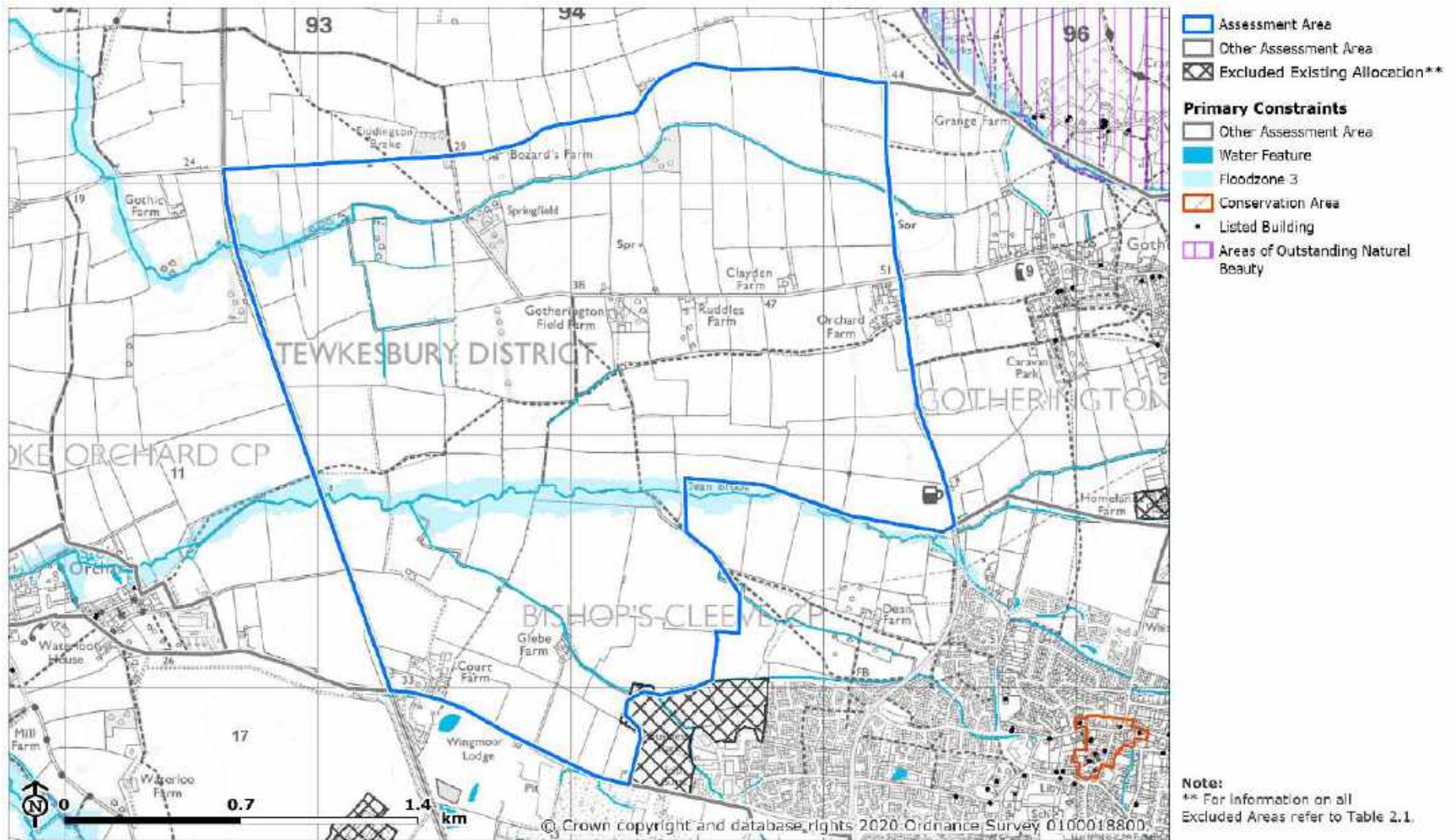
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

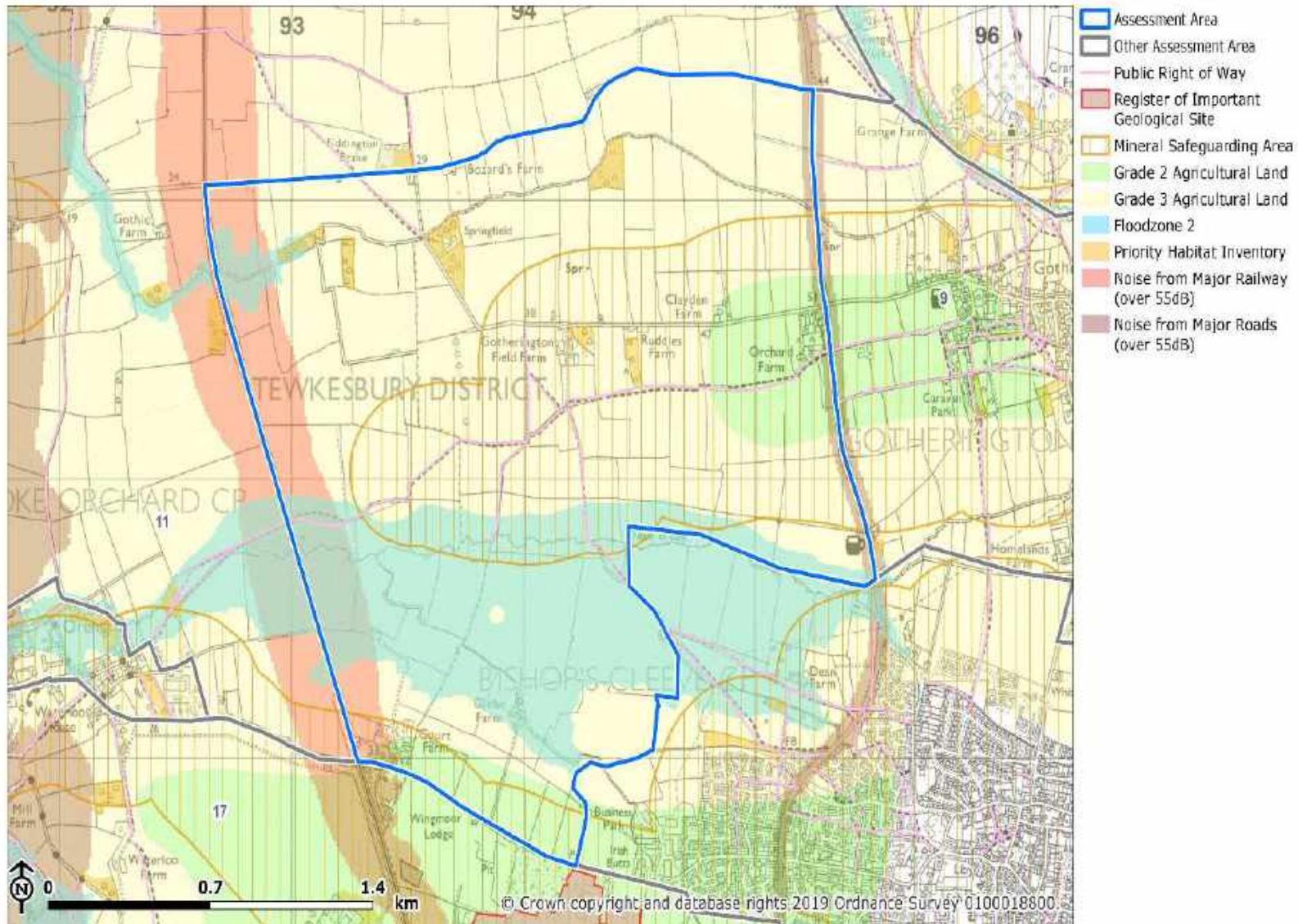
Area: ~500ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are no designated assets recorded within the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> Non-designated assets recorded within the site by the HER include: <ul style="list-style-type: none"> Cropmark of a possible burial mound; Prehistoric - Roman enclosure; Site of Roman settlement; Extensive ridge and furrow earthworks; Loudilow Lane; Post-medieval railway and dew pond; and Site of a WWII ammunition depot. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> The HLC data indicates an agricultural landscape 	<p>None of the designated assets in the wider vicinity of the assessment area appear to have a meaningful relationship with it suggesting that that development would be unlikely to result in negative effects to their significance as a result of setting change.</p> <p>There are a variety of known archaeological sites/ features within the assessment area none of which appear to be of such significance as to be an absolute constraint to development. However, they would require further investigation and, in the event of loss, an appropriate level of recording.</p> <p>The presence of a number of archaeological sites along the boundaries of the assessment area suggests a good potential for hitherto unknown remains. Once established, mitigation would need to be undertaken in accordance with their significance.</p> <p>The older less regular field systems to the centre and the north of the assessment area are likely to have a historical relationship with Gotherington, having once formed part of its open fields. Retention of these would preserve their value – any historic hedgerows present and provide some separation between Gotherington and Bishop’s Cleeve. This would help maintain the distinct and separate character/ identity of the two settlements.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>comprised of regular and less regular organised enclosure as well as semi-irregular enclosure The irregular enclosure has some time-depth and value in itself, but may also contain hedgerows that qualify as important under the schedule 1 part II archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are multiple listed buildings clustered around Gotherington (to the east), Woolstone (to the northeast), Fiddington (to the northwest), Stoke Orchard (to the west and in Bishops Cleeve (to the southeast). • There are three Scheduled Monuments – all prehistoric hillforts – that lie to the east of the assessment area. <p>Woodmancote Conservation Area</p>	<p>In the wider area the two historic settlements of Stoke Orchard and Gotherington represent the greatest sensitivities due to the need to preserve their historic character and the large number of listed buildings that they contain. However, it seems likely that most of the listed buildings in the wider vicinity are unlikely to have a relationship with the assessment area that would, in the event of development, result in negative effects to their significance.</p> <p>Development of the assessment area is unlikely to result in particularly meaningful setting change to the Scheduled Monuments in the wider area.</p> <p>Woodmancote Conservation Area extends up Nottingham Hill meaning that there could be some intervisibility that changes the experience – setting – of the asset. Any harm is unlikely to be substantial.</p> <p>To minimise the potential for harm development is likely to be best sited tight to Bishop’s Cleeve e.g. to the south of Gotherington Fields Road.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>lies to the southeast of the assessment area</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets recorded by the HER have been identified as particularly susceptible to setting change. 				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. IRZ associated with the surrounding SSSI overlap the assessment area but none specifically list residential development as land uses of risk. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Designated site of geological importance (Wingmoor Farm Sand and Gravel Pit) adjacent to the southern boundary of assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> None within 2km of the assessment area. <p>IRZS:</p>	<p>Any spatial variation of development in the assessment area will be required to provide suitable mitigation measures to ensure that the wooded river corridor network is maintained, the connectivity of hedgerows and woodlands is optimised. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> IRZ associated with the surrounding SSSI overlap the assessment area but none specifically list residential development as land uses of risk. <p>Negligible effects may occur under all development size options as there is potential for them to be located over 250m from local designations and over 2km from national designations.</p>				
Soil Quality	<p>The majority of the site is located on grade 3 agricultural land. However, there is approximately 28ha area of grade 2 agricultural land located adjacent to the eastern boundary of the assessment area and approximately a further 16ha area of grade 2 land in the south-western corner.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality under all development size options. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>Developments of all scales can potentially avoid the loss of grade 2 agricultural land through detailed design, as these areas are restricted to land adjacent to the edges of the assessment area boundaries. However, the remainder of the area is grade 3 agricultural land and therefore development within any part of the site has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality		N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are considered likely in relation to water quality for all development size options.</p>				
Flood Risk	<p>The majority of the site is greenfield, but there are areas of agricultural/residential development and local roads distributed throughout the site.</p> <p>There is approximately 94ha of developable land in the southern half of the assessment area that is located within Flood Zone 2 due to the presence of Dean Brook passing through the area. There is also a small area (<5ha) of developable land in the north-western corner within Flood Zone 2 due to the presence of another watercourse.</p> <p>There is potentially sufficient space to accommodate all development size options outside of Flood Zone 2. As such, negligible effects may occur in relation to flood risk.</p>	<p>There is potential for all development scales to be located to the north of Dean Brook, avoiding land in Flood Zone 2. There is also potential for a small extension to be located in the southernmost part of the assessment area outside of Flood Zone 2.</p>	Yellow	Yellow	Yellow
Mineral Resources	<p>There is approximately 1800ha of the central region of the site that is located within a Mineral Safeguarding Area</p>	<p>There is sufficient space adjacent to the northern boundary of the assessment area to accommodate all development scales outside</p>	Yellow	Yellow	Yellow

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>(MSA). There is also approximately a further 18ha of land adjacent to the southern boundary that is also located within a MSA.</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, there is potentially sufficient space outside of MSAs to accommodate all development scales. As such, negligible effect may occur in relation to mineral resources.</p>	<p>of MSAs. However, not all of this development at this location would be considered an urban extension due to the degree of separation from Bishop's Cleeve to the south. There is also potentially sufficient space to the south of the Dean Brook to accommodate a small or medium extension type outside of MSAs.</p> <p>It may also be possible to avoid the sterilisation of mineral resources in the assessment area by extracting minerals prior to development.</p>			
Noise	<p>The area contains two regions located within areas of high noise Noisy area, with one being located adjacent to the A435 that passes along the eastern boundary of the site from north-south, and the other being located along western boundary of the site adjacent to a railway line.</p> <p>There is sufficient space within the assessment area to accommodate all development size options outside of noisy areas.</p>	<p>There is sufficient space within the assessment area for all development scales to be set back from the noisy areas on the western and eastern boundaries.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues</p>			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Sense of tranquillity, isolation and remoteness, due to open expansive character and lack of disturbance major transport routes. • Open and exposed landscape character with the gently undulating landform providing a high level of intervisibility across the assessment area. • Intervisibility with Cotswolds AONB. <p>As such, landscape sensitivity is high under the largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high and moderate for medium and small extensions respectively as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	M-H	M

Summary of Constraints and Landscape Sensitivity

Overall, the least constrained land within the assessment area appears to be in the northern half. There is potential to accommodate a small or medium extension type adjacent to the northern boundary that would avoid the majority of constraints. This area is comprised of grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. Development in this location would not be considered an urban extension due to its degree of separation from Bishop’s Cleeve and Gotherington. In addition, the historic environment assessment suggests that the irregular field pattern in the central region and north of the assessment area contribute to the historic environment of Gotherington and therefore development could result in minor negative effects. In light of this, the historic environment assessment suggests a small extension type located adjacent to Bishop’s Cleeve on the south-eastern boundary would be the most appropriate location in historic terms. Whilst development in this location may better preserve the rural character of the area, it is occupied by land located in a Mineral Safeguarding Area and Flood Zone 2. There may be potential to avoid the loss of mineral resources through extraction prior to development. In order to avoid significant adverse effects on landscape, development may be limited to the small extension scale as the character and qualities of the landscape have moderate sensitivity to development at this scale, whilst it is moderate-high for a medium extension and high for a large extension.

The south-west and western boundary offers less potential to accommodate development due to the presence of Flood Zone 2, grade 2 agricultural land and possible negative impacts on upon the setting of heritage assets located within Stoke Orchard to the west.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A435, along the eastern boundary, providing links to Bishops Cleeve and Cheltenham to the south and Tewkesbury to the north.</p> <p>The A435 / Finlay Way Roundabout is located 0.5 miles south of the area. The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate approaching and over its design capacity in 2031 (at between 76% and 102% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The A46 Teddington Hands Roundabout is located 3 miles north of the area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at between 60% and 70% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 44,275</p> <p>A relatively high number of workplaces (jobs) can currently be accessed by PT from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 256,660</p> <p>Access from the assessment area to employment by Car scores relatively high, with good connectivity to key urban centres / employment sites, via the local road network.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the eastern edge of the assessment area is accessible to education sites within 0-20 mins, healthcare sites within 20-40 mins and urban centres within 40-60 mins travel time by public transport services.</p>	

Criterion	Rationale	Score
Private car use by commuters	<p>% Driving a Car or Van = 68%</p> <p>Car based commuter trips currently account for an average of 68% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with other assessment areas, private car still represents the primary method of travel to work and reflects the area's rural nature and low frequency public transport services.</p>	
Proximity to sustainable transport networks	The majority of the assessment area is within the 5km catchment of Ashchurch for Tewkesbury Rail Station and is served by reasonably frequent bus services towards Cheltenham. The assessment area is not directly on, but linked to strategic walk / cycle routes.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer			
	Rail transport	Within 5km of Ashchurch mainline station and with a low frequency bus route serving it. Improved frequency of bus services could result in higher levels of rail patronage.			
	Bus transport	New regular bus service to Tewkesbury is a near term prospect which would enhance service provision although further enhance would be needed. Higher scales of growth increase likelihood of securing levels of investment needed to expand bus network. This would be enhanced further if developed with assessment area 9.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	35,000	35,000	30,000
Viability	High	High	High	High	High

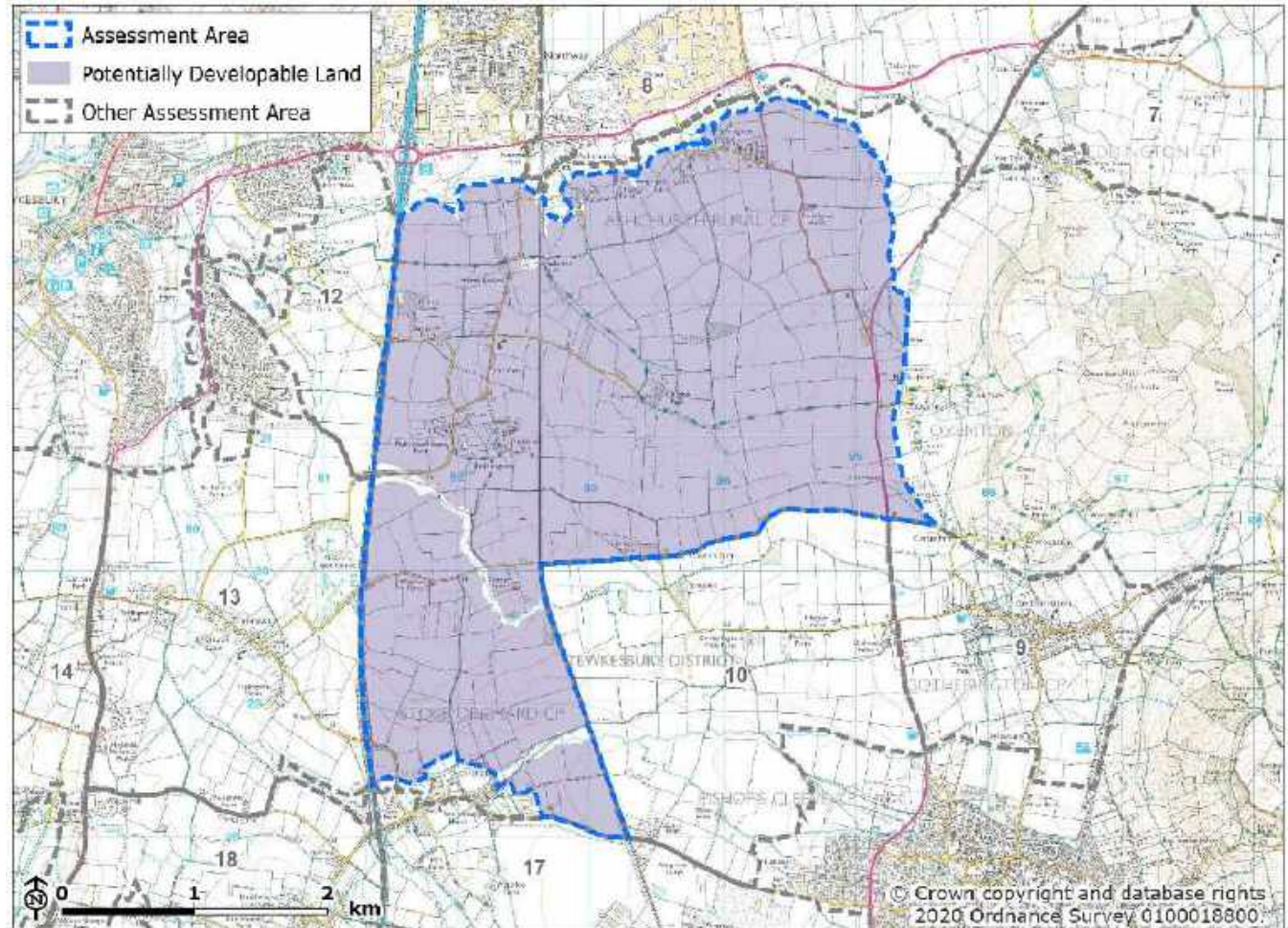
Assessment Area 11 – New Settlement: Land Southeast of Tewkesbury

Assessment Area Ref: 11

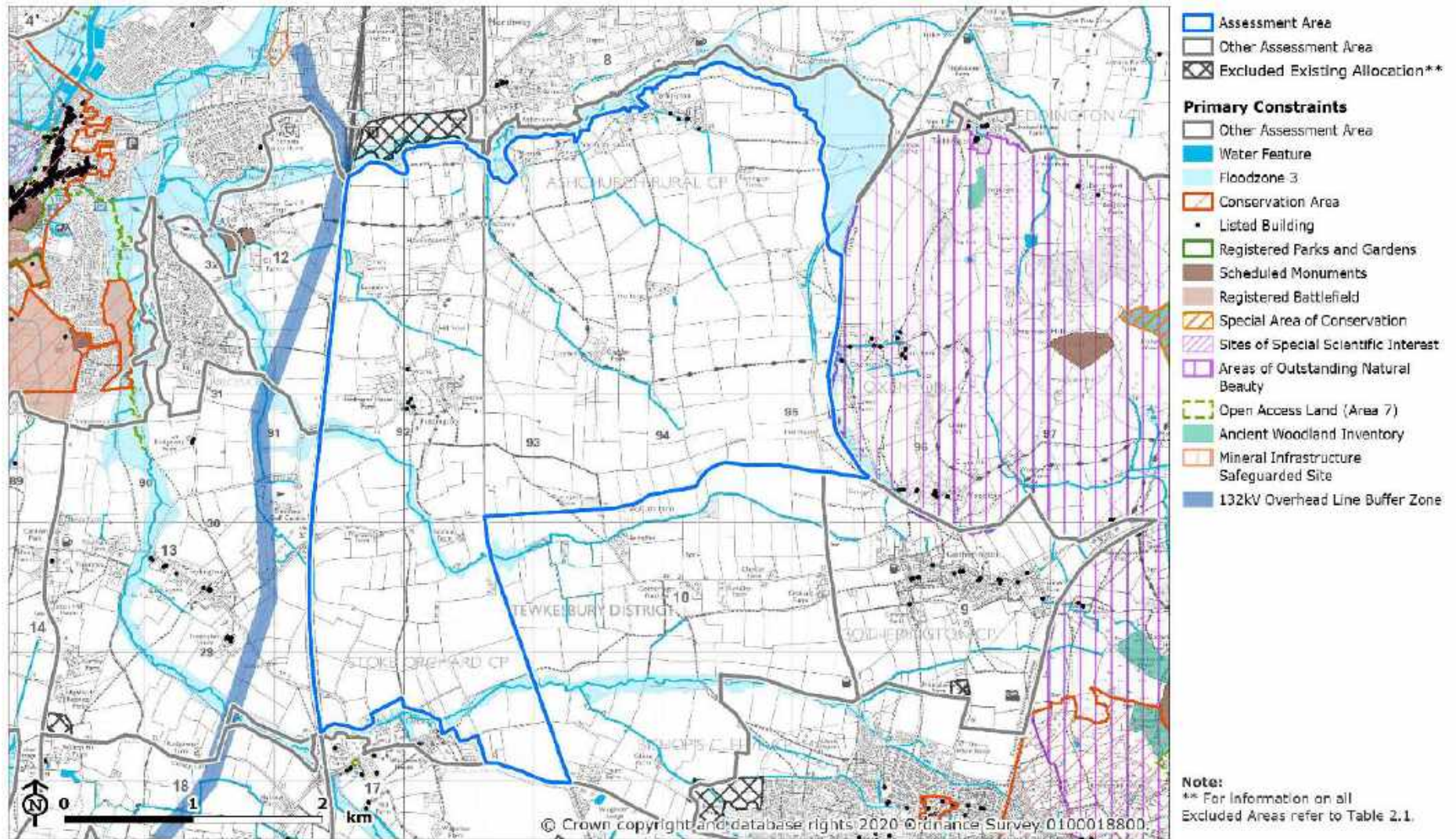
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

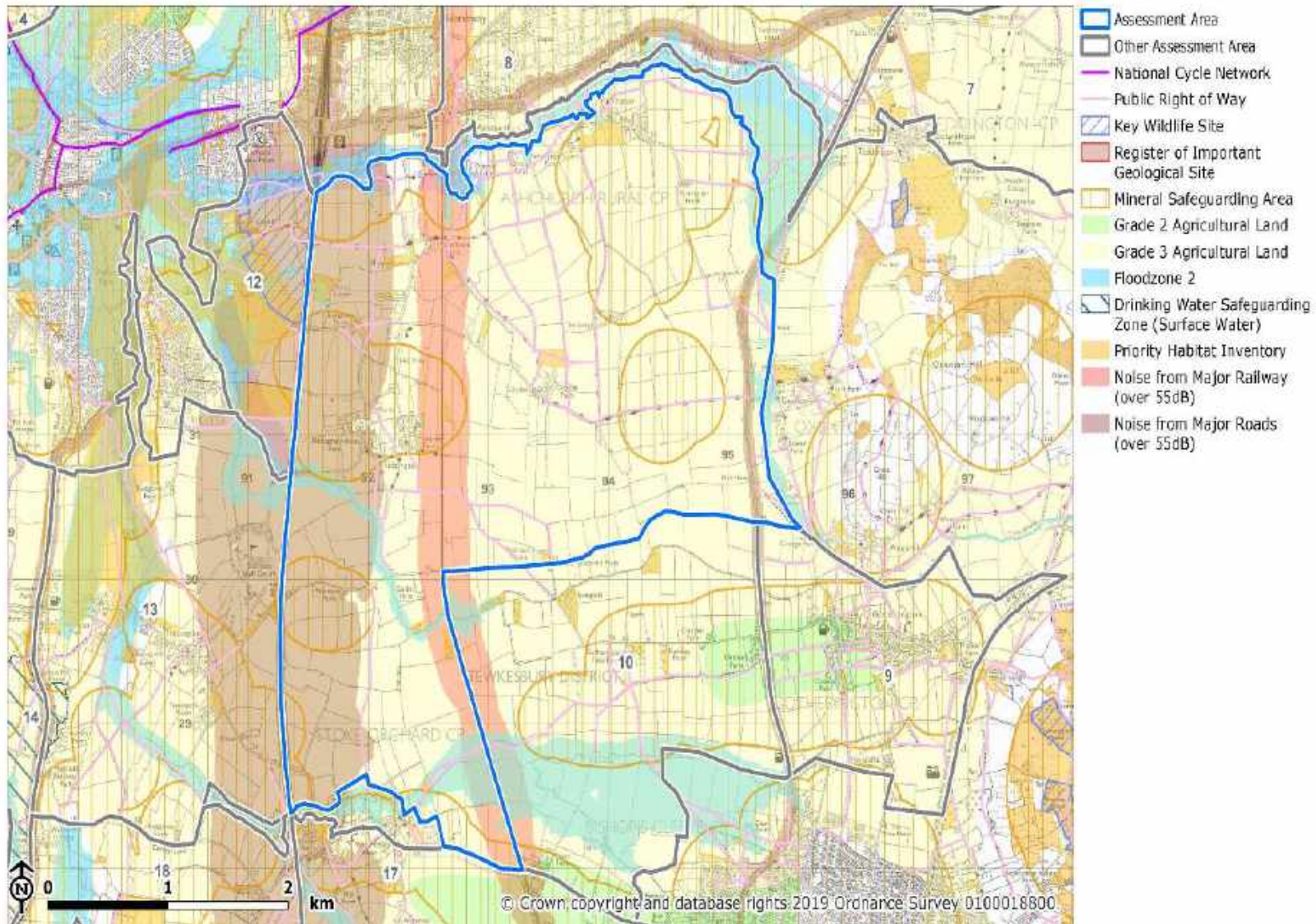
Area: ~1,400ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 9 listed buildings in the assessment area. These are all grade II except for the grade II* Manor Farm in Ashchurch and its associated Dovecote. The remaining assets include a farmhouse, agricultural buildings, and cottages. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Prehistoric features north and east of Fiddington; Possible prehistoric or Roman settlement south of Fiddington; Iron Age settlement near Homedowns Farm, Oxley Farm, and Troughton Farm in Stoke Orchard, as well as near Pamington; 	<p>The key sensitivities of the assessment area are the listed buildings in Pamington and Fiddington. Many of these would be susceptible to setting change, as well as physical change.</p> <p>Stoke Orchard on the southern edge of the assessment area is also sensitive as it forms part of the setting of some of the listed buildings there. It is of further sensitivity as there are two non-designated medieval moated sites and associated Anglo-Saxon/medieval settlement that may be of more than local significance; especially since one may be associated with the grade II* listed Manor Farm, increasing its susceptibility to setting change.</p> <p>Although setting change is unlikely for the listed buildings in the other nearby rural settlements (e.g. Oxenton and Woolstone) coalescence with a new settlement is best avoided to preserve their rural character and identity.</p> <p>The scheduled monument on Oxenton Hill further serves to make the eastern edge of the assessment area sensitive to development.</p> <p>The non-designated assets appear to be largely of local importance except for those already mentioned and possibly the water meadow north of Gothic Farm. All of these assets would be susceptible primarily to</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Iron Age to Roman settlement east of Fiddington, with Roman field system to the north; - Roman settlement north of Stoke Orchard; - Moated site at Stoke Orchard with adjacent earthwork remains of a settlement; - Medieval settlement in Fiddington and Oxenton; - Cropmarks south of Ashchurch; - Earthwork remains of a medieval to post-medieval settlement at Middle Farm and east of Fiddington; - Extensive ridge and furrow earthworks and a possible water meadow north of Gothic Farm; - Earthwork remains of a moated site and Anglo-Saxon to medieval settlement at the grade II* Manor Farm; - Shrunken medieval village at Natton Farm; - An underground tunnel?, at Rectory Farm; 	<p>physical change, although setting change may also be an issue with some.</p> <p>At this juncture, it seems likely that this area would be able to accommodate a town or city with minor negative effects. To best avoid/minimise harm any new development would be best placed between the GWR line and B4079 to the east and west and kept south of Pamington.</p>			

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	<ul style="list-style-type: none"> - The Natton Seventh day Baptist Chapel (still extant); - Post-medieval railway and turnpike road, as well as toll house; - Multiple military sites identified from aerial photos. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • Other than three historic settlements: Fiddington, Pamington and Stoke Orchard, the HLC indicates a primarily agricultural landscape comprised of a mix of less irregular, regular and less regular enclosures. Much of this partly reflects former unenclosed cultivation patterns and so has some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. • The assessment area also includes some riverine 				

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	<p>pasture and an active industrial site.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are three scheduled monuments in the wider vicinity of the assessment area. Of these, the Iron Age hillfort on Oxenton Hill is the only one with any potential to experience harm as a result of setting change. • There are a large number of listed buildings in the wider vicinity, generally clustered in small settlements e.g. Oxenton, Woolstone, Ashchurch, Treddington and Stoke Orchard. However, the assessment area only appears to form part of the setting of some of those in Stoke Orchard e.g. the grade II Barn 40m east of Dean Farmhouse and Manor Farm. <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	particularly susceptible to setting change.				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Key Wildlife Site (Walton Cardiff Ponds) adjacent to the north-western boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> No international or national assets within 2km of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> IRZ associated with the surrounding SSSI overlap the assessment area, although none specifically list residential development as a land use of risk. <p>Negligible effects may occur for all development size options as there is potential for them to be located over 250m from local designations and over 2km from national designations.</p>	Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the network of priority habitats throughout the assessment area are maintained/enhanced.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. There is approximately 20ha of land that is classified as grade 4 in the north-western corner of the assessment area.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality at all development capacities. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>Due to the high proportionate coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.</p>	?	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are considered likely in relation to water quality for all development size options.</p>	N/A			
Flood Risk	<p>The assessment area is largely greenfield apart from B4079, which passes through the north-eastern part of the assessment area, and sparsely distributed local roads and agricultural/residential buildings distributed throughout the assessment area. Additionally, the settlement of Stoke Orchard is located in the south-westernmost corner of the assessment</p>	<p>There is significant potential for development at all capacities to be located outside of Flood Zone 2 as these areas are restricted to relatively small pockets of land. Land to the west of the B4079 could potentially accommodate all scales of development outside of Flood Zone 2.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>area, Pamington is located in the north and Fiddington is located in the west.</p> <p>There are small areas (<5ha) of developable land located within Flood Zone 2 in the south-west of the assessment area due to the presence of two watercourses (Tirle Brook and Dean Brook). In addition, there are also further small areas (<20ha) of land adjacent to the north and north-eastern boundary that also located within Flood Zone 2.</p> <p>There is sufficient space within the assessment are to accommodate all development size options outside of Flood Zone 2. As such, negligible effects may occur in relation to flood risk.</p>				
Mineral Resources	<p>There are four large pockets of land in the northern half of the assessment area that are located within Mineral Safeguarding Areas (MSAs), amounting to approximately 417ha. In addition, there are further smaller pockets of safeguarded land in the south-west of the assessment area, amounting to approximately 72ha.</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, the assessment area is large and there is potentially sufficient space to accommodate all development size options outside of</p>	<p>There is over 400ha of unsafeguarded land in central region of the assessment area that could potentially accommodate all development size options, avoiding the sterilisation of mineral resources.</p> <p>It may also be possible to avoid the sterilisation of mineral resources by extracting minerals prior to development.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	MSAs. As such, negligible effects may occur in relation to mineral resources at all development capacities.				
Noise	<p>There are three areas of the assessment area that are located within areas of high noise Noisy area due to the presence of the M5 to the west, a railway passing through the centre of the assessment area and A435 on the eastern boundary of the assessment area.</p> <p>However, there is potentially sufficient space in assessment area to accommodate development at all development size options outside of noisy areas. As such, negligible effects may occur in relation to noise.</p>	<p>There is potential for development at all capacities to avoid noise pollution as there is approximately 500ha of land in the north-east of the assessment area that is located outside of noisy areas.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Sense of tranquillity, isolation and remoteness, due to open expansive character and lack of disturbance from major transport routes. • Open and exposed landscape character with the gently undulating landform providing a high level of intervisibility across the assessment area. • Intervisibility with the Cotswolds AONB. <p>As such, sensitivity is high under the large size option as the key characteristics and qualities of the landscape may be highly sensitive to change from residential development of this scale. Sensitivity is reduced to moderate-high under the small and medium size options as the key characteristics and qualities of the landscape may be less sensitive to change from residential development at these scales.</p>	H	M-H	M-H

Summary of Constraints and Landscape Sensitivity

There is over 200ha of land to the east the railway line that is unaffected by the majority of the constraints and could potentially accommodate a small or large village. This area is comprised of grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. There is potentially sufficient space to accommodate the largest Development Type if land further to the east is also used. This area is occupied by land within a Mineral Safeguarding Area, but it may be possible to avoid the sterilisation of mineral resources through extraction prior to development. In addition, development that encroaches further into the east of the assessment area may result in negative impacts on the setting of heritage assets in the settlements of Pamington, Oxenton and Woolstone. A development of the largest scale may also result in a degree of coalescence between these settlements and more significant adverse impacts on landscape due to high sensitivity, compared to moderate-high landscape sensitivity for the small and medium scales of development.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A46 (Ashchurch Road) and the B4079 / A435, providing direct links to Tewkesbury and Bishops Cleeve, while the M5 runs along the western boundary.</p> <p>The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecast that 'critical junctions' along the A46 through Ashchurch (including that with the M5) will operate close to, or beyond, their design capacities in 2031. They suggest limited capacity will exist to accommodate significant growth in this location without improved cycling and public transport links and/or supplementary capacity improvements to the A46 (proposed to be dualled and realigned to the South as part of JCS mitigation measures) and M5 Junction 9 (proposed to receive junction capacity upgrades through JCS mitigation).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 18</p> <p>A very low number of workplaces (jobs) can currently be accessed by public transport from the assessment area, which is currently served by low-frequency bus services.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 211,526</p> <p>Access from the assessment area to employment by Car scores relatively low, with travel times to key employment sites likely to take over 30 mins.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the bulk of the assessment area is not currently accessible to a range of key services (urban centres, schools and healthcare facilities) within 40 mins travel time by public transport services.</p> <p>Some small peripheral sections of the area are accessible to key services. The land adjacent to the A435 at Oxenton is accessible to education facilities within 20 mins and healthcare facilities within 40-60 mins. The land north of Stoke Orchard is accessible to education within 20 mins and healthcare within 20-40 mins.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 68%</p> <p>Car based commuter trips currently account for an average of 68% of journeys in LSOAs covered by the assessment area. While this is relatively low compared with other</p>	

Criterion	Rationale	Score
	assessment areas, private car still represents the primary method of travel to work and reflects the area's proximity to the strategic road network.	
Proximity to sustainable transport networks	The majority of the assessment area is within the 2.5km catchment of Ashchurch for Tewkesbury Rail Station and is served by low-frequency bus services. There are opportunities to enhance existing walking and cycling paths through any future development proposals, to improve access to Tewkesbury by active modes.	

Deliverability/Infrastructure

Criterion	Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)	
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure. Some constraints arise with new infrastructure required to cross rail network and M5.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable, although easement would require high pressure pipeline diversion which would incur a cost to developer			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Rail transport	Within 2.5km of Ashchurch mainline station and with a low frequency bus route serving it. Improved frequency of bus services could result in higher levels of rail patronage.			
	Bus transport	Within 500m of existing low frequency bus route and close enough to Tewkesbury and station to mean that improvements in frequency could result in reasonably high levels of bus patronage. Improvements to bus accessibility would be needed at M5 J9 to avoid severance issues and this may have a higher prospect of being delivered at higher scales of growth. Collective development with Ashchurch Garden Town (location #8) and/or areas to east (assessment areas 5, 6 and 7) could facilitate/justify significant investment in improvements, e.g. busway.			
	Cycle transport	Distant from existing cycle network although proximity to Tewkesbury and station could mean that investment in cycling infrastructure increases cycling trips. Improvements to cycle accessibility would be needed at M5 J9 to avoid severance issues and this may have a higher prospect of being delivered at higher scales of growth. Collective development with Ashchurch Garden Town (location #8) and/or areas to east (assessment areas 5, 6 and 7) could facilitate/justify significant investment in improvements.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	25,000	15,000
Viability	High	High	High	High	High	Medium

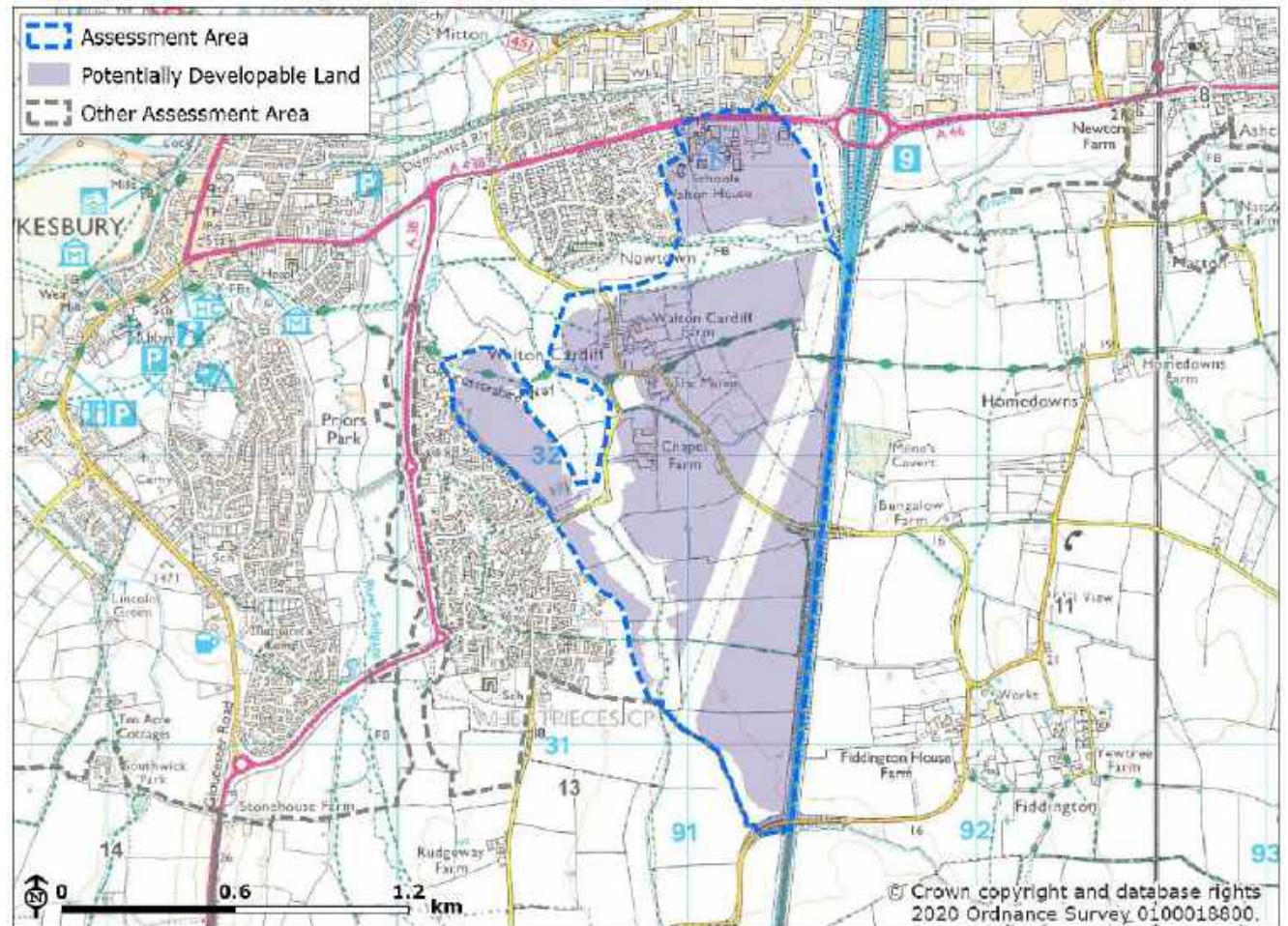
Assessment Area 12 – Urban extension: Land East of Tewkesbury

Assessment Area Ref: 12

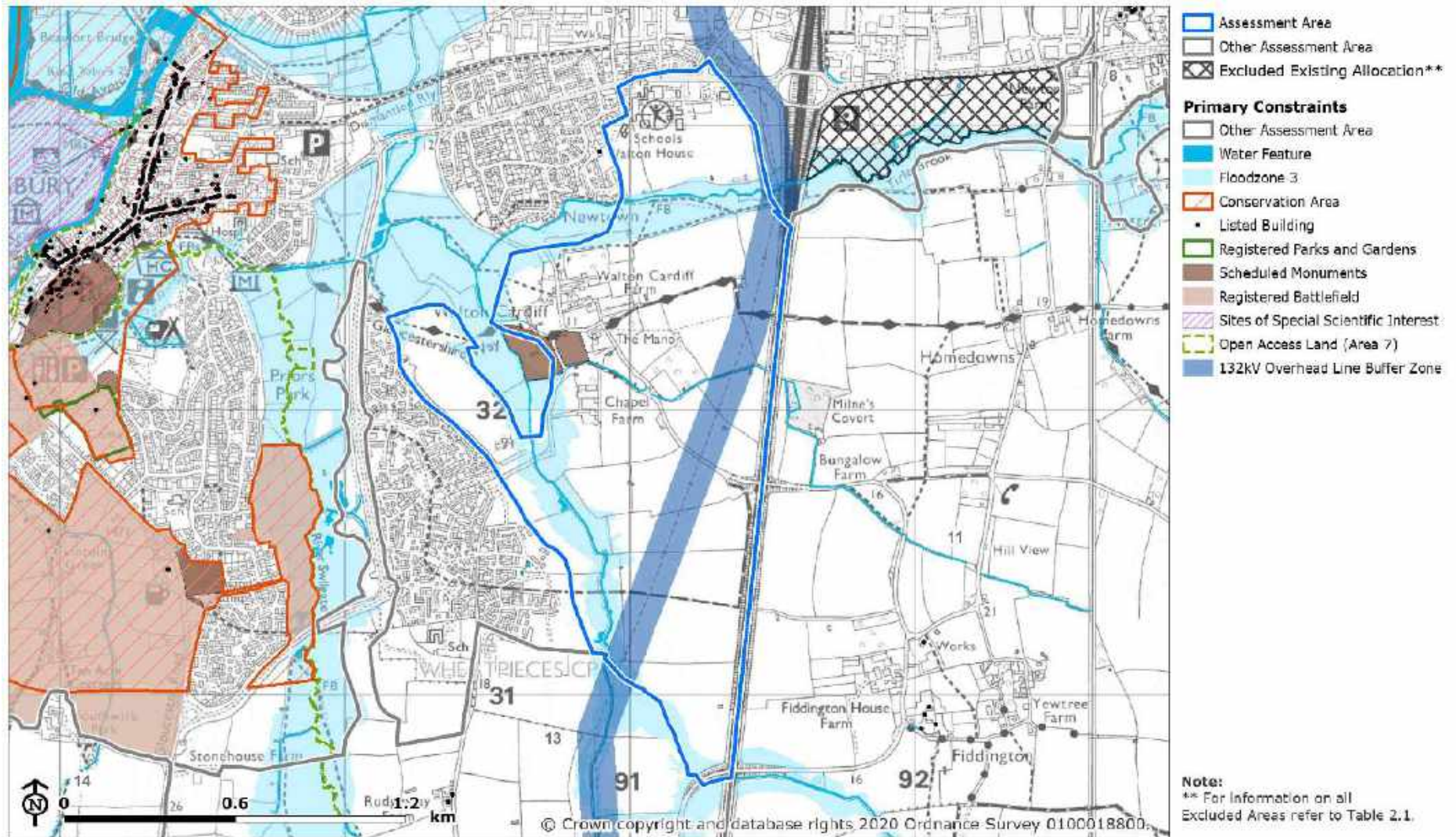
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

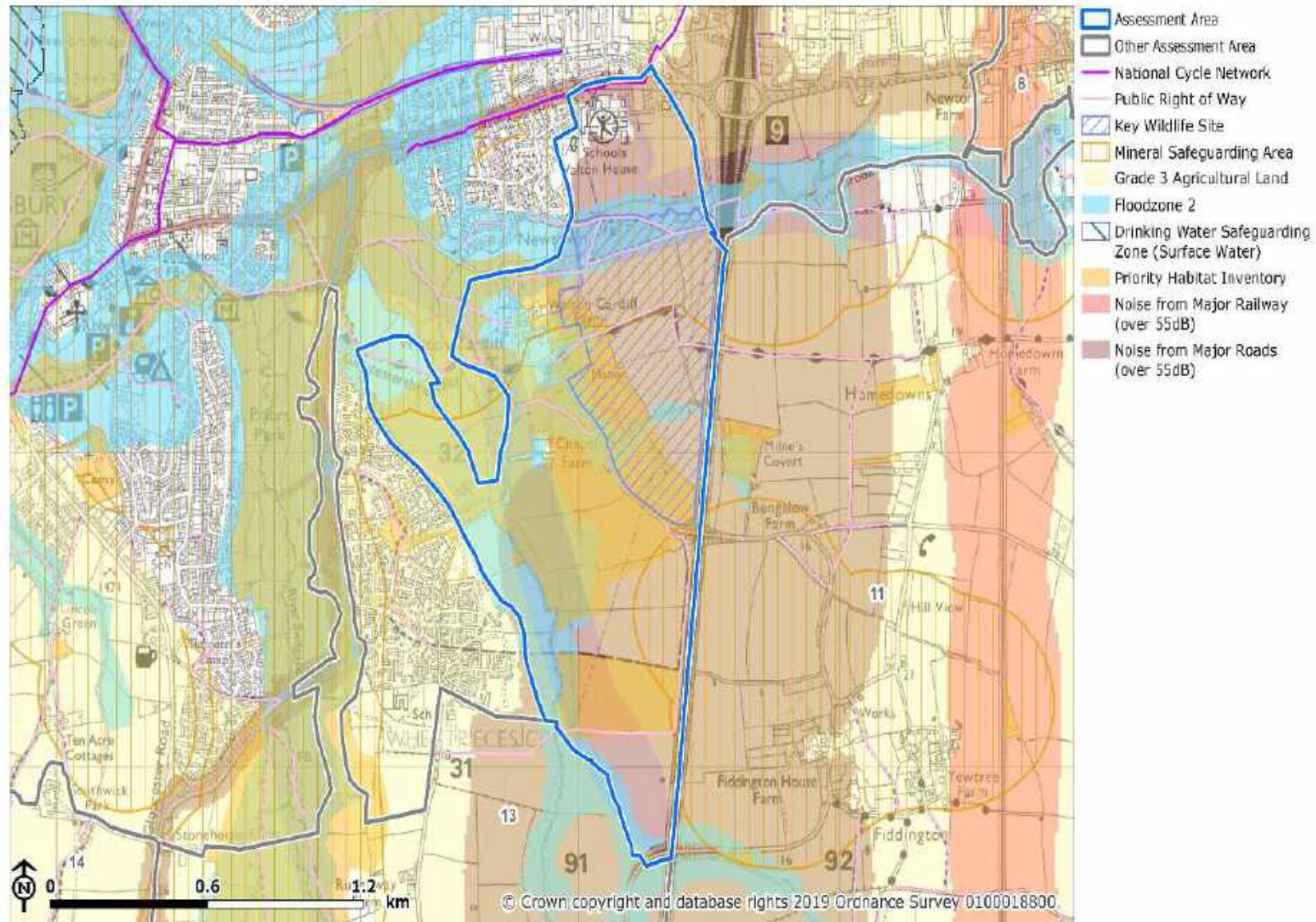
Area: ~171ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The scheduled remains of a deserted medieval village (DMV) lie in Walton Cardiff. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> A Bronze Age metal working site; Possible Roman settlement by the M5; Water meadow system, Walton Cardiff; Extensive ridge and furrow; Site of a post-medieval church, Walton Cardiff; Post-medieval causeway, west of Chapel Farm; and Tewkesbury Turnpike road. <p><i>Historic Landscape</i></p>	<p>The key constraint of the assessment area is the scheduled DMV in Walton Cardiff, which cannot legally be disturbed without scheduled monument consent.</p> <p>There are no listed buildings, but as with any of the assessment areas there may be non-designated built heritage assets that may be susceptible to physical and/ or setting change.</p> <p>The grade II listed Walton House is immediately adjacent to the assessment area but its setting is so changed, that any further development is unlikely to affect its significance or legibility.</p> <p>The known non-designated assets are generally of low value. The water meadow could be of greater significance, but it largely extends beyond the assessment area and overlaps partly with the scheduled monument.</p> <p>To avoid/ minimise harm an urban extension may be best located to the south of the assessment area below Chapel Farm. This area could potentially accommodate a small urban extension giving rise to minor negative effects as a result of the physical harm to archaeology. In theory, a larger extension might be possible by also extending north to the east of Walton Cardiff and the scheduled monument to Newtown. Such an extension would still technically give rise to minor negative effects but the number of effects</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> The HLC indicates a primarily agricultural landscape comprised of a mix of irregular and less regular enclosures. Much of this partly reflects former unenclosed cultivation patterns and so has some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. There are also some areas of riverine pasture. In the north is an area of former ornamental landscape – now playing fields - associated with Walton House. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The grade II listed Walton House is immediately adjacent of the 	<p>would be greater as there is would change the setting of non-designated built heritage assets and the affect the historic character of Walton Cardiff. Overall, these two areas could probably accommodate a medium sized extension with minor negative effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>north-western part of the assessment area. This country house is largely enclosed by residential development, but parts of its former grounds extend into the assessment area. Whilst still open playing fields, these parts now appear to be screened by a tree-lined boundary meaning that they are unlikely to be experienced as part of the assets setting.</p> <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being particularly susceptible to setting change.</p>				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Key Wildlife Site (Walton Cardiff Ponds) occupies the majority of the northern half of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Key Wildlife Site (Tewkesbury Railway Line) 160m to the north. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Severn Ham) 1.2km west. 	<p>Any spatial distribution of development within the assessment area will be required to ensure that there is a suitable buffer created around the Key Wildlife Site and that the areas of floodplain grazing marsh priority habitat – which extend through the majority of the central and southern Assessment Area – are maintained. This may place considerable restrictions on the scale of development possible as the Key Wildlife Site and areas of priority habitat occupy the majority of the assessment area. There is insufficient space to accommodate a continuous development at</p>	<p>N/A</p>	<p>*</p>	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>IRZs:</p> <ul style="list-style-type: none"> IRZ for Severn Ham SSSI overlaps with the western half of the assessment area and is for residential development of 100 units or more. <p>Significant negative effects may occur under the medium development size option as it is likely that this scale of development could not be accommodated without intersecting with the local designation in the assessment area. Negligible effects may occur under the smallest development size option as there is potentially sufficient space to accommodate this scale of development over 250m from local designations and over 2km from national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>	<p>the medium size option without overlapping with ecological assets in the area.</p> <p>It may be possible to locate a small extension type in the south-east of the assessment area, which would be over 250m from the local designation within the assessment area and over 2km from the national designation to the west. However, development at this location may not be considered an urban extension due to the degree of separation from Tewkesbury.</p>			
Soil Quality	<p>The majority of developable land within the assessment area boundaries is grade 3 agricultural land. There is approximately 25ha of developable land that is grade 4 adjacent to the western boundary and in the northern part of the assessment area. In addition, there is approximately 10ha of land adjacent to the northern boundary that is classified as urban.</p>	<p>There are pockets of grade 4 land within the assessment area at the northern and southern ends of the area that in combination could accommodate a small extension; however, as separate pockets, they would not represent a single extension. Therefore, there is considered to be no area large enough within the area that is able to accommodate any extension size without affecting land designated as Grade 3 agricultural land.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality under the applicable development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>				
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are considered likely in relation to water quality under the applicable development size options.</p>	N/A	N/A		
Flood Risk	<p>The assessment area is greenfield apart from agricultural/residential development and local roads distributed sparsely throughout the assessment area and the settlement of Walton Cardiff in the western half.</p> <p>There is approximately 30ha of developable land that is located within Flood Zone 2 due to Tirlle Brook passing through the western half of the assessment area and one of its tributaries bisecting the area from west to east.</p>	<p>Development at the smallest size option could potentially be accommodated in the eastern half of the assessment area outside of Flood Zone 2, either north or south of the watercourse bisecting the area.</p>	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Significant negative effects may occur under the medium development size option as it is likely that this scale of development could not be accommodated without intersecting with Flood Zone 2. Negligible effects may occur under the smallest development size option as there is potentially sufficient space to accommodate this scale of development outside of Flood Zone 2.</p>				
Mineral Resources	<p>There is approximately 57ha of land in the northern half of the assessment area that is located within a Mineral Safeguarding Area (MSA). In addition, there is a smaller pocket of safeguarded land on the south-eastern boundary, amounting to approximately 10ha.</p> <p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur at the medium development size option as there is insufficient space to accommodate this scale of development outside of MSAs. Negligible effects may occur in relation to mineral resources at the small development size option as this scale of development can potentially be accommodated outside of MSAs.</p>	<p>There is an area of unsafeguarded land to the east of Walton Cardiff that could potentially accommodate development at the smallest size option, avoiding the sterilisation of mineral resources.</p> <p>It may also be possible to accommodate larger development scales without the sterilisation of mineral resources by extracting minerals prior to development.</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Noise	<p>Over 50% of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours, due to the presence of the M5 on the eastern boundary.</p> <p>Significant negative effects may occur in relation to noise under both applicable development size options as there is insufficient space to accommodate these scales of development outside of noisy areas.</p>	<p>There is land in the western half of the assessment area that is located outside of noisy areas, but there is potentially insufficient space to accommodate an urban extension of over 500 dwellings.</p> <p>Suitable mitigation may be possible within the assessment area to overcome any noise related issues with development.</p>	N/A	*	*
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A	N/A		

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Risk of coalescence between Tewkebusry and Newton. • Rural and agricultural landscape character. • Open and exposed landscape character with the gently undulating landform providing a high level of intervisibility across the assessment area. <p>As such, landscape sensitivity is high under the medium size option as the key characteristics and qualities of the landscape may be highly sensitive to change from residential development of this scale. Landscape sensitivity is reduced to moderate-high under the small size option as the key characteristics and qualities of the landscape are potentially less sensitive to change from residential development of this scale.</p>	N/A	H	M-H

Summary of Constraints and Landscape Sensitivity

There is almost no land within the assessment area that is free from multiple constraints. In particular, much of the northern half of the assessment area is occupied by a Key Wildlife Site that is also adjacent to a Scheduled Monument on the western boundary. As such, a small extension type may best be placed to the west and south-east of Chapel Farm. There is insufficient space to accommodate a continuous development in the southern half of the assessment area due to the presence of a water course and a powerline. In addition, these two potential areas for a small extension type (west and east of Chapel Farm) contain some land within a noisy area, Mineral Safeguarding Areas, Flood Zone 2 and some grade 3 agricultural land. There may be potential to avoid the sterilisation of mineral resources through extraction prior to development and it is not clear if the grade 3 land is grade 3a or the lower quality grade 3b. In addition, it may be possible to overcome any noise related issues using suitable mitigation. Development at the smallest end of the spectrum may result in reduced adverse impacts on landscape, but landscape sensitivity in the area is still moderate-high for a small extension type.

Although not large enough to accommodate a small extension type, there is some land in the northernmost part of the assessment area that may be able to support some infill development. This area is also occupied by land within a noisy area and a Mineral Safeguarding Area, which it may be possible to mitigate adverse impacts on. There is also some grade 3 agricultural land in this location, but it is not clear if it is grade 3a or grade 3b.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A438, linking to M5 Junction 9, and to the west via the A38.</p> <p>The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecast that 'critical junctions' along the A46 through Ashchurch (including that with the M5) will operate close to, or beyond, their design capacities in 2031. They suggest limited capacity will exist to accommodate significant growth in this location without improved cycling and public transport links and/or supplementary capacity improvements to the A46 (proposed to be dualled and realigned to the South as part of JCS mitigation measures) and M5 Junction 9 (proposed to receive junction capacity upgrades through JCS mitigation).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 34,494</p> <p>A relatively high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with high-frequency PT services operating along the key arterial routes in proximity to the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 253,729</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to Tewkesbury and other key employment sites.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is partially accessible to a number of key services (education and healthcare) within 0-20 mins and urban centres between 20-40 mins travel time by public transport services.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 76%</p> <p>Car based commuter trips currently account for an average of 76% of journeys in LSOAs covered by the assessment area. This number is relatively high given the areas proximity to key services.</p>	

Criterion	Rationale	Score
Proximity to sustainable transport networks	The majority of the assessment area is within the 2.5km catchment area of Ashchurch for Tewkesbury Rail Station and is close to high frequency bus services. A National Cycle Network route runs along the northern boundary of the assessment area, providing cycle links to Evesham.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	Load is acceptable.	N/A		
	Rail transport	Within 2.5km of Ashchurch mainline station and with a low frequency bus route serving it. Improved frequency of bus services could result in higher levels of rail patronage.	N/A		

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	Bus transport	Served by a low frequency bus route and close enough to Cheltenham and Tewkesbury to mean that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J9 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Development at higher scales would have a better prospect of securing investment needed to deliver improvements required to the bus network. This would be enhanced if accompanied by development of other areas, e.g. assessment areas 8, 11 and 13.	N/A		
	Cycle transport	Served by existing cycle network including Ashchurch station and Tewkesbury. Proximity to M5 J9 would require significant cycle network expansion to avoid overloading SRN network with significant additional car traffic. Development at higher scales would have a better prospect of securing investment needed to deliver improvements required to the cycling network. This would be enhanced if accompanied by development of other areas, e.g. assessment areas 8, 11 and 13.	N/A		

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	35,000	35,000	N/A
Viability	500	1,000	2,500	3,500	4,500

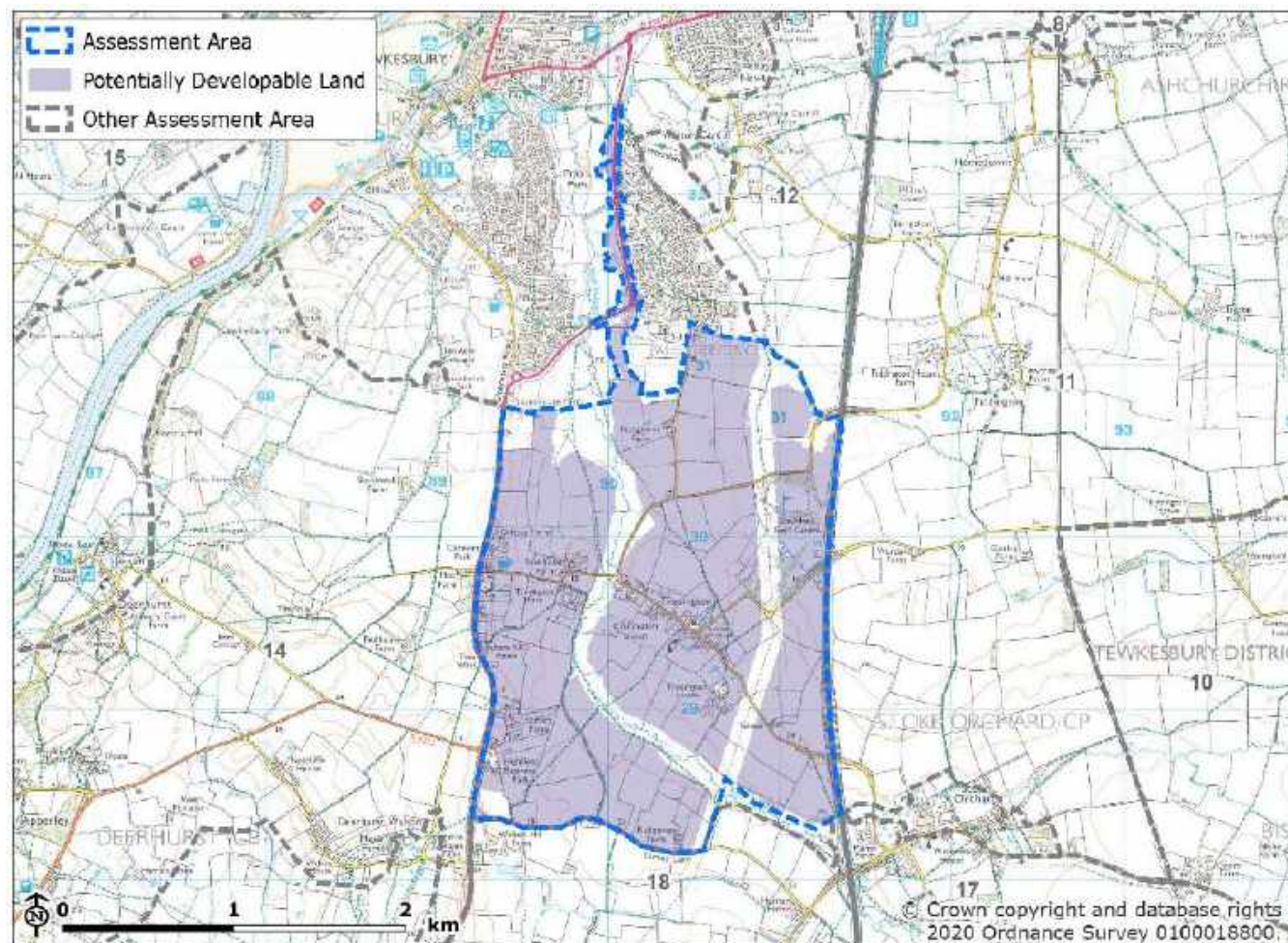
Assessment Area 13 – Urban Extension: Land South of Tewkesbury (West of M5)

Assessment Area Ref: 13

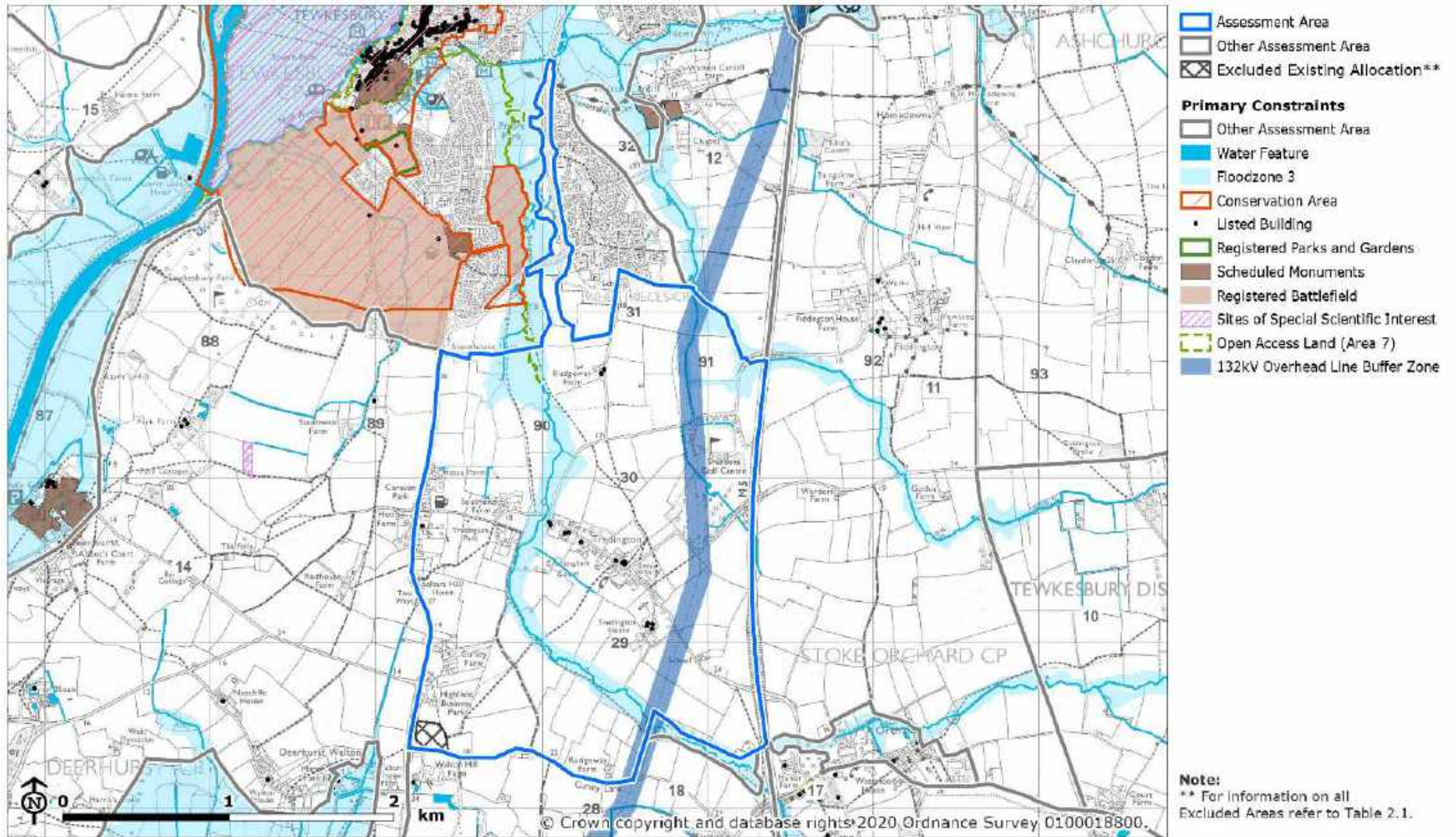
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

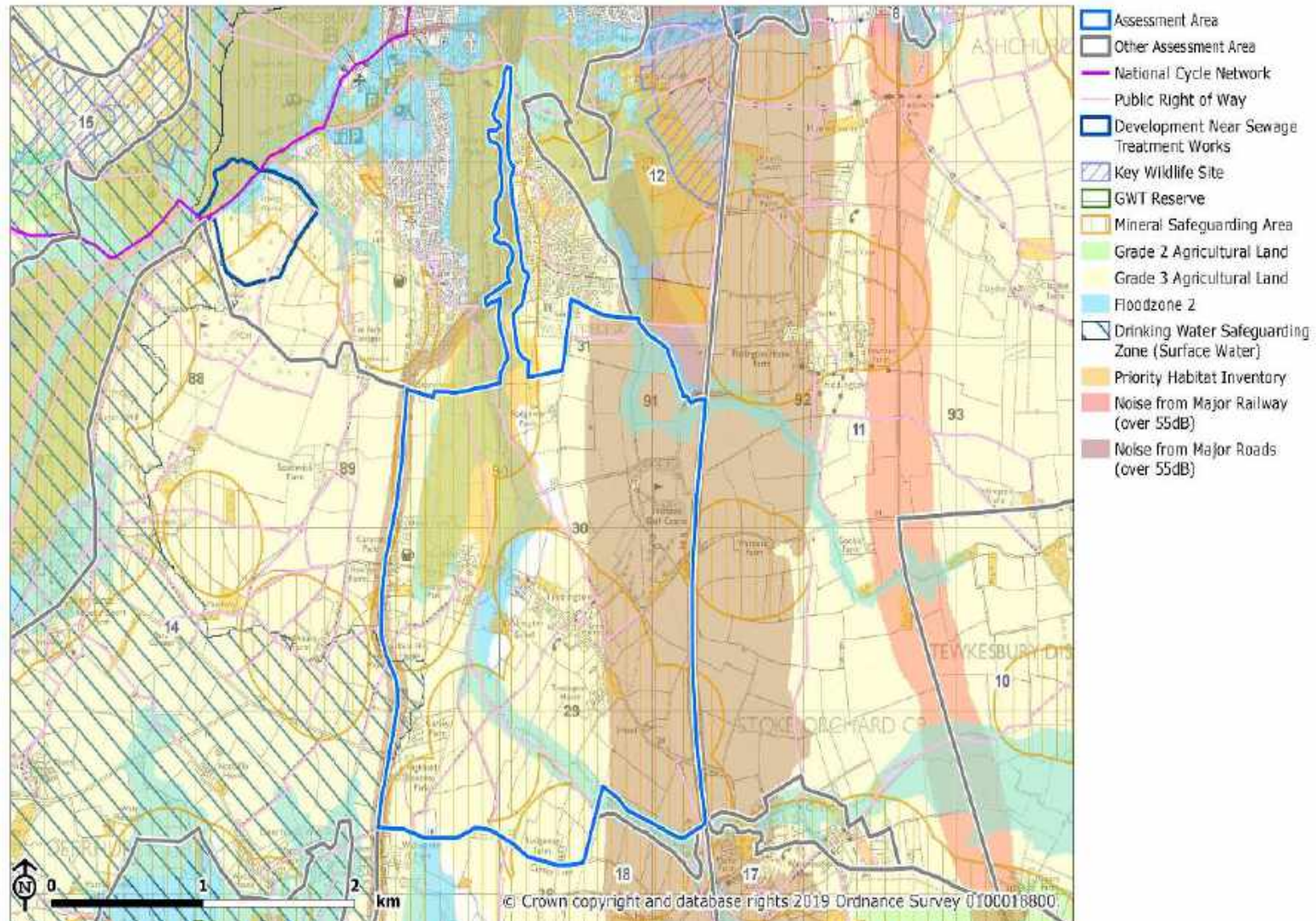
Area: ~546ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are 18 listed buildings of all grades within the assessment area. These are clustered towards the centre within the linear rural settlement of Tredington, with outliers to the north and west. • The grade II listed Churchyard Cross in St John The Baptist's Churchyard, in Tredington, is also a scheduled monument. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records a large number of heritage assets within the assessment area including, but not limited to: <ul style="list-style-type: none"> - Multiple Prehistoric and Roman settlement sites/features; - A number of possible medieval/ post-medieval mill sites; 	<p>The listed buildings are generally of high susceptibility to setting change as they are typically agricultural buildings with rural hinterlands that contribute to their legibility. The grade I church of St John is of particular sensitivity and has an important relationship with a number of grade II listed burial monuments in its churchyard. The buildings characterise Tredington as a historic rural settlement and its coalescence with Tewkesbury should be avoided.</p> <p>The moated sites and possible deserted medieval settlement at Tredington could be of high significance. So too could the Anglo-Saxon and medieval settlement at Stoke Orchard. These sites could require preservation in situ. Other sites would require further investigation but are considered unlikely, based on the current level of assessment, to be a constraint to development.</p> <p>In the wider area, Tewkesbury Conservation area represents a key sensitivity in relation to setting change in addition to the listed buildings in Stoke Orchard which are indicative of its rural origins.</p> <p>To avoid/ minimise the key sensitivities development could be limited to the north-</p>	<p>?</p>	<p>?</p>	<p>?</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Two moated sites and deserted medieval village in Tredington; - Anglo-saxon and medieval moated site and settlement at Manor Farm, Stoke Orchard; and - The former Tredington Hospital. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • Other than the settlement at Tredington, the HLC data indicates an agricultural landscape comprised of a mix of enclosures including irregular (to the north), less irregular (to the west) and less regular enclosure (to the east) as well as Valley side meadow below spring line. The older enclosures could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p>	<p>eastern corner of the assessment area. Development could also be restricted to the southwestern corner.</p> <p>Due to the need to avoid the more sensitive areas of the site, which are generally in the centre associated with Tredington, it is considered likely that significant negative effects may arise from a large development, and minor negative effects in relation to medium and small developments.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> Tewkesbury Conservation Area lies to the west of the northern extent of the assessment area. The Battle of Tewkesbury Registered Battlefield lies to the west of the northern extent of the assessment area, which partially overlaps with the Tewkesbury Conservation Area. There is a group of listed buildings to the southeast by Stoke Orchard. These include a grade I listed church. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets have been identified being susceptible to setting change at this stage. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> There are no designations within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> There are no designations within 250m of the assessment area. <p>International and National Assets within 2km:</p>	<p>Any spatial distribution of development in the assessment area should be required to provide suitable avoidance/mitigation measures to ensure that the wider, cohesive floodplain grazing marsh is maintained.</p> <p>The stepping stones of woodland and interlinking hedgerows through Tredington should be safeguarded. There is an opportunity to extend and connect between these features to provide enhancement.</p> <p>Development in or adjacent to floodplain grazing marsh will be tightly constrained.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> SSSI (Severn Ham, designated for hay meadow-managed grassland) 950km north-west. SSSI (Turvey's Piece, also designated for hay meadows) 1km west. SSSI (Coombe Hill Canal designated for the invertebrate assemblage and plants) 1.2km south-west. SSSI (Old River Severn, Upper Lode - varied botanical, avian and invertebrate cited interests) 1.9km north-west. <p>IRZs:</p> <ul style="list-style-type: none"> The IRZ for Severn Ham SSSI overlaps the entire assessment area. Residential development of 100 units or more are listed as a land use of risk. The IRZ for Turvey's Piece SSSI overlaps the north western part of Area 13. The IRZ for Coombe Hill Canal SSSI overlaps with the southern half of the assessment area. <p>Negligible effects may occur for all development size options as they could</p>	<p>Whilst avoidance as the first stage of the Mitigation Hierarchy (avoidance) should be emphasised, this habitat type offers opportunity for enhancement.</p> <p>The Area is overlapped by numerous SSSI IRZ, which will require consideration in any expansion of Tewkesbury. Within the northern section of this assessment area, the SSSI IRZ is indicating that residential developments of 100 units or more have the potential to cause impacts to the designated sites within the local area.</p> <p>The river and floodplain forms a key component of the habitat connectivity through Tewkesbury, the wider functionality of which should be maintained.</p> <p>There may be potential to accommodate all development scales in the eastern half of the assessment area over 2km from national designations in the area, although this would have implications for the connectivity with the existing urban area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	potentially be accommodated over 2km from any national designations.				
Soil Quality	<p>The vast majority of the assessment area is located on grade 3 agricultural land. There is approximately 45ha adjacent to the watercourse in the central region of the assessment area that is grade 2 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality at all development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	Due to the high proportionate coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.	?	?	?
Water Quality	<p>There is approximately 7ha on the south-western boundary of the assessment area that is located within a drinking water safeguarding zone.</p> <p>However, the majority of the assessment area is located outside of this area and therefore negligible effects may occur in relation to water quality for all development option sizes.</p>	Due to the area of the assessment area located within a drinking water safeguarding zone being restricted to a small pocket of land in the south of the assessment area, it is likely that all development options can be accommodated outside of this area.			
Flood Risk	The assessment area is greenfield apart from the settlement of Tredington located in the centre of the assessment	There is potential for development within the assessment area to be accommodated outside of Flood Zone 2 to the west or east of the			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>area and sparsely distributed local roads and agricultural/residential buildings.</p> <p>There is approximately 100ha of land within the assessment area that is in Flood Zones 2 due to the River Swilgate passing through the centre of the assessment area from north to south. There is also a smaller area of the assessment area in the north-eastern corner located within Flood Zone 2 due to the presence of Tirl Brook.</p> <p>It is considered likely that all development typologies could be accommodated within the assessment area whilst avoiding areas of Flood Zone 2, therefore negligible effects are anticipated for all development sizes.</p>	<p>watercourse that bisects the assessment area (avoiding the area in the north-east area). However, a development located further south in the assessment area may not be considered an urban extension due to the degree of separation from Tewkesbury in the north.</p>			
Mineral Resources	<p>Over 50% of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur in relation to mineral resources under the largest development option size as there is insufficient space to accommodate this scale of development outside of MSAs. Negligible effects may occur under the small and medium development options as there is potentially sufficient space</p>	<p>There is potentially sufficient space in the north of the assessment area to accommodate the small and medium development size options.</p> <p>Suitable mitigation may also be possible for large developments to overcome mineral resourcing issues, such as extraction prior to development.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	to accommodate these scales of development outside of MSAs.				
Noise	<p>The majority of the eastern half of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 along the eastern boundary. A smaller area along the western boundary is also located within an area of high noise Noisy areadue to the presence of the A38.</p> <p>The potential exists for significant negative effects resulting from development within these areas.</p>	<p>Significant negative effects may occur in relation to noise for a large development as there is insufficient space to accommodate this scale of development outside of noisy areas. Negligible effects may occur in relation to noise under the small and medium development scenarios as there is potentially space to accommodate these scales of development outside of noisy areas.</p> <p>Suitable mitigation may also be possible at all scales to overcome noise related issues.</p>	*		
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Historic character of village, irregular field pattern more pastoral character. • High proportion of BAP Priority Habitats including deciduous woodland, traditional orchards and floodplain grazing marsh. • Sense of tranquillity, isolation and remoteness, due to open expansive character. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for small urban extensions as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

<p>Overall, the least constrained land is located in the south-west and north-east portions of the assessment area (in the vicinity of Rudgeway Farm).</p> <p>Development at the smallest development scale could potentially avoid the majority of constraints by being located in the north in the vicinity of Rudgeway Farm. This location is however potentially constrained by a small area of Flood Zone 3 and an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours, as well as two grade II listed buildings at Rudgeway Farm itself. If noise impacts can be mitigated, then on the basis of the constraints considered the optimum development location may be the north-eastern part of the assessment area (up to the lower end of the medium development scale). This area is also occupied by Grade 3 agricultural land but it is not clear whether it is grade 3a grade 3b. However, landscape sensitivity is high under the medium extension scenario and therefore development may be better limited to a smaller scale.</p> <p>Development could also potentially avoid a number of constraints by being located in the south-west of the assessment area, although probably only at the 'small' development scale. This area is occupied by land safeguarded for mineral resources (which it may be possible to extract prior to development) and grade 3 agricultural land (whether grade 3a or 3b is unknown). Importantly, development at this location may not be considered an urban extension, given the degree of separation from Tewkesbury, but could potentially form part of a new settlement if combined with development in other assessment areas. Landscape sensitivity is reduced under the small extension scenario, but is still considered to be moderate-high.</p> <p>Such small development scenarios are all likely to be within 2km of at least one of the SSSIs within the vicinity of the area.</p>

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is adjacent to the A38 (Tewkesbury Bypass) which provides a link to M5 Junction 9. While 'critical junctions' along both routes currently operate beyond their design capacity in AM/PM peak periods, transport modelling undertaken for the JCS Evidence base forecasts that improvements linked to future growth nearby will reduce peak hour traffic congestion (albeit with key junctions predicted to function close to their design capacity at peak times).</p> <p>To the South, the assessment area is linked to M5 Junction 10 via the A38 / A4019 (Cheltenham Rd). Both M5 Junction 10 (not an all movements junction) and the A38/Coombe Hill junctions are forecast to operate beyond 90% of their design capacity during peak hours when future JCS growth allocations and transport improvements are delivered.</p> <p>Both routes provide direct links to Tewkesbury, Cheltenham and Gloucester. Without the provision of enhanced alternatives to car use, and/or further highway capacity improvements, it is likely that growth in this area will worsen forecast future traffic congestion.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 54,585</p> <p>Access from the assessment area to workplaces (jobs) is high, due to the assessment area's proximity to public transport services that directly serve Tewkesbury and other nearby urban centres.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 267,325</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to Tewkesbury and Cheltenham.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility outputs show that some educational and healthcare sites can be accessed within 20mins travel time by public transport services, whilst some urban centres can be reached between 20 and 40mins travel time.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 68%</p>	

Criterion	Rationale	Score
	Car based trips currently account for an average of 68% of commuter journeys in the LSOAs covered by the assessment area. This is likely a result of the assessment area's relatively rural location and proximity to the strategic road network.	
Proximity to sustainable transport networks	The majority of the assessment area is located within 5km of Ashchurch for Tewkesbury Rail Station and within 500m of a low-frequency bus route, with services to Tewkesbury and surrounding urban centres. The assessment area is currently divorced from the National Cycle Network (NCN), but with potential opportunities to provide strategic active travel routes to the north of the site via Rudgeaway Lane.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network only required at highest scale of growth, with the cost of downstream reinforcement to be borne by developer			

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	Rail transport	Within 5km of Ashchurch mainline station. Improved frequency of bus services could result in higher levels of rail patronage.			
	Bus transport	Served by a low frequency bus route and close enough to Cheltenham and Tewkesbury to mean that improvements in frequency could result in reasonably high levels of bus patronage. Only at higher scales of growth will there be a reasonable likelihood of securing levels of investment needed to expand bus network, unless developed along with assessment area 12.			
	Cycle transport	Not currently served by cycle network although close enough to Tewkesbury that investment in cycle infrastructure could increase cycle trips. Only at higher scales of growth will there be a reasonable likelihood of securing levels of investment needed to develop cycle network, unless developed along with assessment area 12.			

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	35,000	35,000	30,000
Viability	High	High	High	High	High

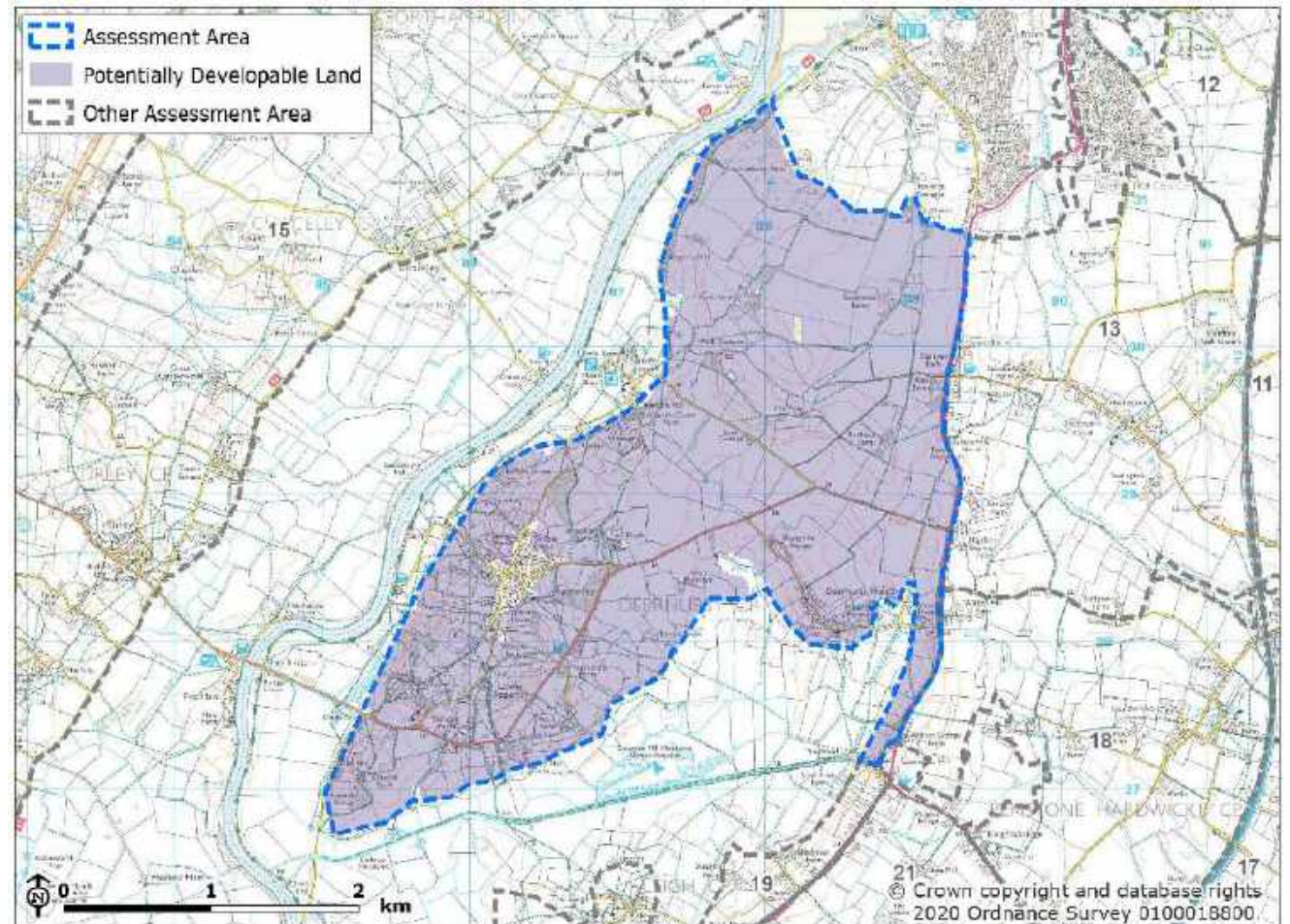
Assessment Area 14 – New Settlement: Land Southwest of Tewkesbury (West of A38)

Assessment Area Ref: 14

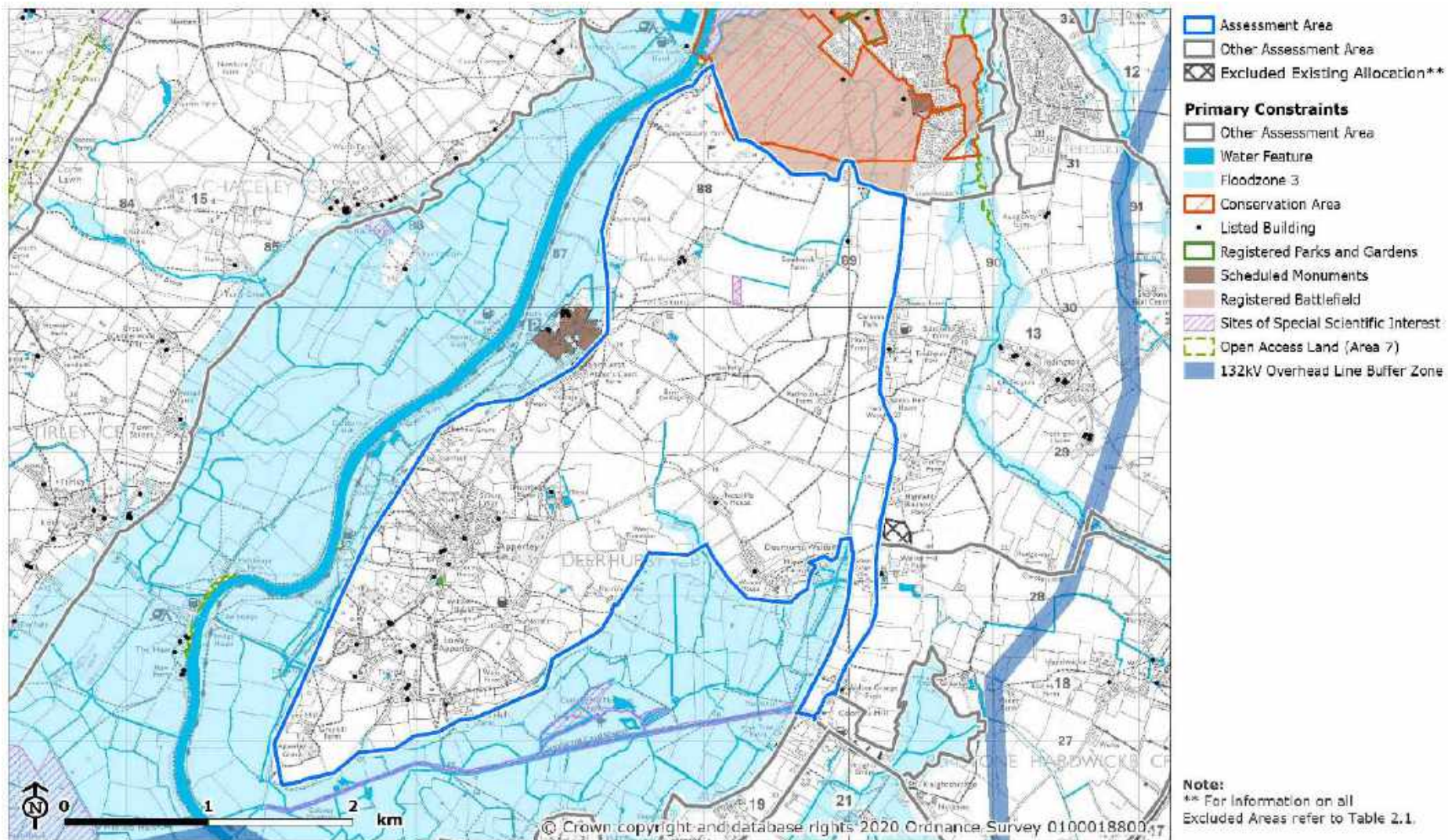
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

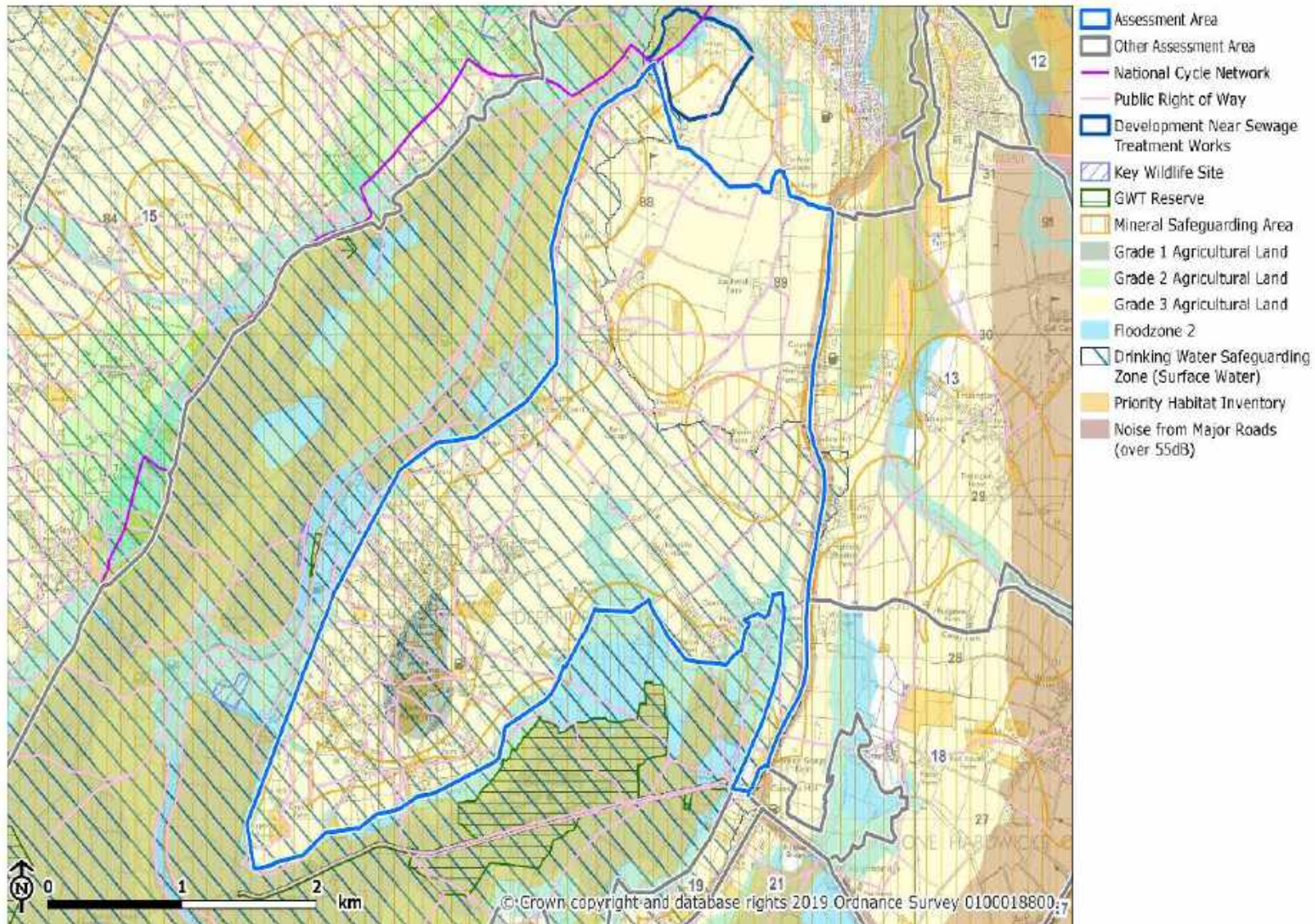
Area: ~985ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are 28 listed buildings within the assessment area; these are all Grade II save for the Grade II* Wightfield Manor. Most of the listed buildings are clustered around Apperley and Lower Apperley but there are some outliers at Deerhurst and further north towards Tewkesbury e.g. Tewkesbury Hall. • A small part of the scheduled Deerhurst monastic site and settlement lies within the area, along the western boundary. • A small part of Tewkesbury Conservation Area crosses into the assessment area along the northern boundary. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records a very large number of non-designated assets in the assessment area. 	<p>Many of the listed buildings would be highly sensitive to setting change. The listed buildings also highlight the historic rural character of the settlements at Apperley and Deerhurst, which would be altered by development.</p> <p>Development to the north of the search area could adversely affect the character/ special interest as well as the setting of Tewkesbury Conservation Area and the registered battlefield.</p> <p>There are a number of non-designated archaeological assets within the search area that could potentially be of high value, for example, The prehistoric burial mounds; the Roman Villa; the medieval moated sites and settlements; the water meadow earthworks, etc. These may require preservation in-situ. Certain archaeological assets may also be susceptible to setting change e.g. the burial mounds.</p> <p>Development to the west could result in physical disturbance to a Scheduled Monument. Setting change to the listed buildings at Deerhurst and to the east at Deerhurst Walton could also arise as a result of development within the search area.</p> <p>Due to the density and wide spatial distribution of potentially sensitive assets it is unlikely that any new settlements could be</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>These include, but are not limited to:</p> <ul style="list-style-type: none"> - Multiple prehistoric burial mounds/ ring ditches; - A possible Roman villa within Tewkesbury Park. - Southwick Park Romano-British settlement; - Route of the Birmingham to Gloucester Roman Road; - Multiple medieval hollow ways; - Multiple cropmarks and parch marks of unknown date; - Water meadow earthworks; - Medieval estate and park of Tewkesbury; - Medieval shrunken settlement at Deerhurst; - Medieval moated sites at Deerhurst Walton and Wightfield Manor; - Medieval fishponds; and - Extensive ridge and furrow earthworks. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • In addition to the settlements at Apperley, Lower Apperley, Deerhurst and Deerhurst Walton 	<p>accommodated in this area without resulting in the potential for significant negative effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>the HLC data indicates a landscape comprised of a mix of irregular, less regular and regular enclosures with former post-medieval ornamental parkland to the northwest. There are also some small areas of early woodland within the northern half of the search area. The older elements of the landscape have value in themselves and could contain further heritage assets e.g. hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • The scheduled Deerhurst monastic site and settlement is associated with a number of listed buildings that stand immediately west of the assessment area. These include three grade I listed buildings. • The registered battle site of the battle of Tewkesbury is immediately adjacent to the northern boundary of the 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>assessment area. This partially intersects with the Tewkesbury Conservation Area.</p> <ul style="list-style-type: none"> There are a small number of grade II listed buildings to the southeast of the assessment area near Deerhurst Walton. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets susceptible to setting change have been identified at this stage. 				
Ecological and Geological Environment	<p>Assets within the assessment area boundaries:</p> <ul style="list-style-type: none"> SSSI (Turvey's Piece, designated for hay meadow-managed grasslands) lies in the centre-north of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SSSI (Severn Ham, designated for hay meadow-managed grasslands) 100m north. SSSI (Coombe Hill Canal, designated for the invertebrate assemblage and plants) 180m to the south. Also a GWT reserve. <p>International and National Assets within 2km:</p>	<p>The northern part of the assessment area is particularly constrained by the Turvey's Piece SSSI, Severn Ham SSSI and SSSI IRZs.</p> <p>The south west is also constrained by proximity to the Coombe Hill Canal SSSI.</p> <p>Due to the distribution of ecological sites within the wider landscape, it is very likely that large development capacities have the potential to result in significant negative effects to these.</p> <p>A small or large village development could potentially be provided in a central/southern part of the assessment area without significant effects.</p> <p>Any spatial distribution of development in the assessment area will be required to provide</p>	<p>*</p>	<p>*</p>	<p>*</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> SSSI (Ashleworth Ham, of ephemeral wet botanical and wildfowl interest) 1.4km south-west. Also a GWT reserve. SSSI (Old River Severn, Upper Lode designated for select plant species) 1.2km north. SSSI (Chaceley Meadow, designated for the grassland assemblage) 1.5km west. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within multiple SSSI IRZs and these indicate that all planning application – residential application of 100 units or more have the potential to impact the statutory designations within the landscape. <p>Significant negative effects may occur at the large development sizes. Minor negative effects may occur at the small and medium development option sizes as these scales of development have the potential to be located set back from ecological assets, but still within 2km of national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>	<p>suitable avoidance/mitigation measures to ensure that a suitable buffer region is established between any development and SSSIs.</p> <p>Buffers around floodplain habitat within which development is avoided should be considered to ensure that viability of the wider, cohesive habitat is maintained. Such buffers offer opportunity for creation of habitats of greatest buffering, and potentially also ecosystem service, functionality.</p> <p>The mosaic of priority habitats should be maintained and, where possible, connectivity between the network of linear corridors and stepping stones optimised.</p> <p>The river and floodplain forms a key component of the habitat connectivity through the local landscape, the wider functionality of which must be maintained despite any development proposal within this assessment area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Soil Quality	<p>The majority of the assessment area is located on grade 3 agricultural land. However, there is approximately a 33ha pocket of grade 1 agricultural land located in the south-western corner of the assessment area south of the settlement of Apperley.</p> <p>There is potential for development in the assessment area to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all development capacities.</p> <p>The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>Due to grade 1 agricultural land being restricted to a relatively small area, there is potential for development within the assessment area to be located away from this constraint.</p> <p>However, the remaining land within the assessment area is grade 3 and therefore development allocated to any region may result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b</p> <p>As such there is potential for significant negative effects throughout the assessment area.</p>	?	?	?
Water Quality	<p>Over 60% of the assessment area is located within a Drinking Water Safeguarding Zone, predominantly in the western and southern parts of the assessment area.</p> <p>As such, significant negative effects may occur in relation to water quality at the largest development option size as there is insufficient space to accommodate this scale of development outside of water safeguarding zones. Negligible effects are anticipated in relation to water quality for the two smaller development option sizes as there is potentially</p>	<p>There is over 200ha of land in the north-eastern part of the assessment area that is not located within a drinking water safeguarding zone. This area could potentially accommodate development at the small and medium development option sizes, avoiding the potential for adverse effects on water quality.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	sufficient space to accommodate these scales of development outside of water safeguarding zones.				
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlements of Apperley and Lower Apperley are located in the south-west and the B4213 passes through the eastern boundary and exits at the south-western boundary. There are also multiple local roads and areas of agricultural development distributed throughout the assessment area.</p> <p>There is approximately 40ha of land in Flood Zone 2 adjacent to the southern boundary due to the presence of Combe Hill Canal to the south. In addition, there is approximately a further 20ha of land on the western boundary that is also within Flood Zone 2 due to the presence of the River Severn to the west.</p> <p>However, the majority of the assessment area is within as Flood Zone 1 and therefore negligible effects are anticipated at all development capacities.</p>	Due to the areas of the assessment area located within Flood Zone 2 being restricted to land adjacent to the southern and western boundaries, there is significant potential for development at all option sizes against this criterion.			
Mineral Resources	Approaching 50% of the assessment area is designated as a Mineral Safeguarding Areas (MSA). Land within	There is approximately 280ha of land to the north-east of Apperley that could potentially accommodate developments at the small and	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>MSAs is distributed predominantly along the western boundary, with the majority of the south-west of the assessment area being safeguarded. There are also two pockets of land within MSAs in the northern half of the assessment area as well as some land directly adjacent to the southern boundary.</p> <p>There is potential for development at the largest development option size to result in the sterilisation of mineral resources as there is insufficient space to accommodate this scale of development outside of MSAs. As such, significant negative effects may occur in relation to mineral resources for the largest development option. For the two smaller development options, negligible effects may occur in relation to mineral resources as there is potentially sufficient space to accommodate these scales of development outside of MSAs.</p>	<p>medium scale outside of MSAs whilst avoiding the sterilisation of mineral resources. Additionally there is approximately 130ha of land in the north of the assessment area outside of MSAs that could accommodate development at the smallest option size whilst avoiding the sterilisation of mineral resources.</p> <p>Suitable mitigation may also be possible to overcome mineral resourcing issues such as extraction prior to development.</p>			
Noise	<p>A relatively narrow strip of land directly adjacent to the eastern boundary of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A38.</p> <p>However, this occupies a very small proportion overall and there is sufficient space within the assessment area for all</p>	<p>There is significant potential for development at all size options to be located outside of noisy areas as this area is restricted to land directly adjacent to the eastern boundary. Suitable mitigation may also be possible to overcome any noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	development option sizes to be set back from this area. Therefore negligible effects are anticipated in relation to noise.				
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development capacities.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Open and expansive views. Intervisibility with Cotswolds AONB and River Severn creating a strong sense of place. There is a well-developed network of public rights of way. <p>As such, landscape sensitivity is high under the medium and largest development options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for smallest development option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

Development in the south western part of the assessment area has the potential to result in the loss of grade 1 agricultural land. The remainder of the assessment area is comprised of grade 3 land but it is not clear if it is grade 3a or the lower quality grade 3b.

Turvey's Piece SSSI is an important sensitivity with respect to the northern part of the assessment area. Although the central/southern part of the assessment area has lower ecological sensitivity, the assessment is considered of likely high sensitivity with respect to heritage throughout and in relation to all development scales. The southwestern area of the assessment area, for example, is constrained by heritage designations in and around Apperley, and development in the western part of the assessment area may affect the setting of Deerhurst scheduled monument and a number of listed buildings.

Overall, this assessment area is therefore considered likely to be highly sensitive to development of a new settlement at all scales. Landscape sensitivity is reduced under the small village scenario compared to the larger scales of development, but is still considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is adjacent to the A38 (Tewkesbury Bypass) which provides a link to M5 Junction 9 to the north. While 'critical junctions' along both routes currently operate beyond their design capacity in AM/PM peak periods, transport modelling undertaken for the JCS Evidence base forecasts that improvements linked to future growth nearby will reduce peak hour traffic congestion (albeit with key junctions predicted to function close to their design capacity at peak times).</p> <p>To the South, the assessment area is linked to M5 Junction 10 via the A38 / A4019 (Cheltenham Rd). Both M5 Junction 10 (not an 'all and the A38/Coombe Hill junctions are forecast to operate beyond 90% of their design capacity during peak hours when future JCS growth allocations and transport improvements are delivered.</p> <p>Both routes provide direct links to Tewkesbury, Cheltenham and Gloucester. Without the provision of enhanced alternatives to car use, and/or further highway capacity improvements, it is likely that growth in this area will worsen forecast future traffic congestion.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 671</p> <p>Access to workplaces (jobs) by public transport is scored as low due to the assessment area only being served by a low-frequency public transport route.</p>	

Criterion	Rationale	Score
	Number of workplaces (jobs) accessible within 30 minutes = 259,418 Access from the assessment area to employment by Car scores relatively high , reflecting direct local road links to Tewkesbury and Gloucester.	
Access to other key services and facilities by public transport	TRACC Accessibility outputs show the assessment area currently exhibits poor accessibility to key services by public transport, particularly to healthcare and urban centres. Route enhancements and/or additional services would be needed to ensure greater connectivity to key services and encourage mode shift to public transport.	
Private car use by commuters	% Driving a Car or Van = 71% Car based trips currently account for an average of 71% of commuter journeys in the LSOAs covered by the assessment area. This reflects the assessment areas proximity to the strategic road network and current low-frequency bus routes.	
Proximity to sustainable transport networks	The assessment area is located within 500m of a bus route with low-frequency services, but the majority of the area is further than 5km from the nearest rail station. To the immediate north of the assessment area is a National Cycle Route, which provides strategic walking and cycling connectivity to Tewkesbury – with opportunities to provide links into the assessment area as part of any future development.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required at all scales of growth, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Only a small part within 5km of Ashchurch mainline station.			
	Bus transport	Served by a low frequency bus route and close enough to Cheltenham and Tewkesbury to mean that improvements in frequency could result in reasonably high levels of bus patronage. Only at higher scales of growth will there be a reasonable likelihood of securing levels of investment needed to expand bus network, unless developed along with assessment areas 13 and possibly 12.			

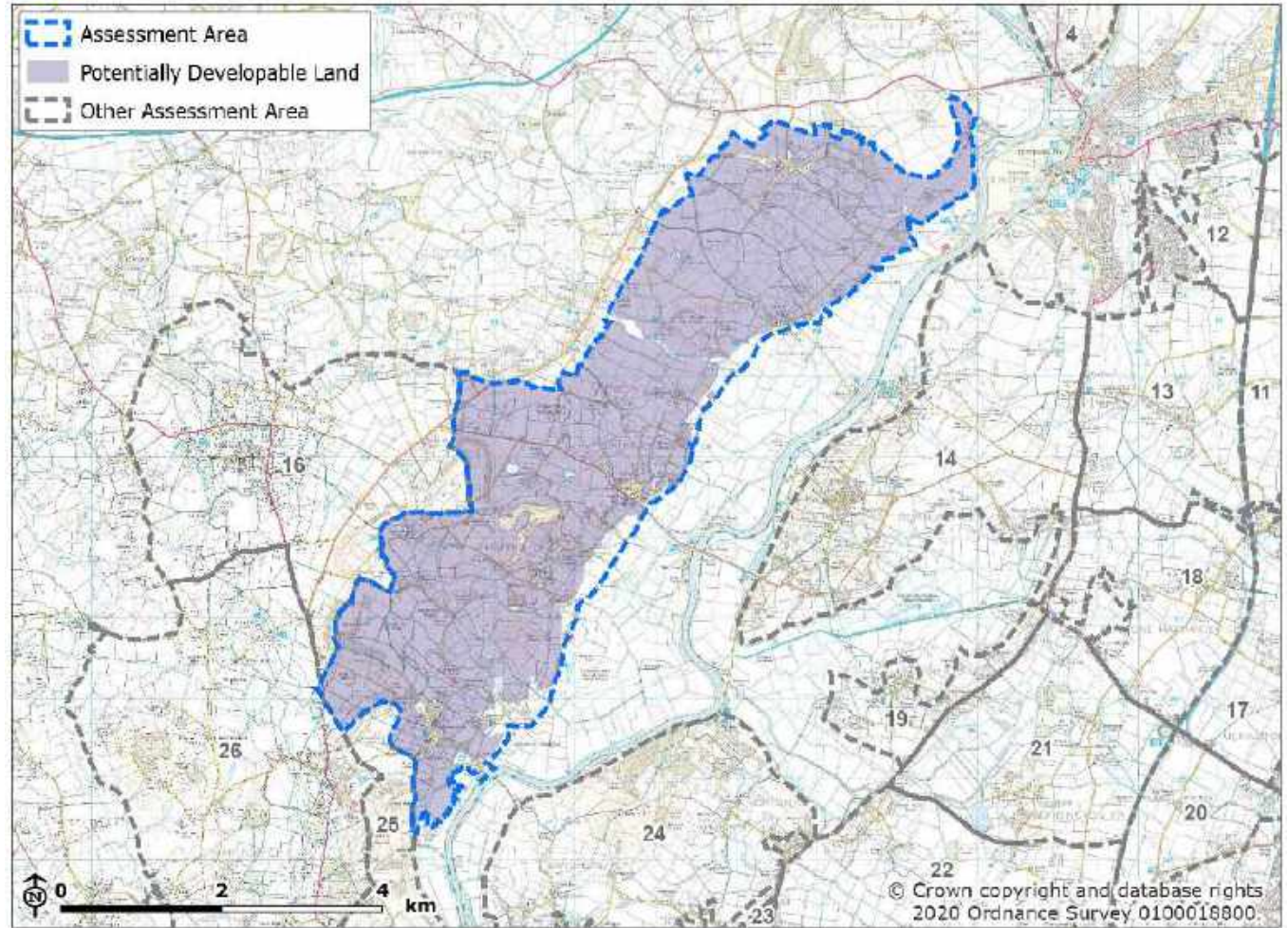
Assessment Area 15 – New Settlement: Land Southwest of Tewkesbury

Assessment Area Ref: 15

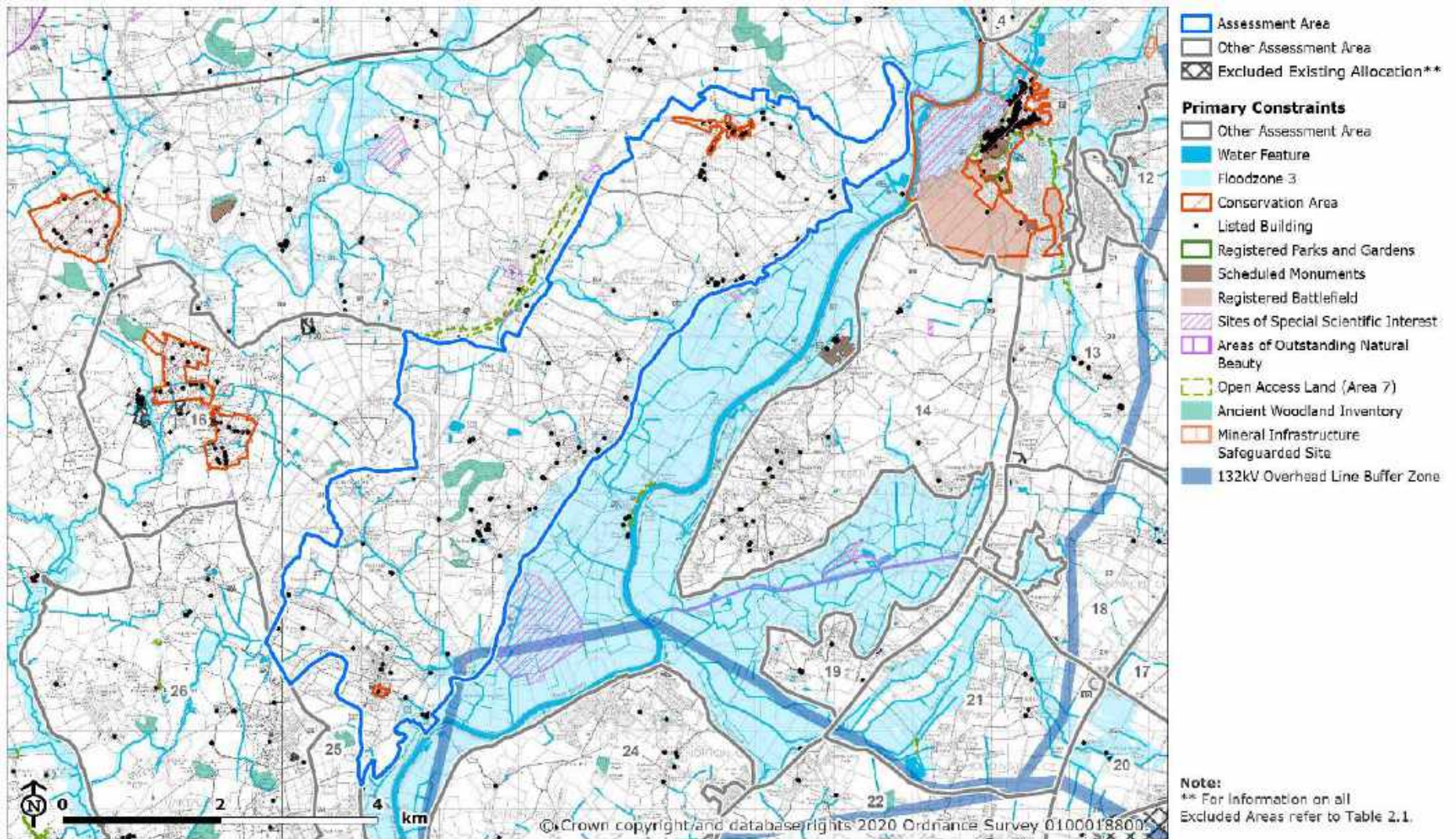
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

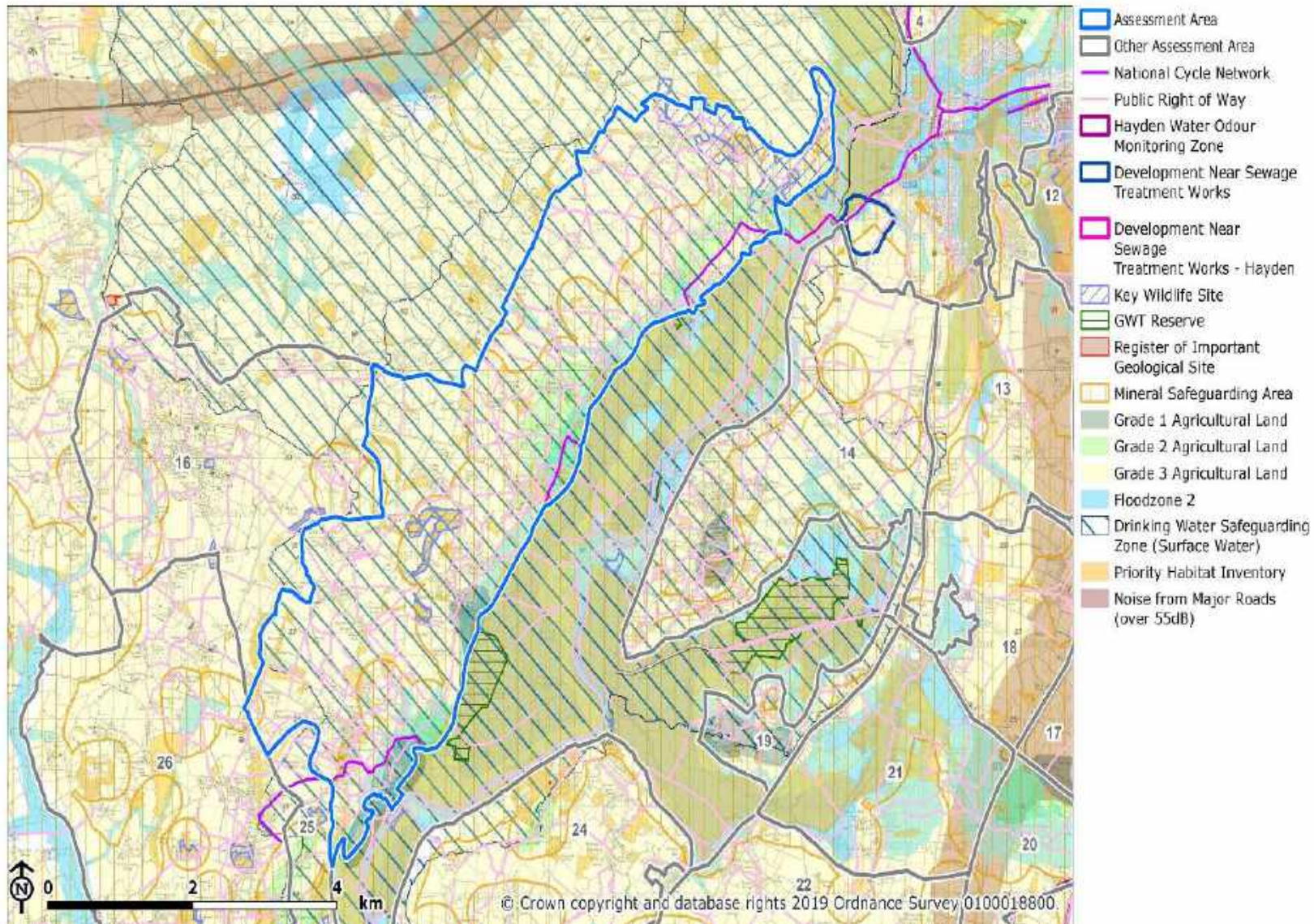
Area: ~2,200ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The assessment area contains 141 listed buildings. These include five grade I buildings – three churches, a former manor house and a former farmhouse – and nine grade II* buildings – three country houses, two churches, a manor, detached house, a farmhouse and tithe barn – which are spread throughout the assessment area. The remaining grade II listed buildings are also widely dispersed. They include farmhouses, cottages and a variety of agricultural buildings as well as houses and multiple burial monuments. Ashleworth Conservation Area lies in the southern part of the assessment area and Forthampton Conservation Area lies in the north of the assessment area. These both 	<p>A significant proportion of the listed buildings in this assessment area – such as the farmhouses, agricultural buildings, and country houses - would be highly susceptible to setting change.</p> <p>The northern end of the assessment area is particularly sensitive to development due to the conservation areas within and adjacent to it, and the high number of listed buildings within and around these. Particularly the grade II* Forthampton Court and its non-designated landscape ornamental parkland which is of more than local significance due to its association with the high value building.</p> <p>Chaceley on the eastern edge of the assessment area is another area of particular sensitivity given that development could affect the significance of a number of its listed buildings, which have functional/ historical relationships with their rural setting. The area also contains a scheduled monument and a possible double moated site that may be of more than local significance.</p> <p>Within the south-eastern part of the assessment area, Hasfield is of very high sensitivity as this historic rural settlement includes a number of listed buildings of the highest grades that would be susceptible to setting change. The non-designated garden water features and any further remaining ornamental parkland features are also of more</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>contain a number of listed buildings but are also likely to include a number of non-designated buildings of local importance.</p> <ul style="list-style-type: none"> There are two scheduled monuments within the assessment area – a cross in the churchyard of St John’s the Baptist Church, Chaceley and a tithe barn at Ashleworth. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER identifies a number of non-designated heritage assets within the assessment area. These include, but are not limited to: <ul style="list-style-type: none"> Possible Roman settlement near Tirley; Medieval settlements at Forthampton and Ashleworth, including a quay at the latter; A possible double moated site at Chaceley Court; Numerous medieval and post-medieval agricultural and industrial features; 	<p>than local importance due to their association with the grade II* Hasfield Court.</p> <p>Further south Ashleworth is also highly sensitive due to the conservation area covering the historic core of the village, as well as the nearby grade II* manor house and complex of listed buildings of all grades at Ashleworth Court.</p> <p>Finally to the south-west the grade II* Foscombe and its non-designated former parkland are of high sensitivity to change.</p> <p>The distribution of key historic environment assets is such that development of a new settlement at any of the development option sizes may result in significant negative effects. However, there may be some potential for a very small village (e.g. up to ~2000 dwellings) to the north of the road running through Tirley (north west of the village) to avoid significant negative effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - The sites of post-medieval buildings e.g. houses, windmills, tithe barns; - Extant post-medieval buildings (mainly agricultural); - Medieval to post-medieval landscaped park associated with Forthampton Court, which includes earthworks interpreted as a moat; - Hasfield Court garden water features; - Medieval to post-medieval water meadows along the eastern edge of the assessment area; - A variety of cropmarks and earthworks. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural landscape interspersed with settlements, surviving early woodland (some ancient) and three surviving ornamental landscape at: Foscombe (grade I), Hasfield Court (grade II*) – both to the south - and Forthampton Court (grade I) – to the north. The agricultural landscape is 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>comprised of a mix of irregular, less irregular and regular enclosures, as well as some meadows. The irregular enclosures could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • Tewkesbury Conservation Area lies to the east of the northern end of the assessment area. It intersects two scheduled monuments, a registered battlefield, a registered park and garden and numerous listed buildings of all grades. To the east is the Staunton/ Corse Conservation Area, which contains numerous grade II listed buildings. • There are a number of listed buildings in the wider vicinity of the assessment area. Of these, those most susceptible to setting change include Longridge Cider Mill and Cookshill Farmhouse – to 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>the south – and Corse Lawn House Hotel to the west.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets recorded by the HER within the wider vicinity of the assessment area have been identified as being susceptible to setting change at this stage. 				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Forthampton Oaks Key Wildlife Site spans north-most part of the assessment area around Forthampton. Key Wildlife Site (Corse Hill Bottom) in central region of assessment area. Two Ancient Woodlands (Corse Grove and Barrow Hill) in central region of the assessment area, in the vicinity of Hasfield. Both Key Wildlife Sites, at least in part. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SSSI (Ashleworth Ham) adjacent to the south-eastern boundary. Also a GWT reserve. 	<p>Due to the spatial distribution of ecological designations – national designations surround the assessment area - it is likely that a new settlement at the large scale in the assessment area may fundamentally compromise the cited interests of these sites and as such, significant negative effects are identified for each development option size. The effects are reduced to minor negative in relation to a small or large village as there is potential for these scales of development to have greater separation distances from local designations. For example, a small settlement could be accommodated over 250m from local designations in the vicinity of Foscombe Farm in the south of the site, to the north of Wickridge Street in the south, or at multiple locations in the northern half of the site to the south of Forthampton.</p> <p>The network of priority habitat throughout the assessment area should be protected, particularly the ancient and deciduous</p>	<p>*</p>	<p>*</p>	<p>*</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • SSSI (Chaceley Meadow) adjacent to the north-eastern boundary. Also a GWT reserve. • Three SSSIs (Poolhay Meadows, Avenue Meadows and Coombhill Meadows) adjacent to the north-western boundary. • Two SSSIs (Severn Ham and Old River Severn) adjacent to the northern boundary. • River Severn floodplain grazing marsh priority habitat extends east beyond the assessment area boundary. • Ancient Woodland (Deans Coppice) adjacent to the southern boundary and contiguous with priority woodlands within Area 15. Also present adjacent to the northern boundary. • Key Wildlife Site (Ashleworth Quay Brickpits) adjacent to the south-eastern boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Coombe Hill Canal) designated for the invertebrate 	<p>woodland habitats. Strengthening these areas as a cohesive network may help to reduce negative effects from any development permitted.</p> <p>Identification of a suitable buffer to the floodplain habitats of the R.Severn in the east of Area 15 should form part of a wider, strategic approach to the long-term conservation of this living landscape.</p> <p>This assessment area is overlaid by numerous SSSI IRZs, due to the proximity of SSSIs to the area boundary. Protection of ancient woodland habitats, which occur within the assessment area, will also be required with development.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>assemblage and for plants) 1.9km east.</p> <ul style="list-style-type: none"> SSSI (Oridge Street Meadows) 1km west. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within multiple SSSI IRZs, which indicate that residential development is highly constrained in the southern part of the assessment area but less constrained in the northern part of the assessment area. <p>Significant negative effects may occur at the large development option size as this scale of development would likely be within 250m of national designations or intersecting with local designations. Minor negative effects may occur at the small and medium development option sizes as this scale of development could potentially be set further back from assets in the area, but is still likely to be within 2km of national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	The majority of the assessment area is comprised of grade 3 agricultural land. However, there are two areas of grade 1	There is significant potential for development at all sizes to avoid the areas of grade 1 and grade 2 agricultural land due to their relatively	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>agricultural land adjacent to the south-eastern boundary, amounting to approximately 64ha. In addition, there are also three areas of grade 2 agricultural land in close proximity to the eastern boundary in the south, central region and the north, amounting to approximately 212ha.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality at all development sizes.</p> <p>The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>small size within the context of the assessment area as a whole. However, the remainder of the assessment area is still comprised of grade 3 agricultural land and therefore development at any location, regardless of development size, has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>			
Water Quality	<p>The vast majority of the assessment area is located within a drinking water safeguarding zone.</p> <p>As such, significant negative effects in relation to water quality may occur from residential development in this assessment area.</p>	<p>There is approximately 64ha in the south-westernmost corner of the assessment area that is outside of the drinking water safeguarding zone. This could theoretically accommodate the smallest development option size.</p>	■	■	■
Flood Risk	<p>The majority of the assessment area is Greenfield. However, there are multiple settlements distributed throughout the area and the B4213 and the B4211 bisect the central region from west to east. There are also multiple local roads</p>	<p>There is significant potential for development at all sizes to be located within Flood Zone 1, as such negligible effects are considered possible throughout the assessment area.</p>	■	■	■

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>and areas of agricultural development throughout the assessment area.</p> <p>There is land adjacent to the full length of the eastern boundary that is within Flood Zone 2 due to the presence of the River Severn to the east. Additionally, there is a smaller area of Flood Zone 2 that bisects the central region of the assessment area from west to east due to the presence of Newhall Brook.</p> <p>However, the majority of the assessment area is not located within any Flood Zones and therefore negligible effects are anticipated in relation to flood risk for all development sizes.</p>				
Mineral Resources	<p>The majority of the eastern half and the central region of the assessment area is comprised of land that is located within Mineral Safeguarding areas (MSAs).</p> <p>There is potential for development to result in the sterilisation of mineral resources.</p>	<p>There is a significant amount of land in the south-west and north-west of the assessment area that is not located within a MSA. Development at the small and medium scales could potentially be located at these locations, avoiding the sterilisation mineral resources and resulting in negligible effects.</p> <p>The largest development option size could potentially be physically located within the assessment area whilst avoiding MSAs, although this would result in a disjointed and incoherent development form.</p> <p>Negligible effects are therefore possible for all development sizes and this is reflected in the scoring, although at the larger scale a</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
		<p>disjointed development form would be needed to achieve this level of effect in practice.</p> <p>Suitable mitigation may also be possible in relation to mineral resourcing, such as extraction prior to development.</p>			
Noise	<p>There is no land within the assessment area that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>As such, negligible effects are anticipated in relation to noise for all development options.</p>	N/A			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development option sizes.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Steep landform with numerous hills and ridges. • Frequent areas of woodland amongst the farmed land. • Long views across the River Severn to the Cotswolds AONB escarpment. • Strong rural character with high levels of tranquillity. <p>As such, landscape sensitivity is high for all development options as the key characteristics and qualities of the landscape are likely to be highly sensitive to development.</p>	H	H	H

Summary of Constraints and Landscape Sensitivity

<p>A small village located within parts of the northern and southern portions of the assessment area is likely to minimize harm to ecological to minor adverse effects. In fact, it may be possible to accommodate a larger village in the southern portion of the area without causing significant adverse effects on ecological assets. It should be possible for such development to also avoid grade 1 and grade 2 agricultural land. The remainder of the assessment area is grade 3, and impacts would therefore depend upon whether this is grade 3a or grade 3b. There is also limited potential for development that could avoid the drinking water safeguarding zone.</p> <p>The assessment area is considered likely to be highly sensitive to development at all scales and locations with respect to the historic environment, although effects are less certain at the smallest scale. Similarly, all scales of development may have significant adverse impacts on the character and qualities of the landscape, particularly so in the south where there are steep slopes associated with ridges and hills.</p>

Accessibility

Criterion	Rationale	Score
Capacity of the road network	The assessment area is connected to the highway network via the B2413 which runs through the centre of the assessment area, the B4211 to the west and the A417 to the south, providing links to Tewkesbury, Gloucester and Hartpury.	

Criterion	Rationale	Score
	<p>Whilst the assessment area is located approximately 5 miles from the nearest 'critical junctions' defined in the JCS Transport Evidence base modelling (the A40 / A417 'Over roundabout' to the south, M5 Junction 10 to the east, and A438 / Shannon Way at Tewkesbury), these forecasts suggest that, with allocated growth and associated transport improvements, the junctions will be required to operate at or approaching their design capacity in order to accommodate all predicted vehicle trips during the AM and PM peak periods.</p> <p>Without improved alternatives to private car trips, or further improvements to the 'critical junctions', it is reasonable to expect that further development within the assessment area could result in worsening of traffic conditions at the 'critical junctions' during peak times.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 3,407</p> <p>The assessment area is currently served by a low-frequency bus service, and is not within proximity of a rail station, therefore access to workplaces (jobs) is currently scored as low.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 253,252</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to Tewkesbury, Gloucester and Hartpury.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that parts of the assessment area, located alongside key highway links (Tirley and Ashleworth), have relatively good accessibility to key services, with some education sites accessible within 20mins and healthcare facilities / urban centres accessible between 20mins and 40 mins travel time by public transport. The remaining parts of the assessment area are considered to have poor accessibility.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 70%</p> <p>Car based trips account for an average of 70% of commuter journeys in LSOAs covered by the assessment area showing a relatively high dependency on car-based trips for travel to work journeys. This is a result of low frequency public transport services and limited integration between them during the AM peak from the assessment area.</p>	

Criterion	Rationale	Score
Proximity to sustainable transport networks	The assessment area is within 500m of a low frequency bus route and is located along the National Cycle Network route. The assessment area is further than 5km from the nearest railway station.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.			
	Drinking water	Development of any scale would require significant work to develop a new source or mitigate Water Framework Directive pressures on water resources. Additional work and funding would be required for this but resources unlikely to be available in the next 5-10 years.			
	Electricity	Part of site served by Newent Primary Substation which currently has less than 10% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	Reinforcement of pipeline network required at all scales of growth, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Not proximate to rail stations or lines.			

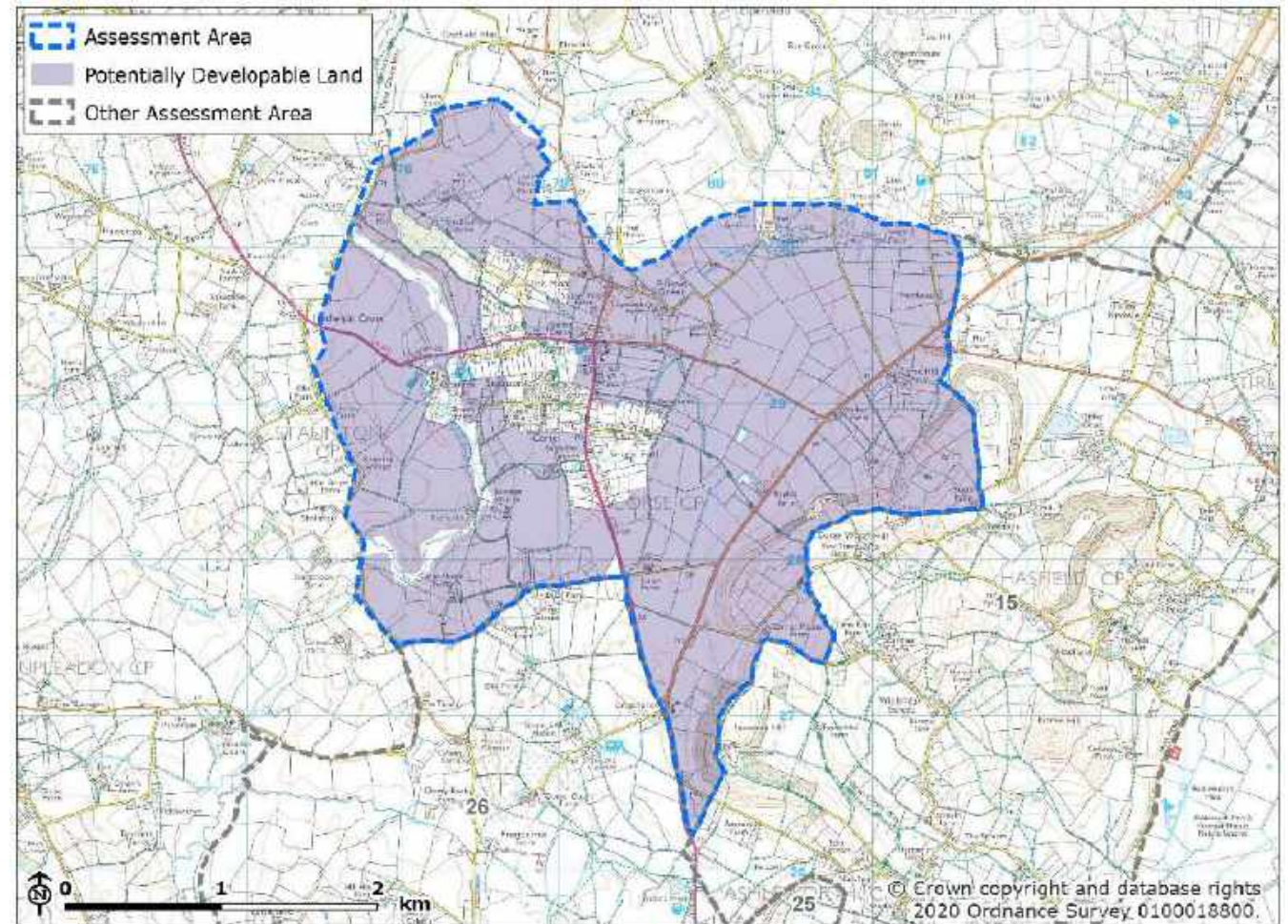
Assessment Area 16 – New Settlement: Land at Staunton

Assessment Area Ref: 16

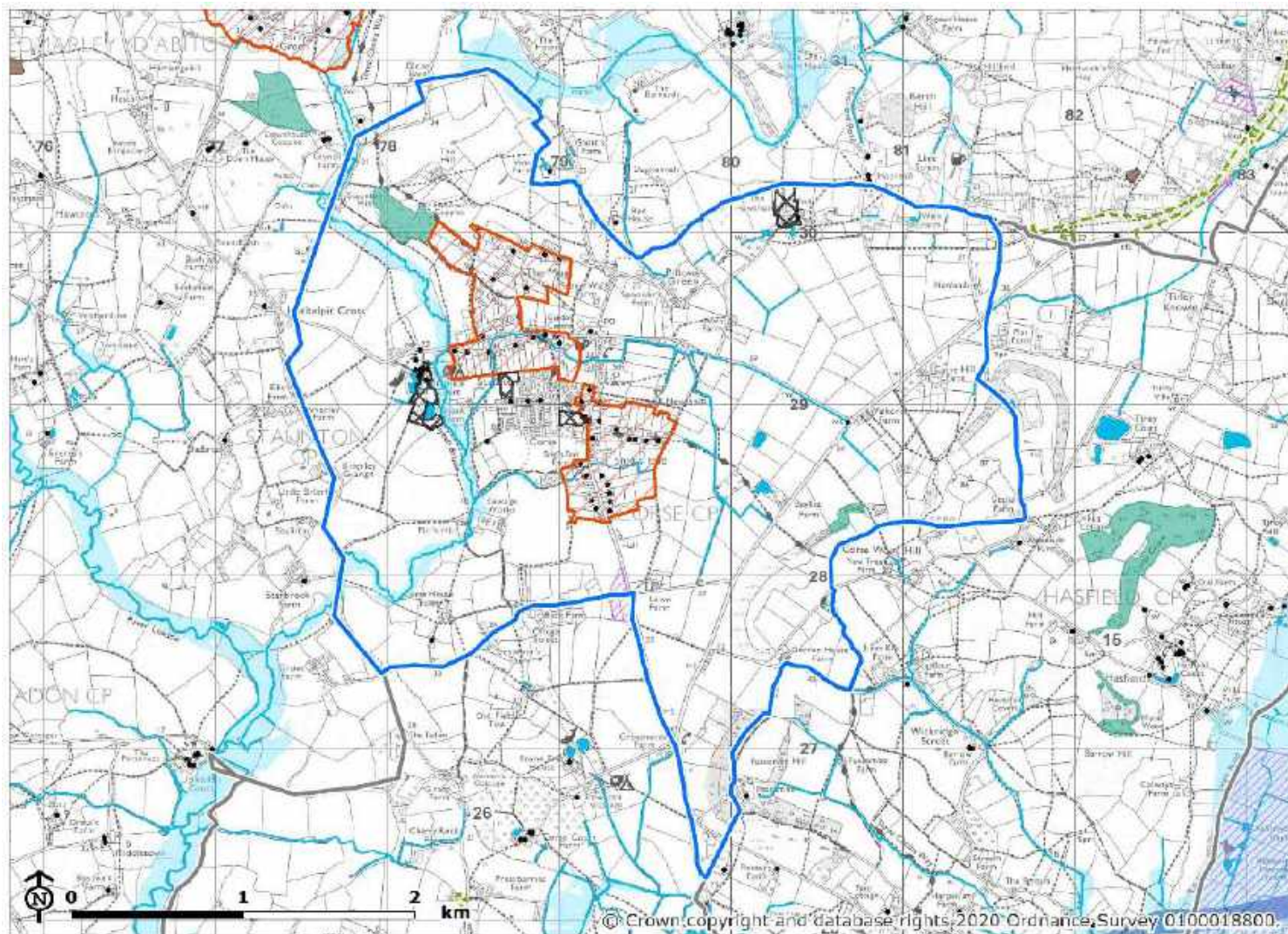
Authority Area: Forest of Dean District

Development Typology: New Settlement

Area: ~1,072ha



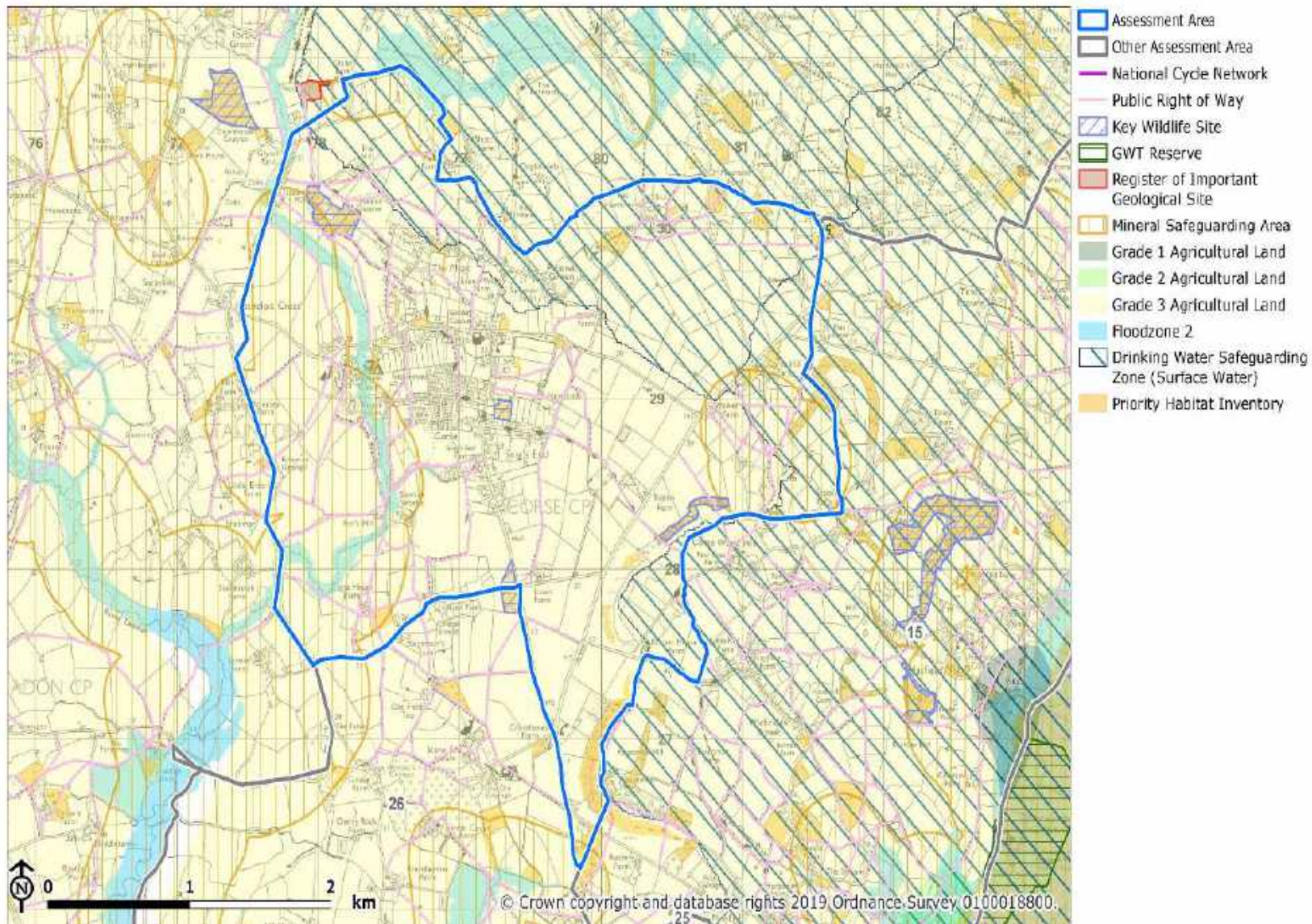
Primary Constraints



- Assessment Area
 - Other Assessment Area
 - Excluded Existing Allocation**
- Primary Constraints**
- Other Assessment Area
 - Water Feature
 - Floodzone 3
 - Conservation Area
 - Listed Building
 - Scheduled Monuments
 - Sites of Special Scientific Interest
 - Open Access Land (Area 7)
 - Ancient Woodland Inventory
 - 132kV Overhead Line Buffer Zone

Note:
 ** For information on all Excluded Areas refer to Table 2.1.

Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 57 listed buildings within the assessment area. These are all grade II except for the grade II* Church of St James. The remaining grade II listed buildings include a range of farmhouses, cottages, agricultural buildings, former schools, burial monuments, houses (mainly relating to the chartist industrial workers settlement of Snig's End), pubs, milestones and a war memorial. The majority of listed buildings stand within the historic settlements of Staunton and Corse. Although there are some outlying farmhouses/ agricultural buildings and milestones. The Staunton and Corse Conservation Area covers the historic cores of these two settlements, and occupies a 	<p>The Staunton and Core Conservation Area – and listed buildings within it - lie just west of the centre of the assessment area. Development within or around the Conservation Area could result in a significant negative effect.</p> <p>The area to the north of the conservation area is especially sensitive as development here could not only harm the conservation area but also the significance of designated assets beyond the assessment area e.g. Lowbands Conservation Area; Gadbury Hillfort and The Down House.</p> <p>The area west of Staunton and Core Conservation area is also especially sensitive due to the presence of a number of listed buildings at Staunton Court and the remaining designed post-medieval landscape associated with them, which although non-designated is of more than local significance due to its association with nationally important buildings.</p> <p>To the southwest of the Conservation Area there is also a listed agricultural store that could be harmed if its agricultural setting was developed. This is also the area in which Oridge shrunken medieval settlement is recorded; this asset may be of more than local significance.</p>	<p>?</p>	<p>?</p>	<p>?</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>significant, centrally located, portion of the assessment area.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER only records a limited number of heritage assets in the assessment area. These include: <ul style="list-style-type: none"> - An undated possible watercourse; - Moated sites at The Hawthorn, north of Stone Walls Farm, and in Staunton as well as a possible one west of the Red House; - Oridge shrunken medieval settlement; - Extant historic building including a farmhouse at the Oaklands and mills in Staunton and to the south of it; - Several post-medieval industrial and agricultural sites; - Earthworks, including ridge and furrow; and - A number of turnpike roads. 	<p>To the northeast of the Conservation Area the assessment area is highly sensitive due to the potential for harm to the grade II listed Hawthorn, a site where there is a non-designated moat - with another possible moat nearby - both of which may be of more than local importance.</p> <p>Other moated sites that may be of more than local importance lie within and to the north of the conservation area.</p> <p>Development of the southernmost tip of the assessment area could result in harm to the grade II* Foscombe (a former country house) that lies just beyond the assessment area.</p> <p>Due to the potential for development to significantly affect sensitive assets, particularly in the centre of the assessment e.g. around Staunton / Corse, it is considered likely that significant negative effects may arise from any sized new development. However, there may be some potential for a very small development (c. 3000 dwellings) in the north eastern corner of the assessment area, an area that adjoins that identified as least constrained for assessment area 15.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> The HLC data indicates a primarily agricultural landscape interspersed with historic settlement and surviving early woodland (classified as ancient woodland). The agricultural landscape comprises a mix of irregular, less irregular, regular and less regular enclosure as well as some small areas of riverine pasture that is now enclosed. The irregular and less regular enclosures have some time-depth and value in themselves. They could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. The assessment <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> Lowbands Conservation Area lies to the north of the assessment area. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • The scheduled remains of Gadbury Camp – an Iron Age Hill fort – lie to the north of the assessment area. • There are a large number of listed buildings in the wider vicinity of the assessment area. Those that may be susceptible to meaningful setting change include: <ul style="list-style-type: none"> - the grade II* Foscombe to the southeast of the assessment area; - the grade II* Red House, to the north of the assessment area; - the grade II listed the Down House; and - the grade II Moorend Farm to the north of the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • Former ornamental parkland to the north of the assessment area, associated with a listed country house: 'The Down House'. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> SSSI (Oridge Street Meadows) straddles the southern boundary with adjacent assessment area 26. Also designated as a Key Wildlife Site. Key Wildlife Site (Staunton Coppice and Grasslands located within the north-west of the assessment area. Also an area of Ancient Woodland (Staunton Coppice). Key Wildlife Site (School Meadow) located to the west of Staunton. Key Wildlife Site (Corse Wood) in the south-east of the assessment area. Also an area of Ancient Woodland. Key Wildlife Site (Moorend Road (Corse)) in the north-east of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Key Wildlife Site (Downhouse Coppice) 250m north-west. Also an area of Ancient Woodland. 	<p>Any spatial distribution of development in the assessment area should be required to provide suitable avoidance/mitigation measures to ensure that the areas of Ancient Woodland are maintained and that suitable buffering (of both construction and operation phase potential impacts) is established between any development and the SSSI in the south.</p> <p>It should also be required to maintain/enhance the networks of priority habitat predominantly in the north of the assessment area. Severance of ancient and deciduous woodlands must be avoided and connectivity – be it additional woodland or complementary habitats – should be optimised at the landscape scale e.g. the sloping topography in the south east.</p> <ul style="list-style-type: none"> Multiple areas of deciduous woodland priority habitat in the south-east of the assessment area (again, Hasfield area) Multiple areas of traditional orchard priority habitat occur throughout the assessment area. <p>Developments at the small and medium option size could potentially be accommodated in the eastern half of the assessment area without overlapping with the Key Wildlife Sites/Ancient Woodland and over 250m from the SSSI in the south.</p>	<p>*</p>	<p>*</p>	<p>*</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • Registered site of geological importance (Glebe Barn Quarry) 170m north-west. • Key Wildlife Site (Wickridge Street, Ashleworth) adjacent to the south-eastern boundary. • Patchwork of deciduous woodland and traditional orchard priority habitat continue beyond eastern boundary. <p>International or National Assets within 2km:</p> <ul style="list-style-type: none"> • Two SSSIs (Poolhay Meadows and Avenue Meadow) 1.5km north-east. • SSSI (Burley Dene Meadows) 2km north. <p>IRZs:</p> <ul style="list-style-type: none"> • The assessment area is within multiple SSSI IRZ which indicates all planning applications and residential developments of 100 units or more have the potential to impact the statutory designated sites within the wider landscape. <p>Significant negative effects may occur at the largest development size as this</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>scale could not be accommodated without intersecting with local designations or falling within 250m or national designations. Minor negative effects may occur for the small and medium development option sizes as these scales of development could potentially be accommodated over 250m from the national designations, but not over 250m from local designations and over 2km from national designations.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The entirety of the assessment area is comprised of grade 3 agricultural land. There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>The entirety of the assessment area comprises grade 3 agricultural land and therefore effects are not expected to vary within the assessment area.</p>	?	?	?
Water Quality	<p>There is approximately 338ha of land in the north and east of the assessment</p>	<p>There is potential for development at the small and medium sizes to be located outside</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>area that is located within a drinking water safeguarding zone.</p> <p>Significant negative effects may occur in relation to water quality under the largest town / city development options sizes as there is potentially insufficient space to accommodate this scale of development outside the drinking water safeguarding zone.</p>	<p>the drinking water safeguarding zone in the eastern part of the assessment area.</p>			
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Staunton is located centrally within the assessment area. The B4208 passes through area from north to south and intersects with the A417 in the central region of the area. There are also multiple local roads and areas of agricultural development throughout the assessment area.</p> <p>Land directly adjacent to Glynch Brook in the western half of the assessment area is within Flood Zone 2.</p> <p>It is considered likely that all development sizes could be accommodated within the assessment area whilst avoiding areas of Flood Zone 2 and therefore negligible effects are anticipated for all development sizes.</p>	<p>There is significant potential for all development sizes to be located outside of Flood Zone 2 as this area is restricted to the banks of watercourse in the western half. The watercourse separates approximately 132ha of land from the rest of the assessment area. If development were to be located in this area, it is likely only the smallest development option size (small village) could be accommodated here.</p>			
Mineral Resources	<p>Approximately half (~230ha) of the western side of the assessment area is located within a Mineral Safeguarding</p>	<p>There is a significant amount of land in the eastern half of the assessment area that is not located within a MSA that could potentially</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Area (MSA). Additionally, there is pocket of land within a MSA adjacent to the eastern boundary, amounting to around 70ha.</p> <p>There is potential for development to result in the sterilisation of mineral resources. Negligible effects may occur under all development size options as there is potentially sufficient space to accommodate these scales of development outside of MSAs.</p>	<p>accommodate development at all three scales, avoiding the sterilisation of mineral resources.</p> <p>Suitable mitigation may also be possible for the large development size to overcome mineral resourcing issues, such as extraction prior to development.</p>			
Noise	<p>The assessment area does not contain any land that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>As such, negligible effects are anticipated in relation to noise for all development sizes.</p>	N/A			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Rural character experienced away from the main roads. • Distinctive wooded ridges to the east. • Sparsely settled character with small historic villages and scattered farms. <p>As such, landscape sensitivity is high under the medium and largest development option sizes as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for smallest development size as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

Land in the east of the assessment area is less sensitive overall on the basis of the constraints that have been considered, particularly for development at the smallest considered scale, due to the relatively central location of the majority of the historic assets in the area, medium and large development scales may have a significant impact with respect to the historic environment. Landscape sensitivity is also high under the medium and large development scenarios, which indicates a smaller scale of development may be more suitable. However, it is still considered to be moderate-high under the smallest scale scenario. The majority of the study area is comprised of grade 3 agricultural land, but whether this will be a constraint to development depends on whether it is grade 3a or the lower quality grade 3b.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A417 (West / South), B4211 (East) and the B4208 (North), providing strategic links to Tewkesbury, Ledbury and Gloucester.</p> <p>Whilst the assessment area is located approximately 7 miles from the nearest 'critical junctions' as set out in the JCS Transport Evidence base modelling (the A40 / A417 'Over roundabout' to the south, this modelling forecasts that, with allocated growth and associated transport improvements, this junction will be required to operate at approaching 120% its design capacity in order to accommodate all predicted vehicle trips during the AM and PM peak periods.</p> <p>Without improved alternatives to private car trips, or further improvements to the 'critical junction', it is reasonable to expect that further development within the assessment area would result in worsening of traffic conditions at the 'critical junction' during peak times.</p>	Yellow
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 293</p> <p>Due to the proximity of the assessment area to a high-frequency public transport services, access to workplaces (jobs) by public transport is very low. The assessment area is currently partially served by the low-frequency 351 service.</p>	Red
	<p>Number of workplaces (jobs) accessible within 30 minutes = 260,383</p> <p>Access from the assessment area to employment by Car scores relatively high, due to direct road links to Ledbury and Gloucester.</p>	Yellow
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that parts of the assessment area located alongside key highway links (at Staunton) have relatively good accessibility to key services, with some education sites accessible within 20mins and healthcare sites and urban centres accessible between 20mins and 40 mins travel time by public transport. The remaining parts of the assessment area are considered to have poor accessibility.</p>	Yellow

Criterion	Rationale	Score
Private car use by commuters	% Driving a Car or Van = 64% Car mode share for travel to work journeys currently accounts for an average of 64% of commuter trips in the LSOAs covering the assessment area.	
Proximity to sustainable transport networks	The assessment area is currently divorced from existing active travel routes and rail stations and is only served by a low frequency bus services.	

Deliverability/Infrastructure

Criterion	Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)	
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.			
	Drinking water	Development of any scale would require significant work to develop a new source or mitigate Water Framework Directive pressures on water resources. Additional work and funding would be required for this but resources unlikely to be available in the next 5-10 years.			
	Electricity	Part of site served by Newent Primary Substation which currently has less than 10% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	Reinforcement of pipeline network required at all scales of growth, with the cost of downstream reinforcement to be borne by developer.			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Rail transport	Not proximate to rail stations or lines.			
	Bus transport	Served by a low frequency bus route and close enough to Gloucester and Tewkesbury to mean that improvements in frequency could result in reasonably high levels of bus patronage. Higher scales of growth increases prospect of securing investment needed to deliver bus infrastructure.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips. Higher scales of growth increases prospect of securing investment needed to deliver new cycle infrastructure.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	10,000	10,000	10,000	10,000	25,000	15,000
Viability	Medium	Medium	Medium	Medium	High	Medium

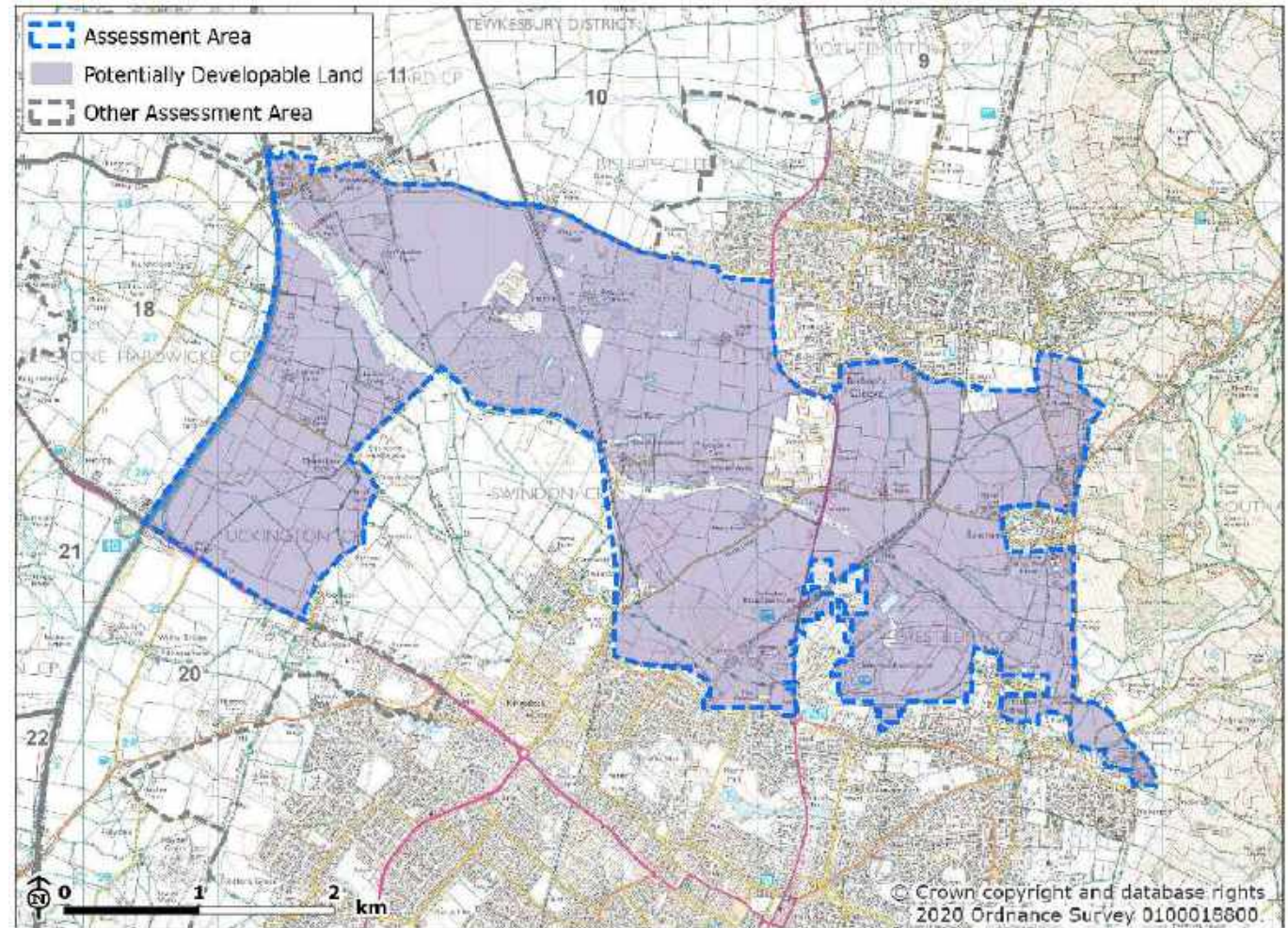
Assessment Area 17 – Urban Extension: North of Cheltenham

Assessment Area Ref: 17

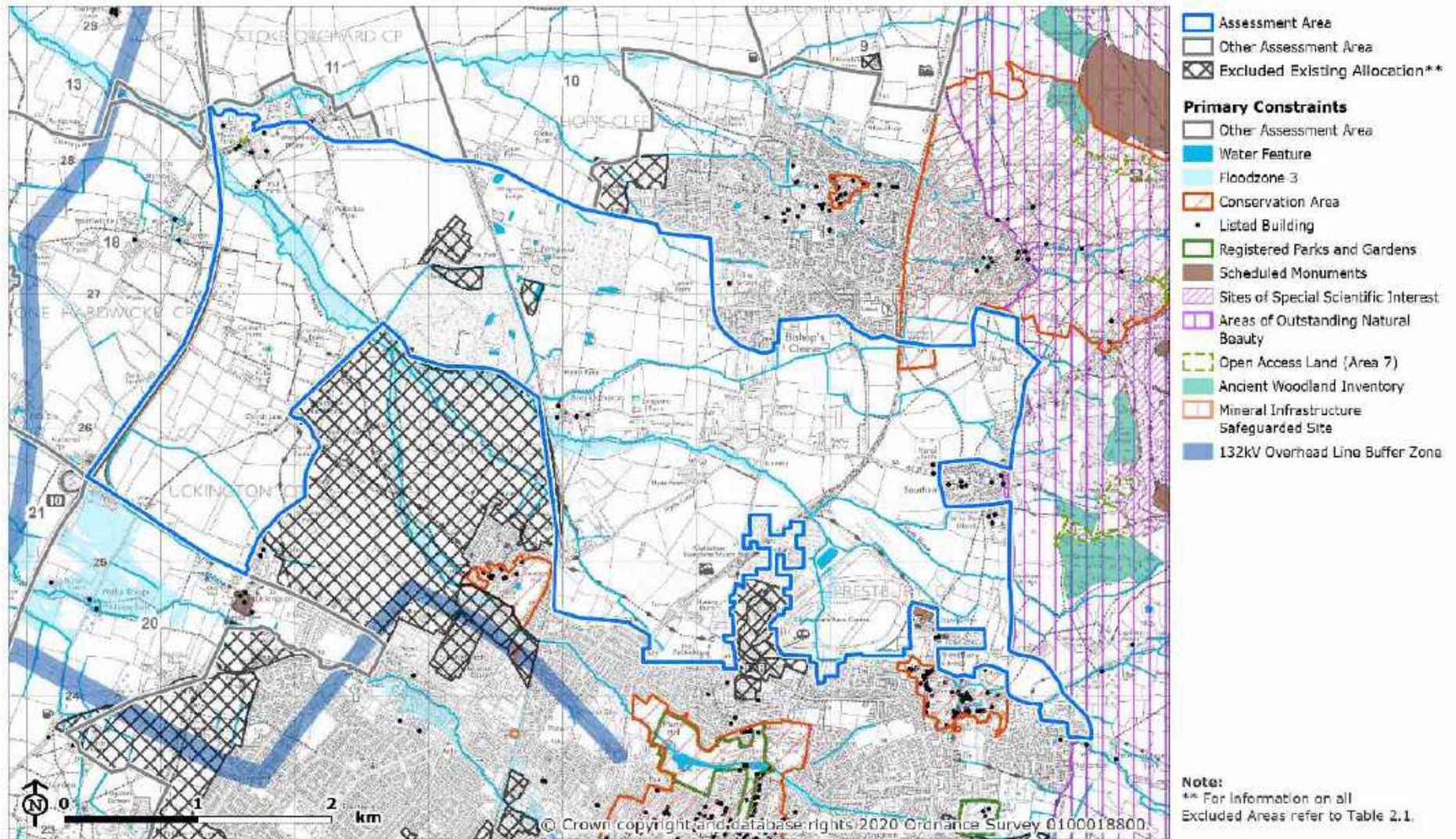
Authority: Tewkesbury and Cheltenham

Development Typology: Urban Extension

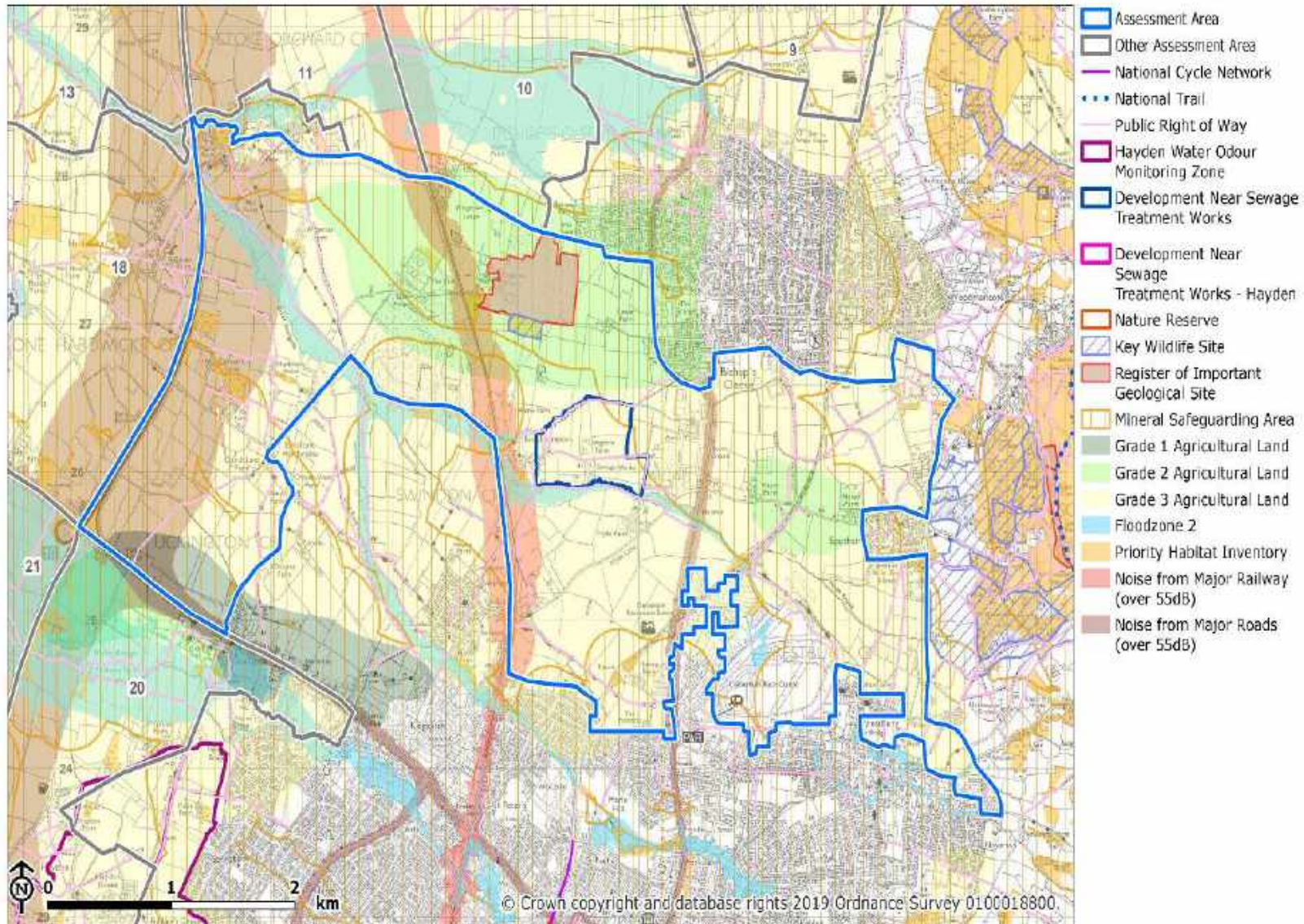
Area: ~1,489ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 24 listed buildings of all grades in the assessment area. These are clustered in and around Stoke Orchard, Brockhampton, Southam and Elmstone Hardwicke. The assets include Churches, burial monuments, farmhouses, houses, cottages, agricultural buildings, a former manor house, a country house and its lodge, and a water conduit. The north-eastern part of the assessment area overlaps and adjoins the Woodmancote Conservation Area and to the southeast, Prestbury Conservation Area is very slightly overlapped and otherwise immediately adjoined. To the southeast, a scheduled moated site is partly overlapped. <p><i>Non-designated</i></p>	<p>The eastern part of the assessment area is highly sensitive due to the presence of designated assets along its southern, eastern and north-eastern edges. These include: the scheduled moat and Prestbury Conservation Area, which includes listed buildings and locally listed buildings), all of which lie to the south.</p> <p>To the east there are the listed buildings in Southam (which include the grade II* former manor house and any remnant non-designated parkland) and the village’s historic rural character, as well the three scheduled monuments beyond the assessment area. While to the north is the Woodmancote Conservation Area.</p> <p>There may be some opportunity for infill development over Cheltenham race course (provided the scheduled monument and its setting are avoided) but otherwise development to the east of the railway would likely result in significant negative effects to several assets.</p> <p>The southern edge of the assessment area adjacent to Cheltenham is also sensitive to the west of the railway, due to the Swindon Village Conservation Area and the listed buildings at Brockhampton a short distance further north. There may be some opportunity for infill north of Swindon Lane and south of Hyde Lane pending further</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> • The HER lists many non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - Three possible ring-ditches at Home Farm Solar Site; - Bronze Age burial, near Prestbury; - An undated enclosure southeast of Elmstone Hardwicke; - Roman settlement Cleeve Business Park and a field boundary near Noverton Lane, Southam; - A Saxon cemetery at Lower Farm; - Anglo-Saxon and medieval settlement at Manor Farm, Stoke Orchard; - A possible deserted medieval village (DMV) at Elmstone Hardwicke; Medieval moated site, Stoke Orchard; - Medieval deer park at Prestbury and another associated with Southam Manor, now De La Bere Hotel (listed grade II*), which was later replaced by an ornamental landscape. 	<p>assessment of the sensitivity of the conservation area but a large extension in this area could not only affect these heritage assets but lead to the coalescence of the two historic towns and/ or Brockhampton.</p> <p>The listed buildings at Brockhampton are a constraint to any extension west of the railway, from Bishop's Cleeve. So too is the Woodmancote Conservation area which extends to the railway. The Grange - a grade II listed building - is also located along the northern edge of the assessment area. However, the setting of this building no longer appears to contribute to its significance or legibility, due to the extent and proximity of modern development.</p> <p>Given these sensitivities there may be an option for an extension between Stoke Orchard Road and Kaye Lane. (Further assessment may even indicate a potential to develop up to the railway.) The extension could go as far south as Hyde Lane but should not coalesce with Brockhampton. Expansion along the northern edge is limited by the presence of a Saxon cemetery at Lower Farm, which is likely to be of more than local significance due to their rarity. Its removal would result in a significant negative effect. A cemetery also suggests settlement nearby, and it may be that the adjacent cropmarks to the west represent this.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Medieval settlement at Southam, Hardwicke Brake and Brockhampton; - Possible medieval settlement at Haymes Farm; - Medieval moated site truncated by the M5 and another suggested by a cropmark in Prestbury; - Medieval-post-medieval settlement earthworks in Stoke Orchard and at Mill Farm; - Extensive ridge and furrow earthworks across the area and a remnant strip field system near Elmstone Hardwicke; - Post-medieval settlement earthworks between Colman’s Farm and Villa Farm; - Shrunken settlement at Dark’s Farm; - Formerly listed cider press at Lower Farm, Brockhampton; - Possible path and pond in Southam Lane, and an 	<p>Any extension west is limited by the risk of coalescing with Stoke Orchard and the potential to harm the listed buildings within that settlement.</p> <p>The potential development area outlined would probably accommodate a large extension with minor negative effects to non-designated assets.</p> <p>To the south of Stoke Orchard, the key constraints are the grade II* listed church of St Mary Magdalene in Elmstone Hardwicke, which is associated with several grade II listed burial monuments, and the non-designated DMV, which may be of more than local significance. Other than the Church and monuments, the built character of Elmstone Hardwicke is largely modern meaning that there may be some opportunity for a small-scale new settlement in this area. This would give rise to minor negative effects, provided effects. It is of note that the area adjoins the area in assessment area 18, that appears least constrained in historic environment terms. It should also be noted that there may be some development potential – again for a new development, not an extension - southwest of Stoke Orchard beyond Waterloo Farm. This area contains non-designated heritage assets, meaning minor negative effects would arise.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>early road near Elmstone Hardwicke;</p> <ul style="list-style-type: none"> - Site of post-medieval mills to the south of Woodmancote and east of Mill Farm, Stoke Orchard where there are also remains of a mill race; - Site of bridge near Hardwicke Brake; - Site of a post-medieval building at Green Farm; - Extant and disused railway lines, and turnpike roads; - Cropmark features near Bishops Cleeve, southeast of Elmstone Hardwicke, southeast and southwest of Kayte Cottages, west of Lower Farm, northeast of Waterloo Farm, south of Manor Farm, Southam, and to the south of Larkrise, Southam; - Geophysical anomalies at Hunting Butts Farm; - WWII sites at Stoke Orchard, Cheltenham Racecourse, Bishops Park and Prestbury; 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Extant WWII pill boxes at Manor Farm, Southam, and Cheltenham racecourse, as well as air raid shelters at Bishops Cleeve and Southam and a subterranean observation post near Court Farm, Bishop Cleeve. • The HER also includes the following locally listed buildings: <ul style="list-style-type: none"> - Old Crossing Cottage; - Wray Side (1920s house) in Prestbury Conservation Area. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a mixed landscape including large areas of agricultural land featuring irregular, less irregular, regular and less regular enclosures. Some of these reflect former unenclosed cultivation patterns and so could include hedgerows that qualify as important under the archaeology 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>and history criteria of The Hedgerow Regulations 1997.</p> <ul style="list-style-type: none"> The area also includes a surviving post-medieval ornamental landscape (Prestbury Park) and a former one at Southam; it also just clips another former one associated with Swindon Hall. Other character areas include an active industrial site south of Bishops Cleeve, an active recreational site (Cheltenham racecourse), and two areas of modern landfill. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> Swindon Conservation Area immediately adjoins the southern edge of the assessment area. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> Few of the listed buildings in the wider vicinity appear to be susceptible to setting change as a result of development within the assessment area. Those that may be include the grade II The Grange, Bishop's Cleeve; The Hayes, Prestbury; Swindon Hall, Swindon; and the grade I Church of St Mary Magdalene in Elmstone Hardwicke. There are three scheduled monuments to the east of the assessment area: a circular settlement site, a cross dyke and a hill fort. A further scheduled moated site lies to southwest, at Uckington. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> There are several locally listed buildings adjacent to the assessment area within Prestbury Conservation Area. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Registered Site of Geological Importance (Wingmoor Farm Sand and Gravel Pit) close to the centre of the assessment area (south west of Bishop's 	Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that a suitable buffer region is established between any development and the designations in and around assessment area 17. The eastern			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Cleeve) with Key Wildlife Site (Wingmoor Farm Meadow) adjacent to the south.</p> <p>Assets within 250m:</p> <ul style="list-style-type: none"> Large Key Wildlife Site (Queenswood Farm) adjacent to the eastern boundary, which buffers the western edge of Cleeve Common SSSI. <p>International and National Assets Within 2km:</p> <ul style="list-style-type: none"> SSSI (Cleeve Common limestone grassland) 600m east. <p>IRZs:</p> <ul style="list-style-type: none"> The IRZ for Cleeve Common SSSI overlaps with part of the eastern half of the assessment area. Rural residential developments of 50 units or more, and non-rural residential of 100 units or more are listed as land uses of risk. <p>There is potentially sufficient space within the assessment area to accommodate all development size options over 250m from local designations and over 2km from national designations. As such, negligible effects may occur.</p>	<p>part of the area is most sensitive to the impacts of development.</p> <p>Maintenance and enhancement of the priority habitat networks – particularly ancient and mature woodland – will be required. Expansion of a cohesive network of habitats may be prioritised (i) in/extending from the varied and wooded topography to the east, (ii) establishing habitat connectivity around Brishop’s Cleeve (iii) extending along existing road and rail corridors.</p> <p>If development took place in the west of the assessment area, it should also be required to maintain and enhance the existing networks of traditional orchard and deciduous woodland priority habitat.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is a large pocket of grade 2 agricultural land adjacent to the northern boundary, amounting to approximately 275ha. There is a smaller pocket of grade 2 agricultural land in the eastern half of the assessment area also, amounting to approximately 48ha. There is a pocket of grade 1 agricultural land in the south-westernmost part of the assessment area, which amounts to approximately 30ha. In addition, there is also approximately 65ha of non-agricultural land in the south-eastern corner of the assessment area as well as a approximately 10ha of urban classified adjacent to the northern boundary at the fringe of Bishop's Cleeve.</p> <p>There is potential for development to result in the loss of high-quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all development size options. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is significant potential for development to avoid the areas of grade 1 and grade 2 agricultural land as there is over 300ha of land in the south that is not grade 1 or grade 2 that could accommodate all potential extension scales. However, the majority of the assessment area is still grade 3 and therefore development has the potential to result in the loss of high quality agricultural land in the majority of the area, dependent upon whether it is grade 3a or the lower quality grade 3b.</p>	?	?	?
Water Quality		N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are considered likely in relation to water quality for all development size options.</p>				
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Southam is located in the east, Brockhampton is located in the central region and part of Stoke Orchard is located in the north-western corner. There are also multiple local roads and areas of agricultural development throughout the assessment area.</p> <p>The River Swilgate bisects the north-western corner of the assessment area, resulting in small amounts (<5ha) of developable land within Flood Zone 2. There are also small amounts (<5ha) of developable land in the central and eastern half of the assessment area that are located within Flood Zone 2, following the course of the River Swilgate.</p> <p>There is sufficient space within the assessment area to accommodate all development size options outside of Flood Zone 2. As such, negligible effects may occur in relation to flood risk for all development size options.</p>	<p>There is significant potential for development at size options to avoid Flood Zone 2 as there is almost 200ha of land in the south of the assessment area that is not constrained by Flood Zone 2 and over 300ha of land in the north that is also outside of Flood Zone 2.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Mineral Resources	<p>Over 50% of the assessment area is comprised of land that is located within Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, there is sufficient space within the assessment area for development at all development size options to be located outside of MSAs. As such, negligible effects may occur in relation to mineral resources.</p>	<p>Despite a significant amount of the assessment area being occupied by MSAs, there is over 140ha in the south that could potentially accommodate all extension size options.</p> <p>In addition, there is potentially sufficient space in the north-west of the assessment area to accommodate a small or medium extension type outside of MSAs. There is also potentially sufficient space in the north-eastern corner of the assessment area to accommodate a small extension type outside of MSAs. However, development in these locations would not be considered an urban extension due to its degree of separation from settlements.</p> <p>It may also be possible to accommodate development without the sterilisation of mineral resources by extracting minerals prior to development.</p>			
Noise	<p>Within the assessment area, there is land adjacent to the western boundary, land in the central region and land in the eastern half that is located in an area of high noise Noisy areadue to the presence of the M5, a railway line and the A435 respectively. The most significant of these areas within a noisy area is land adjacent to the M5, which amounts to approximately 125ha.</p>	<p>There is land in the west, east and central region of the assessment area that could potentially accommodate development at all capacities outside of noisy areas.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	However, there is potentially sufficient space in the assessment area to accommodate all development size options outside of noisy areas. As such, negligible effects may occur in relation to noise.				
Odour	There is a Cordon Sanitaire Zone located in the central region of the assessment area.	There is significant potential for all development capacities to be located outside of the Cordon Sanitaire Zone as this area is restricted to 42ha of land in the central region of the assessment area.			
	However, there is sufficient space within the assessment area to accommodate all potential development sizes outside of this area. As such, negligible effects may occur in relation to odour.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
Key landscape sensitivities: <ul style="list-style-type: none"> Wooded character with frequent orchards and blocks of mixed woodland (including some ancient woodland). Narrow rural lanes. Intact rural character with few modern intrusions. 	H	M-H	M-H

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
As such, landscape sensitivity is high under the largest size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the lower size option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.			

Summary of Constraints and Landscape Sensitivity

Although the assessment area is large, a large extension type would potentially impact on multiple constraints in the majority of the area. There is a large area in the south of the assessment area at the fringe of Cheltenham that could potentially accommodate a large extension type. However, this would likely result in coalescence between Swindon village and Brockhampton as well as adverse impacts on the heritage assets they contain. Landscape sensitivity is also high under the large extension scenario. Therefore, a smaller extension type may be more suitable in this location. This area also has a noisy area, a Mineral Safeguarding Area and grade 3 agricultural land. There may be potential to overcome any noise related issues through suitable mitigation and it may be possible to avoid the sterilisation of mineral resources through extraction prior to development. In addition, it is not clear if the grade 3 land is grade 3a or the lower quality grade 3b. Although reduced compared to the largest scale of development, landscape sensitivity is still moderate-high under the small and medium scale scenarios.

The development of a large extension type in the easternmost part of the assessment area may also result in negative impacts due to the presence of grade 2 agricultural land and high historic environment sensitivity due to multiple heritage assessments spread across Prestbury, Southam and Woodmancote Conservation area from south to north respectively. Cleeve Common SSSI also lies within 2km to the east of this area, which further increases the potential for an extension to result in adverse impacts. Therefore, a smaller extension type may be more suitable in this location, either at the fringe of Bishop's Cleeve in the north or Cheltenham in the south. However, landscape sensitivity remains moderate-high in this scenario.

Development of an extension at any scale adjacent to the northern boundary of the assessment area (to the south-west of Bishop's Cleeve) may result in significant negative effects due to the area being occupied by grade 2 agricultural land and also due to the presence of two local biodiversity/geodiversity designations in the area. Similarly, development further to the west has the potential to result in significant negative effects on the setting of Stoke Orchard, which contains a number of listed buildings. Development at this location would be considered a new settlement rather than an urban extension due to the degree of separation from existing settlements.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A435 (Evesham Road), B4632 (east) and B4075 (south), providing direct links to Bishops Cleeve and Cheltenham.</p> <p>There are five 'critical junctions' in or adjacent to the assessment area. Four 'critical junctions' are along the A435 (A435 / Stoke Orchard Rd / Voxwell Ln Rbt, A435 / Cheltenham Rd Rbt (GE Aviation), A435 / Hyde Ln / Southam Ln, A435 Swindon Ln / B4075 Racecourse Rbt). The JCS Transport Evidence Base strategic transport modelling work's Do Nothing and Do Minimum model tests forecasts that these junctions will operate approaching and beyond their design capacities in 2031 (at between 64% and 92% Do Nothing and between 82% and 103% Do Minimum Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>M5 / A4019 (junction 10) is also adjacent to the west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond 90% of its design capacity in 2031 (at between 91% and 97% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 81,656</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with a several high-frequency public transport services operating along the key arterial routes.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 266,418</p> <p>Access from the assessment area to employment by Car scores relatively high, likely due to the well-connected local road network to Bishops Cleeve, Cheltenham and other urban centres.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that key highway links within the assessment area are accessible to a number of key services (urban centres and healthcare sites) between 20 and 40 mins and education facilities within 20 mins. The remaining parts of the assessment area have lower levels of accessibility.	
Private car use by commuters	% Driving a Car or Van = 71% Car based commuter trips currently account for an average of 71% of commuter journeys in LSOAs covered by the assessment area, which is relatively high given the assessment area's proximity to key services and employment centres.	
Proximity to sustainable transport networks	Much of the assessment area is within the 5km catchment of Cheltenham Spa Rail Station and some of locations are currently served by high-frequency bus services. The assessment areas is connected to several walking and cycling routes and there is potential to link with the existing National Cycle Network route which runs through Cheltenham.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable			
	Rail transport	Most of area within 5km of Cheltenham mainline station.			
	Bus transport	Served by high frequency bus routes into Cheltenham. Higher scales of growth increases prospect of securing investment needed to deliver bus infrastructure.			
	Cycle transport	Not currently served by cycle network although close enough to Cheltenham that investment in cycle infrastructure could link up to existing network and increase cycle trips. Higher scales of growth increases prospect of securing investment needed to deliver new cycle infrastructure.			

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	40,000	40,000	40,000
Viability	High	High	High	High	High

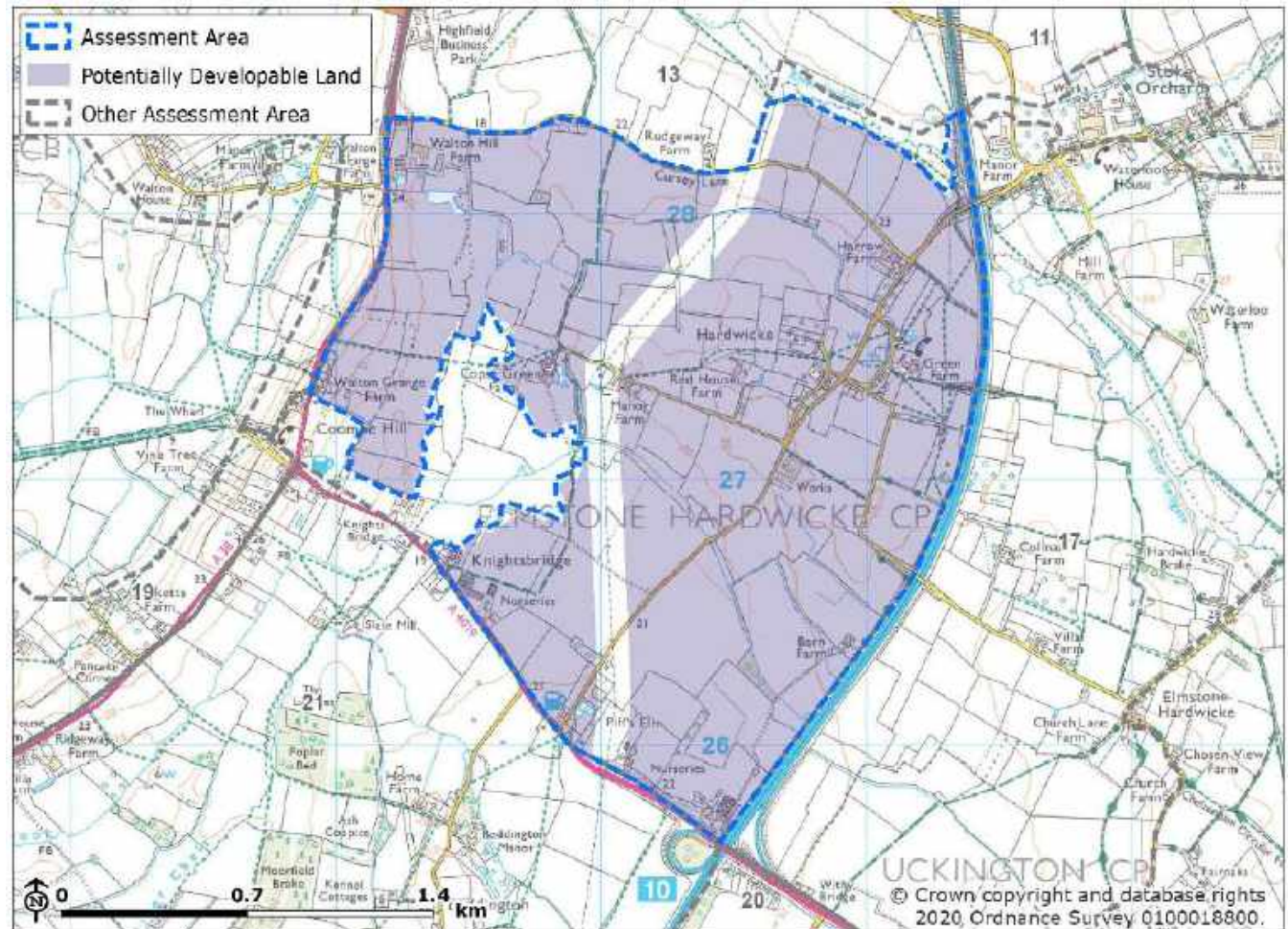
Assessment Area 18 – New Settlement: Northwest of Cheltenham

Assessment Area Ref: 18

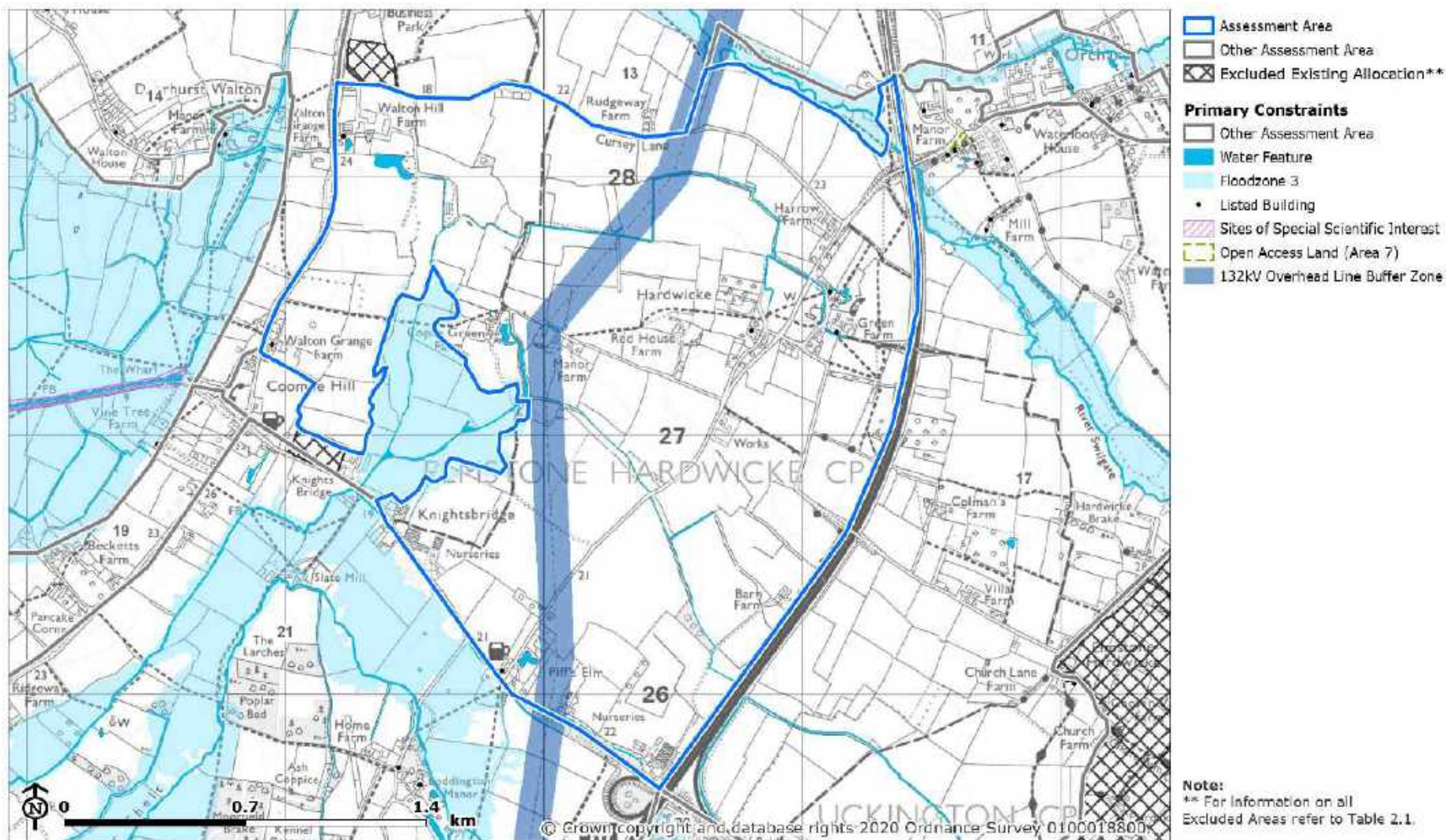
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

Area: ~440ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The assessment area contains six Grade II listed buildings. Three are located near Hardwicke to the north-east and the rest are located along the western and southern assessment area boundaries. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a number of assets within the assessment area these include: <ul style="list-style-type: none"> - An Iron Age field system - A series of ditched enclosure - A possible moated site at Copse Green Farm; - Remains of a moat at Fisher’s Farm; - Anglo-Saxon and medieval settlement including a 	<p>Hardwicke is a particularly sensitive area within the assessment area given the presence of listed buildings that could be harmed as a result of changes to their agricultural setting. The western boundary of the site is sensitive for the same reason. The southern boundary is less sensitive because the listed building there – the Grade II ‘Gloucester Old Spot’ – is an inn and its setting relates primarily to the road, so may be less sensitive to changes to the surrounding area.</p> <p>Most of the listed buildings in the wider vicinity yet outside the assessment area are unlikely to have a relationship with the assessment area that would be affected by development. However, there may be some sensitivity relating to those around Stoke Orchard (northeast) and Boddington (south).</p> <p>There are two moated sites to the west of Hardwick at Manor Farm and Copse Farm which, if of high value, could be a constraint to development requiring preservation in-situ. The same is true for the moated site and early medieval to medieval settlement in the northeast of the site near to Stoke Orchard. The moat at Fishers Farm has already been truncated by the M5 meaning that its value may be lower than that of the others.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>moated manor at Manor Farm, Stoke Orchard;</p> <ul style="list-style-type: none"> - A moat at Manor Farm, Hardwicke; - Cropmarks near Manor Farm Hardwicke; - Possible Romano-British settlement; and, - Ridge and furrow earthworks from past ploughing are evident across most of the assessment area. <ul style="list-style-type: none"> • The HER data also highlights a potential for hitherto unrecorded remains. <p><i>Historic Landscape Character</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural landscape with small extents of historic settlement. The agricultural land is a mix of older irregular and more recent regular enclosure. The irregular enclosure has some value in itself and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. 	<p>The other recorded archaeological remains within the assessment area are likely to be of low-medium significance and are likely to require appropriate investigation and recording prior to development, not preservation in-situ.</p> <p>In terms of the historic landscape the greatest area of sensitivity is the northern half of the site where the older irregular enclosure is present.</p> <p>Based on the known historic environment constraints it is likely that adverse effects would be best avoided/ minimised if development was restricted to the area south of Hardwicke and Manor Farm (assuming that listed building here is retained and its setting preserved). However, this area would not be able to accommodate a large or small village without causing significant negative effects, unless the small village was built at the lower end of the development quantum (c. 4000 dwellings), in which case minor negative effects may occur.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Assets in the wider area that could be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are several clusters of listed buildings in the wider vicinity. The largest is at Stoke Orchard approximately 700m to the north-east of the assessment area – where there is a grade I listed building. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated heritage assets within the HER dataset have been identified as being susceptible to setting change. 				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No designated assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No designated assets within 250m. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Coombe Hill Canal, designated for the invertebrate assemblage and plants) around 300m west, also a GWT reserve. 	<p>The most sensitive part of the assessment area is the western side which is covered by the IRZ related to the Coombe Hill Canal SSSI.</p> <p>The central area of the assessment area around Hardwicke is ecologically rich, as demonstrated by the priority habitat identified here. In order to reduce potential effects, development should be focussed to the central - south of the assessment area but not extend to the very south due to the priority habitat at Stanboro Lodge.</p> <p>Furthermore, any development should avoid and provide suitable set back from the</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> SSSI (Turvey's Piece designated for green hound's-tongue – a plant of woodland and hedgebanks) around 1.9km north-west. <p>IRZs:</p> <ul style="list-style-type: none"> Over 50% of the assessment area lies within a SSSI IRZ which indicates residential development of 100 units has the potential to impact the statutory designations within the wider area. <p>Minor negative effects may occur at the medium development option size as this scale of development would likely be within 2km of a national designation. Negligible effects may occur under the smallest development scale as there is potential to accommodate this scale of development over 250m from local designations and over 2km from national/international designations.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>	<p>Swilgate river corridor to the north of the assessment area and, more generally, any fragmentation of the network of copses and hedgerows which occurs within the assessment area.</p> <p>Generous provision of biodiverse green infrastructure may potentially be considered to accommodate any new recreational demand.</p> <p>It is considered that it may be possible for the small development option size to be accommodated within the assessment area without fundamentally compromising the cited interest of the assets on or near to the assessment area.</p> <p>Unavoidable material impacts in relation to local, national or international designations are in fact less likely than impacts upon the non-designated) habitats within the site.</p>			
Soil Quality	<p>The majority of the assessment area is comprised of Grade 3 agricultural land, but there is a 34ha pocket of Grade 4 agricultural land within a central-western part of the area.</p>	<p>Due to the high proportionate coverage of the grade 3 agricultural land within the assessment area, all applicable development capacities could lead to a loss of high quality agricultural land, dependent on whether it is grade 3a or grade 3b.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>There is, therefore, potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality under all applicable development size options. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>				
Water Quality	<p>There is less than 5ha of land on the western boundary of the assessment area that is located within a drinking water safeguarding zone.</p> <p>However, the vast majority of the assessment area is not located within any drinking water safeguarding zones and therefore negligible effects are anticipated in relation to water quality regardless of the development size.</p>	<p>It is likely that all applicable potential development sizes would be able to avoid being located within a drinking water safeguarding zone as this area of land is restricted to a small pocket of land on the western boundary.</p>	N/A		
Flood Risk	<p>The majority of the assessment area is comprised of greenfield land. However, the settlement of Hardwicke is located in north-eastern corner and parts of the settlements of Knightsbridge and Deerhurst Walton are located in the south and north-west respectively. Additionally, part of the M5 passes through the south-eastern corner of the assessment area and there are local roads distributed throughout the area.</p>	<p>There is potential for development at the small or large village scale to be accommodated outside of Flood Zone 2 in the east side of the area, avoiding potential flood risk.</p>	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>There is approximately 34ha of developable land located within Flood Zone 2 in the western half of the assessment area due to the presence of a watercourse. There is also a smaller pocket of land within Flood Zone 2 in the north-easternmost corner of the assessment area.</p> <p>Negligible effects are anticipated at the small and large village scale as there is potential to accommodate these scales of development outside of Flood Zone 2.</p>				
Mineral Resources	<p>The majority of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects are anticipated in relation to mineral resources under all applicable development size options as there is insufficient space to accommodate these scales of development outside of MSAs.</p>	<p>Suitable mitigation may be possible to overcome mineral resourcing issues such as extraction prior to development.</p>	N/A	*	*
Noise	<p>A large area of the assessment area is within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours adjacent to the eastern boundary due to the presence of the M5, as well as a smaller area of land adjacent to the western</p>	<p>There is sufficient space within the assessment area for development under the smallest scale to be set back from land around main roads which are located within noisy areas.</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>boundary that is also within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A38.</p> <p>As such, significant negative effects may occur for the medium Development Type (if unmitigated) and negligible effects may occur for the smallest Development Type as there is potentially sufficient space to accommodate this scale of development outside of the noisy area.</p>	There may be potential for suitable mitigation to overcome any noise related issues in a larger development scale.			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for applicable development scales.</p>	N/A	N/A		

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Undeveloped, rural and removed perceptual qualities. 	N/A	H	M-H

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<ul style="list-style-type: none"> Open and exposed landscape character with the gently undulating landform providing a high level of intervisibility across the assessment area. <p>Landscape sensitivity high for a medium scale new settlement as the key characteristics and qualities of the landscape may be highly sensitive to development at this scale. Landscape sensitivity is reduced to moderate-high under the small village scenario as the key characteristics and qualities of the landscape may be less sensitive to development of this scale.</p>			

Summary of Constraints and Landscape Sensitivity

The majority of the study area is comprised of grade 3 agricultural land and therefore development of any scale could potentially result in the loss of high-quality agricultural land, dependent upon whether it is grade 3a or the lower quality grade 3b.

Generally, the least sensitive land in the assessment area is located relatively centrally but to the south-west of Hardwicke, particularly with respect to a small village scale development. Development towards the west of the assessment area has the greatest potential impact with respect to the nearest SSSI. Development of a new settlement is likely to result in significant negative impacts upon heritage assets in the area. The effects on heritage assets may be reduced to minor negative with development of a small village at the lowest end of the scale. Additionally, impacts on landscape may be reduced under the smallest scale development scenario, but the sensitivity is still considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the local highways network via the A38 and the A4019 (south), which provides a direct link to the M5 Junction 10.</p> <p>M5 / A4019 (junction 10) is also adjacent to the west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond 90% of its design capacity in 2031 (at between 91% and 97% Ratio to Flow Capacity during the AM and PM peak periods).</p>	

Criterion	Rationale	Score
	<p>A4019 Tewkesbury Rd / A38 Coombe Hill is also considered a 'critical junction' within the JCS modelling and the Do Nothing and Do Minimum model tests forecast that this junction will operate over its design capacity in 2031 (at between 102% and 115% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Further development in this location can reasonably be expected to worsen traffic conditions at these critical junctions without improved public transport links to key destinations.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 7,344</p> <p>Access from the assessment area to workplaces (jobs) by public transport services scores relatively low, and is a result of the current low frequency bus service serving the area. Development of all scales is expected to require significant public transport service enhancement, particularly along the A38 / A4019 corridors.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 271,595</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to major urban centres.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that locations along key highway links within the assessment area are accessible to a number of key services (urban centres and healthcare facilities) between 20 and 40 mins travel time by public transport services and education within 20 mins. The remaining parts of the assessment area currently demonstrate lower levels of public transport accessibility to key services.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 71%</p> <p>Car based trips currently account for an average of 71% of commuter journeys in LSOAs covered by the assessment area. This is likely a result of the assessment area's proximity to the strategic road network (A38 and M5) and presence of low frequency public transport services.</p>	

Criterion	Rationale	Score
Proximity to sustainable transport networks	The assessment area is partially within the 5km catchment of Cheltenham Spa Rail Station and is currently served by a low frequency bus service. The assessment area is divorced from strategic walking and cycling (NCN) route.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer	N/A		
	Rail transport	Largely not proximate to rail stations or lines.	N/A		

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Bus transport	Served by a high frequency bus route into Cheltenham although journey time at upper limit that will allow significant increase in bus patronage. Proximity to M5 J10 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Only highest scales of growth likely to be sufficient to secure levels of investment needed to deliver bus service improvements (unless developed jointly with assessment area 13).	N/A		
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.	N/A		

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	N/A	N/A
Viability	High	High	High	High	N/A	N/A

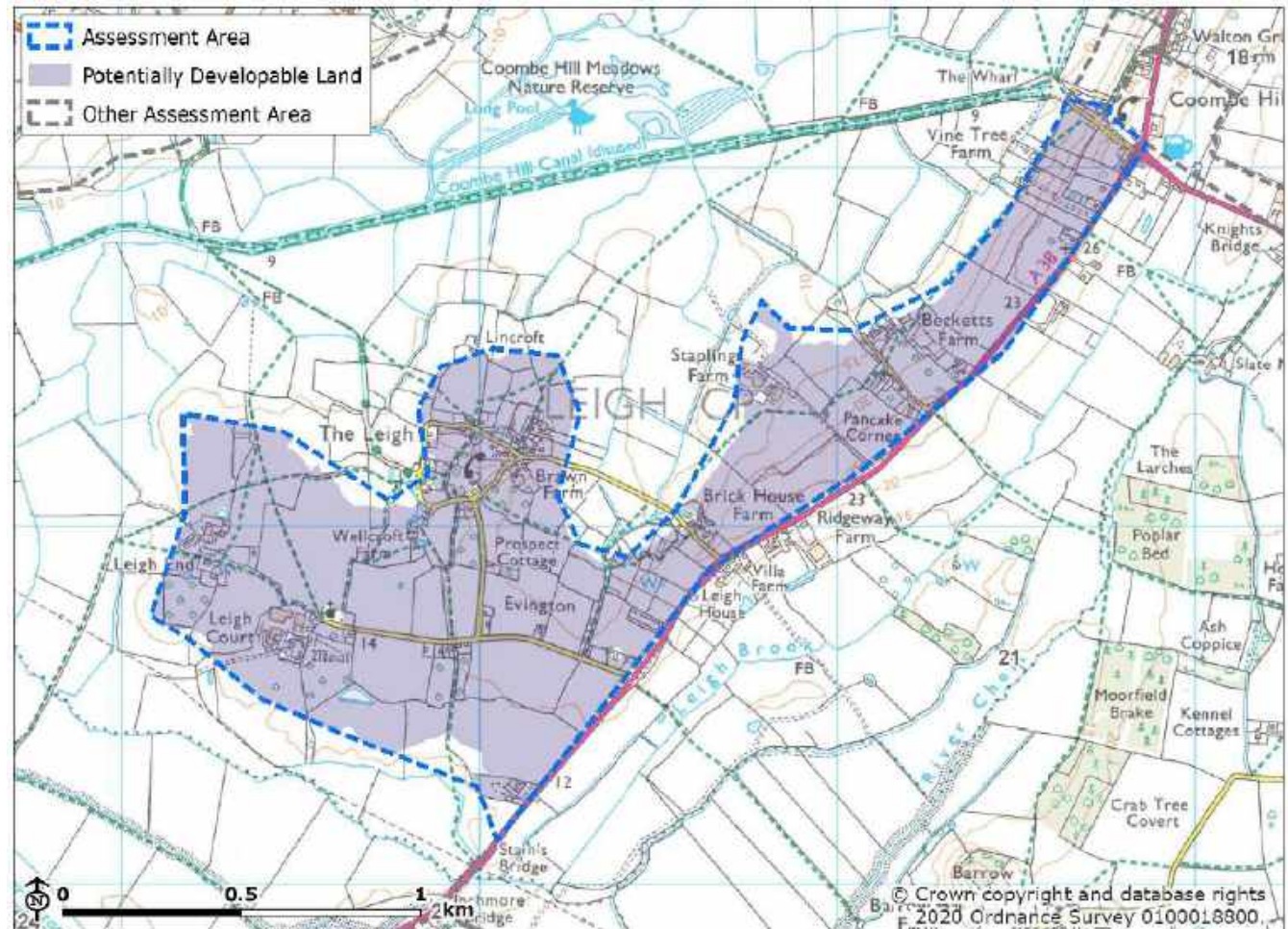
Assessment Area 19 – New Settlement: Land around The Leigh

Assessment Area Ref: 19

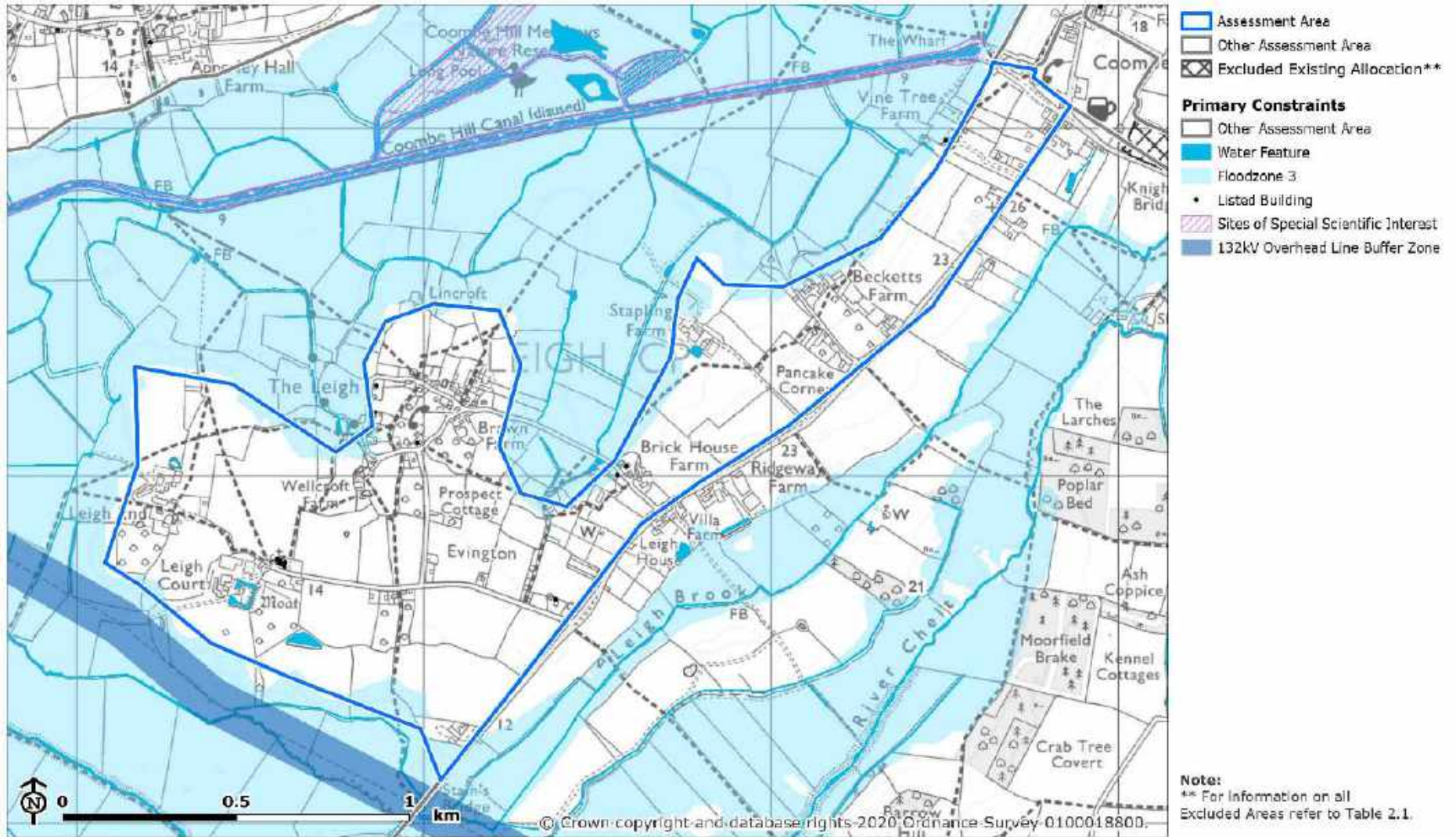
Authority Area: Tewkesbury Borough

Development Typology: New settlement

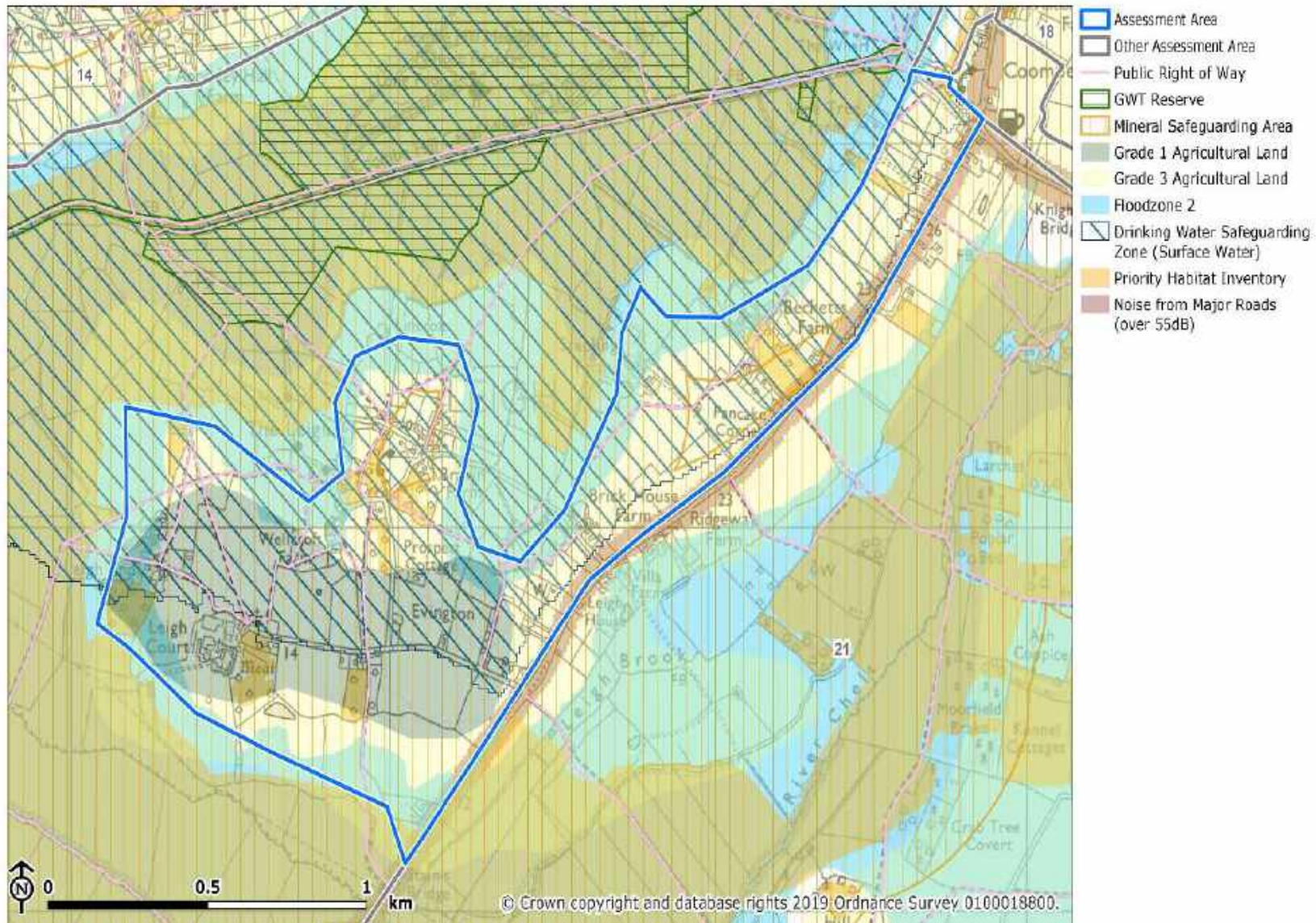
Area: ~161ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 13 listed buildings within the assessment area. These are all grade II save for the grade I Church of St Catherine. With the exception of Evington House – a country house – to the north of the assessment area the listed buildings all lie to the south at The Leigh or Evington. A number of the listings relate to burial monuments in the churchyard of the church of St Catherine. Others are farmhouses, houses and cottages. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER lists multiple non-designated heritage assets including but not limited to: <ul style="list-style-type: none"> A moated site at Leigh Court; 	<p>Several of the listed buildings would be highly susceptible to setting change, making The Leigh, Evington and Combe Hill sensitive areas. Development could also affect the historic character and layout of these settlements.</p> <p>The moated site at Leigh Court – in the southwest of the assessment area in Evington - may require preservation in situ.</p> <p>It is unlikely that the assessment area could accommodate a new settlement whilst avoiding/ minimising significant negative effects to historic environment assets.</p>	N/A	N/A	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - A medieval settlement at Leigh; - Multiple medieval or later hollow ways; - Cropmarks and earthworks, including extensive ridge and furrow; and - A canal and modern military pipeline. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • In addition to the settlement at Leigh the HLC data indicates an agricultural landscape comprised of irregular and less regular enclosure. These enclosures have some time-depth and value in themselves but could also include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of listed buildings in the wider area but none appear to have a 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>relationship with the site that would be affected by development.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets susceptible to setting change have been identified at this stage. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No designated assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SSSI (Coombe Hill Canal) runs parallel to the assessment area, being less than 70 m at the closet point in the north. GWT reserve (Coombe Hill) surrounds, and is much larger than, the Coombe Hill SSSI, extending c70m from Area 19 at its closet point. Majority of southern, western and northern boundary is adjacent to large areas of floodplain grazing marsh priority habitat, part of the wider River Severn corridor. 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the wooded areas of priority habitat are maintained.</p> <p>A buffer region should be established between any development and the SSSI to the north, and especially needs to account for connectivity between the development and the SSSI and River Severn via the extensive floodplain grazing marsh surrounding the assessment area.</p> <p>Priority habitats are found throughout the assessment area, including traditional orchard (at Beckett's Farm, within the Leigh, and at Evington), three stands of deciduous woodland (two at the north near Combe Hill, and one northwest of Evington), and one are of unspecified habitat in the Leigh.</p> <p>It may be possible to accommodate development at the smallest development size</p>	N/A	N/A	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> No national or international designations within 2km. <p>IRZs:</p> <ul style="list-style-type: none"> The IRZ for Coombe Hill Canal SSSI overlaps with the entire assessment area and identifies that any increase in rural residential properties is a risk. <p>Minor negative effects may occur at all possible development sizes (i.e. only small village due to the size of the area) as it may be possible to locate development over 250m from the national designation.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>	<p>over 250m from the SSSI to the north by avoiding the northernmost part of the area.</p> <p>It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p>			
Soil Quality	<p>The southern area of the assessment area contains approximately 53ha of grade 1 agricultural land. The remaining land within the assessment area is grade 3 agricultural land.</p> <p>There is potential for development within the assessment area to result in the loss of high quality agricultural land. Therefore, significant negative effects are possible in relation to soil quality. The effects are uncertain as</p>	<p>There may be potential to accommodate development at the smallest size in the eastern half of the area, avoiding the loss of grade 1 agricultural land. However, remaining land within the assessment area is still grade 3 and therefore development at any location in the area has the potential to result in the loss of high quality agricultural land, dependent on whether it is grade 3a or grade 3b.</p>	N/A	N/A	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.				
Water Quality	<p>The majority of the assessment area is occupied by a drinking water safeguarding zone.</p> <p>As such, significant negative effects are anticipated in relation to water quality.</p>	There is approximately 35ha in the south of the assessment area that is not located within a drinking water safeguarding zone. However, this area is not sufficient to accommodate a new settlement at any of the potential development sizes.	N/A	N/A	
Flood Risk	<p>The majority of the assessment area is greenfield but there are three small settlements (Coombe Hill, Evington and The Leigh), local roads and areas of agricultural development within the area.</p> <p>Developable land within Flood Zone 2 is present on the southern, western and northern boundaries of the assessment area due there being a number of watercourses outside the boundaries.</p> <p>However, there is potentially sufficient space within the assessment area outside of Flood Zone 2 and Flood Zone 2 to accommodate development at the smallest size and therefore negligible effects are anticipated in relation to flood risk at this scale.</p>	Development at the smallest size set back from the boundaries of the assessment area would avoid Flood Zone 2 and 3, potentially reducing flood risk. This may be more feasible in the eastern side of the assessment area due to the presence of the settlement of Evington in the west/south-west.	N/A	N/A	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Mineral Resources	<p>Almost the entirety of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation mineral resources. As such, significant negative effects are anticipated in relation to mineral resources.</p>	<p>The two pockets of land that are not located within a MSA are too small to accommodate a new settlement.</p> <p>It may be possible to accommodate a small size development without the sterilisation of mineral resources if they are extracted prior to development.</p>	N/A	N/A	*
	Noise	<p>Land directly adjacent to the eastern boundary of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours associated with the A38.</p> <p>Negligible effects are anticipated at the smallest development option size as there is potentially sufficient space outside of noisy areas to accommodate this scale of development.</p>	<p>There is sufficient available land within the assessment area for development to be set back from the A38 area of high noise Noisy area and suitable mitigation may be possible to overcome noise related issues.</p>	N/A	N/A
Odour		<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are anticipated in relation to odour for all development sizes.</p>	N/A	N/A	N/A

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Open and expansive views. • Surround by BAP Priority Habitats. • Provides rural setting to The Leigh. <p>As such, landscape sensitivity is moderate-high for small size development option as the key characteristics and qualities of the landscape may be sensitive to development at this scale.</p>	N/A	N/A	M-H

Summary of Constraints and Landscape Sensitivity

There is insufficient space within the assessment area to accommodate a new settlement at the medium or largest development option size and the existing settlements of Evington and The Leigh are located in the south-west and west, further reducing the potential space for a new settlement. The majority of the assessment area is comprised of grade 3 agricultural land and therefore development within the area has the potential to result in the loss of higher quality agricultural land, dependent upon whether it is grade 3a or grade 3b. The land in the east may have sufficient space to accommodate a new settlement at the smallest scale whilst achieving greater than 250m separation from Coombe Hill Canal SSSI. This location is subject to MSAs, a noisy area and a Drinking Water Safeguarding zone, impacts upon the first two of which can potentially be mitigated. However, there is potential for development of any new settlement within this assessment area to result in significant negative effects on the historic environment and on landscape character due to moderate-high sensitivity for the smallest development scale.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected via the A38 (Gloucester Rd), along the Eastern boundary, and provides a strategic link to the M5 Junction 10.</p> <p>M5 / A4019 (junction 10) is also adjacent to the west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction</p>	

Criterion	Rationale	Score
	<p>will operate beyond 90% of its design capacity in 2031 (at between 91% and 97% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>A4019 Tewkesbury Rd / A38 Coombe Hill is also considered a 'critical junction' within the JCS modelling and the Do Nothing and Do Minimum model tests forecast that this junction will operate over its design capacity in 2031 (at between 102% and 115% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>These findings suggest that high quality public transport improvements will be required if development of any scale is allocated to the assessment area.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 114,776</p> <p>A high number of workplaces (jobs) can be accessed from the assessment area within 45mins during the AM peak by public transport. Public transport services provide connections to Gloucester, Tewkesbury and Bishops Cleeve.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 271,595</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to key urban centres / employment sites.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that both education and healthcare facilities can be accessed within 20mins travel time by public transport, whilst urban centres can be accessed between 20 and 40mins travel time.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 72%</p> <p>Car based trips currently account for an average of 72% of commuter journeys in LSOAs covered by the assessment area, despite the area's high-frequency public transport services which provide good connectivity to key services and employment sites.</p>	

Criterion	Rationale	Score
Proximity to sustainable transport networks	The assessment area is located outside of the 5km catchment of a nearest rail station and is currently served by low-frequency bus services. The assessment area is divorced from strategic walking / cycling (NCN) routes.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.	N/A	N/A	
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).	N/A	N/A	
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A	N/A	
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.	N/A	N/A	
	Rail transport	Not proximate to rail stations or lines.	N/A	N/A	

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Bus transport	Within 500m of existing high frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in reasonably high levels of bus patronage. Scale of growth unlikely to be sufficient to secure levels of investment needed to deliver bus improvements (unless developed jointly with assessment area 21).	N/A	N/A	
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.	N/A	N/A	

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	N/A	N/A	N/A
Viability	High	High	High	N/A	N/A	N/A

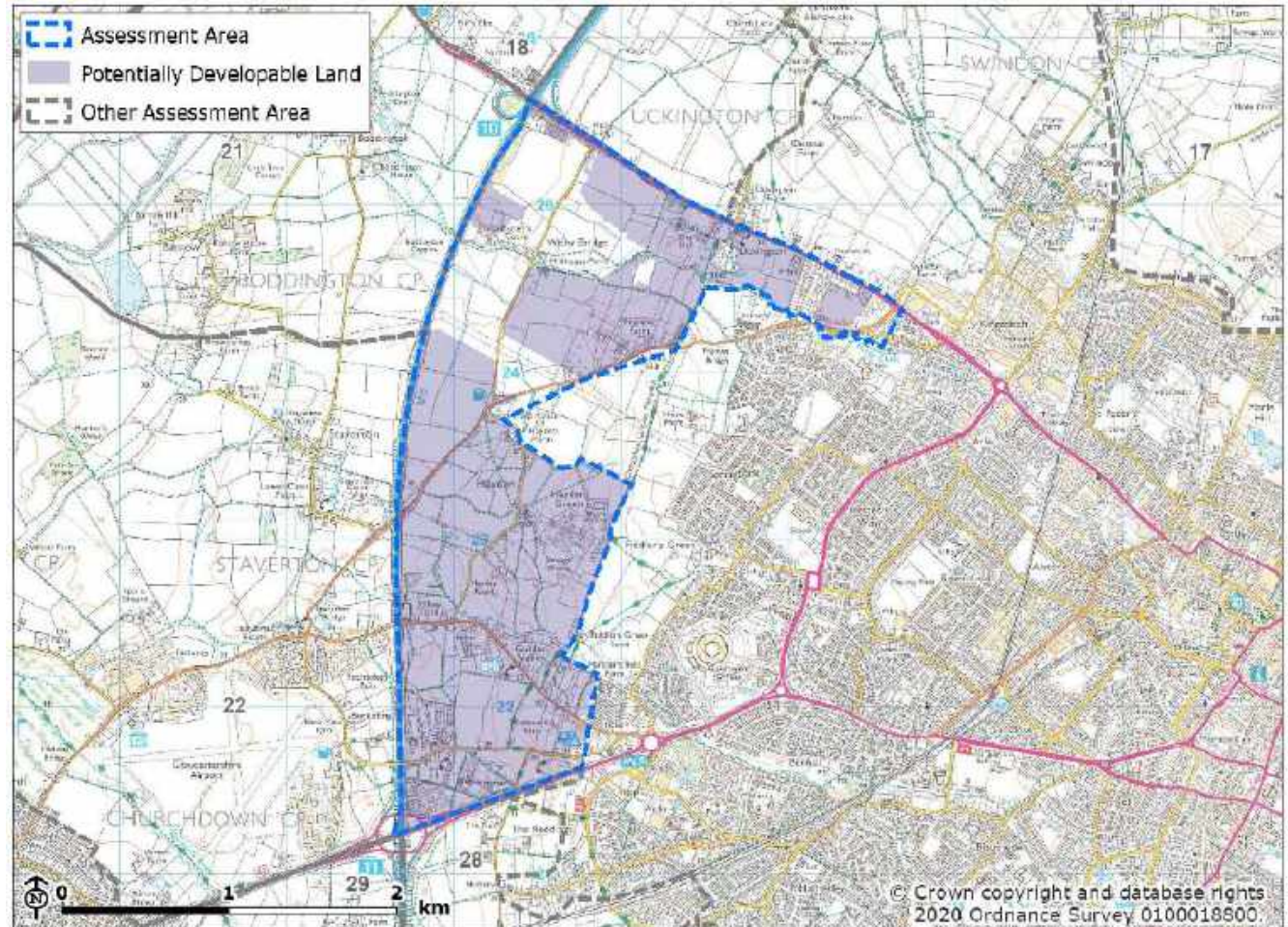
Assessment Area 20 – Urban Extension: Land West of Cheltenham

Assessment Area Ref: 20

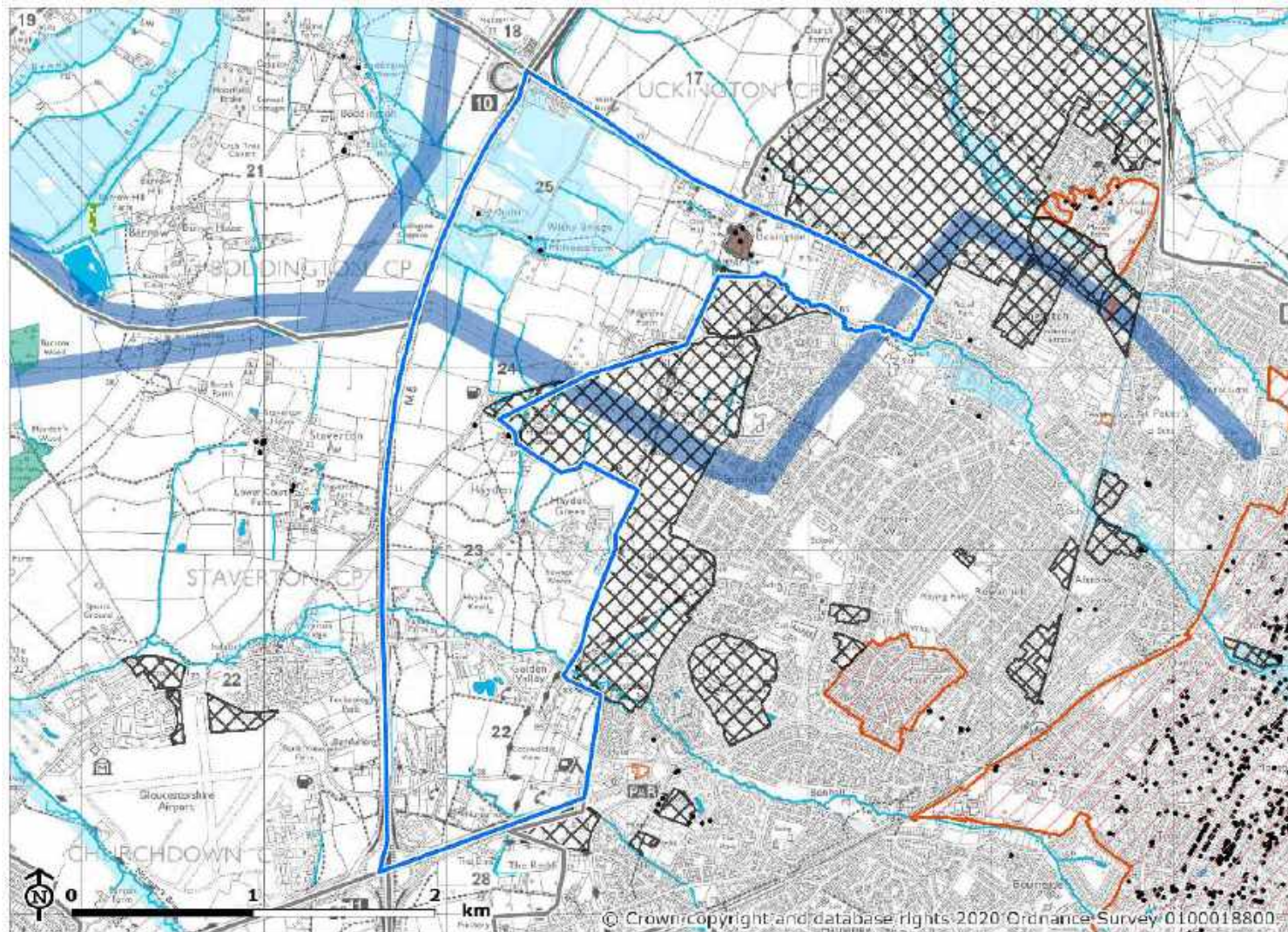
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

Area: ~500ha



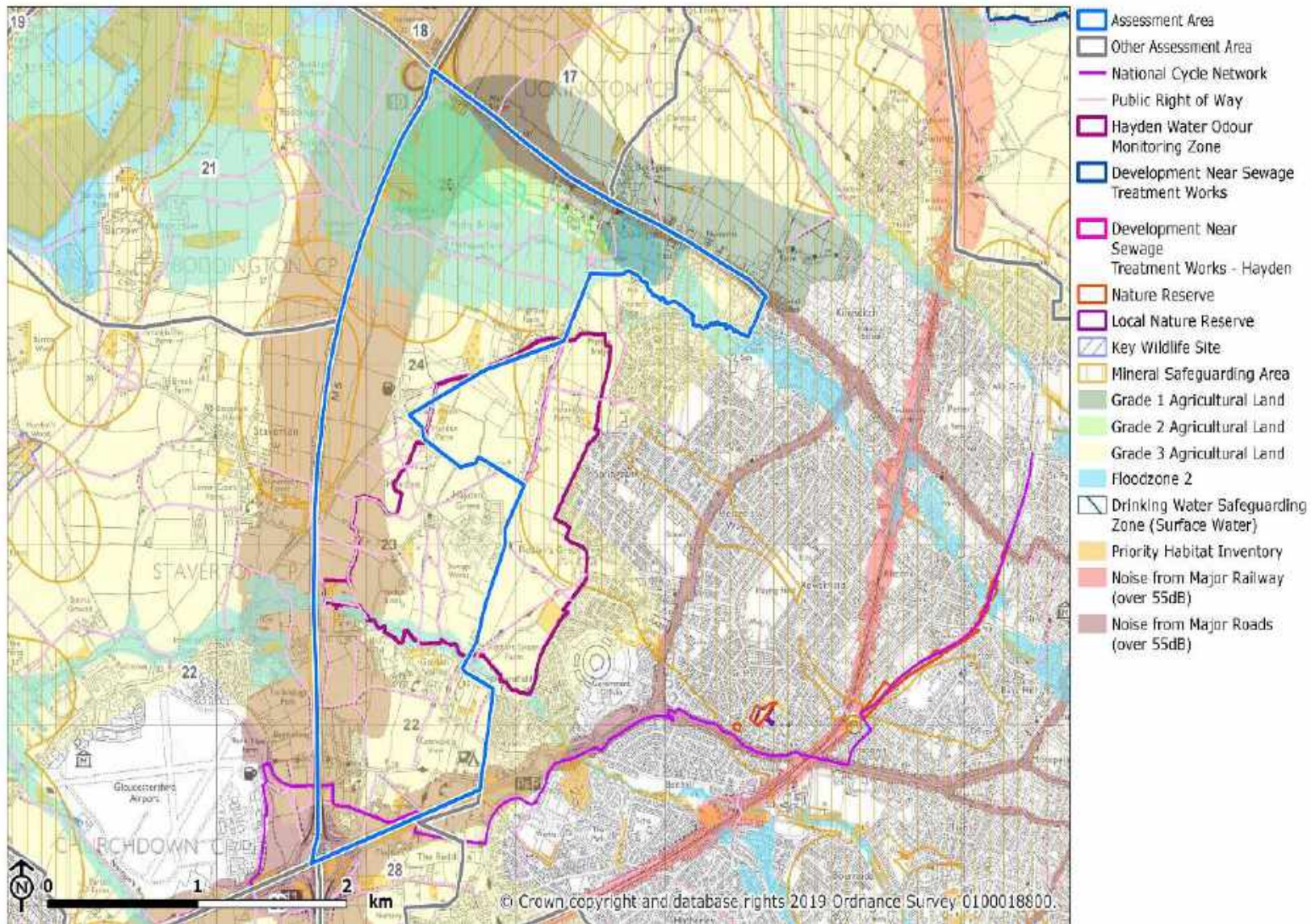
Primary Constraints



- Assessment Area
 - Other Assessment Area
 - Excluded Existing Allocation**
- Primary Constraints**
- Other Assessment Area
 - Water Feature
 - Floodzone 3
 - Conservation Area
 - Listed Building
 - Registered Parks and Gardens
 - Scheduled Monuments
 - Open Access Land (Area 7)
 - Ancient Woodland Inventory
 - Mineral Infrastructure Safeguarded Site
 - 132KV Overhead Line Buffer Zone

Note:
 ** For information on all Excluded Areas refer to Table 2.1.

Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The assessment area contains ten grade II listed buildings. These include houses, farmhouses, and cottages, as well as agricultural and industrial buildings. A group are located at Uckington to the northeast; the rest are dispersed across the northern half of the assessment area. The group of listed buildings at Uckington is associated with the scheduled remains of a moated site. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a number of non-designated heritage assets within the assessment area. These include: <ul style="list-style-type: none"> A locally listed building in the southeast of the assessment area along the B4063. A moated site at Butler’s Court to the northwest; 	<p>The northern half of the assessment area is the most sensitive part due to the presence of the designated assets particularly Uckington, where there is a scheduled monument and listed buildings within the assessment area and listed buildings beyond the assessment area that would be susceptible to setting change. The area to the northwest, towards Boddington, and at Hayden are also sensitive due to the presence of listed buildings.</p> <p>There is also a non-designated moated site in north-west of the assessment area. It could be of more than local significance (e.g. medium-national significance), meaning that preservation in situ may be required. However, physical effects to the other known non-designated assets could probably be mitigated via an appropriate scheme of investigation and recording.</p> <p>To avoid/ minimise harm to the historic environment any urban extension would be best placed to the south of the assessment area. Based on the evidence reviewed herein, it is likely that all urban extension sizes would give rise to minor negative effects.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - An area of cropmarks possibly of a later prehistoric to Roman settlement; - A Roman field system at Uckington; - A prehistoric ring ditch; - The sites of possible medieval/ post-medieval mills; - Two hollow ways near Hayden Green; - Former turnpike roads; - A number of WWII sites. <p><i>Historic Landscape</i></p> <p>The HLC data indicates that the assessment area includes a mix of historic and modern settlement set within a primarily agricultural landscape comprised of irregular, less irregular, regular and less regular enclosures. The irregular and less regular enclosures have some time-depth and value in themselves. They could also include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p><i>Designated</i></p> <ul style="list-style-type: none"> The grade II Uckington Farmhouse and its stable block and cart store, are immediately adjacent to the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> There are no designations within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> There are no designations within 250m of the assessment area. <p>International and National Assets Within 2km:</p> <ul style="list-style-type: none"> SSSI (Badgeworth) 900m south, part of which is a GWT reserve. <p>IRZs:</p> <ul style="list-style-type: none"> Several IRZs overlap with the assessment area which list residential planning applications as a potential risk. <p>Negligible effects may occur for all scales of extensions as there is potential for</p>	<p>Areas of traditional orchard and deciduous woodland priority habitat are distributed throughout the assessment area.</p> <p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the wooded areas of priority habitat are maintained, which will include ensuring that supporting transport infrastructure minimises severance of habitats in the area.</p> <p>There is the potential to provide landscape scale connectivity via linking existing habitats with new green infrastructure.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	them to be located over 250m of local designations and over 2km from international/national designations.				
Soil Quality	<p>The majority of the assessment comprises grade 3 agricultural land. However, there is approximately 53ha of land classified as grade 2 land in the north as well as 32ha of grade 1 land directly adjacent to the northern boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is significant potential for development at all development sizes to avoid the grade 2 and grade 1 agricultural land as these areas are restricted to land adjacent to the northern boundary. However, the remainder of the assessment area is still comprised of grade 3 agricultural land and therefore development at any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or the lower quality grade 3b.</p>	?	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are considered likely in relation to water quality for all development sizes.</p>	N/A			
Flood Risk	<p>The majority of the assessment area is comprised of greenfield land. However, there are areas of existing residential and commercial development as the area is on the fringe of Cheltenham, the B4634 bisects the central region of the area and</p>	<p>There is potentially sufficient space outside of Flood Zone 2 in the central region of the assessment area to accommodate development at all scales. In addition there is also potentially sufficient space in the south</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>the B4063 passes through the southernmost area. There are also local roads and areas of agricultural development distributed throughout the assessment area.</p> <p>Approximately 136ha of land in the northern sector of the assessment area is located within Flood Zone 2 due to the River Chelt passing through the area from west to east. In addition, there is also a smaller area of Flood Zone 2 in the southern half of the assessment area due to the presence of Hatherley Brook, amounting to approximately 10ha.</p> <p>Negligible effects may occur in relation to flood risk under all development size options as there is potentially sufficient space to accommodate these scales of development outside of Flood Zone 2.</p>	<p>of the assessment area to accommodate a development at the small scale.</p>			
Mineral Resources	<p>Approximately 211ha of land in the northernmost part of the assessment area is within a Mineral Safeguarding Area (MSA). There is approximately a further 16ha of land on the western boundary that is also within a MSA.</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, negligible effects may occur in relation to mineral resources under all development sizes as there is potentially sufficient space to</p>	<p>Land in the central region and in the south of the assessment area is not located within any MSAs and could potentially accommodate development of all size options, avoiding the sterilisation of mineral resources. Impacts on mineral resourced could potentially be mitigated, for example by extraction prior to development.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	accommodate these scales of development outside MSAs.				
Noise	<p>Almost the entirety of the western half of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 on the western boundary. In addition, land directly adjacent to the southern and northern boundary of the assessment area is also located within noisy areas due to the presence of the A40 and A4019 respectively.</p> <p>Negligible effects may occur at the small, medium and large development sizes as there is potentially sufficient space to accommodate these scales of development outside noisy areas.</p>	There is potentially sufficient land outside of noisy areas in the north-east of the assessment area to accommodate development at the small and medium size options and in the east for the largest development size.			
Odour	<p>There is approximately 90ha of land in the central part of the assessment area that is located in an Odour Monitoring Zone.</p> <p>However, there is potentially sufficient space to accommodate all scales of development outside this area and therefore negligible effects may occur in relation to odour.</p>	There is potentially sufficient land outside the odour buffer in the northern half of the assessment area to accommodate all development size options.			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Contribution to the sense of separation between Cheltenham and Gloucester. • Intervisibility with the Cotswolds AONB. • Strong rural character and setting provided to existing settlements. <p>As such, landscape sensitivity is moderate-high under the largest size options as the key characteristics and qualities of the landscape may be sensitive to at this scale. Landscape sensitivity is reduced to moderate for the medium and small extension options as the key characteristics and qualities of the landscape are potentially less sensitive to development at these scales.</p>	M-H	M	M

Summary of Constraints and Landscape Sensitivity

The northern region of the assessment area is the furthest from Badgeworth SSSI but is the most sensitive to development in other respects due to multiple constraints in this location: particularly historic assets and Flood Zone 2, but also a noisy area and grade 1 and 2 agricultural land. Noise impacts can potentially be mitigated, however; and grade 1-2 agricultural land is restricted to an area near the northern boundary (the remainder of the site is grade 3 and so could potentially be grade 3b). The central region and south of the assessment area may offer potential for development of all urban extension scales with lower impacts, although effects on Badgeworth SSSI would need careful consideration. To minimise adverse impacts on landscape, development under the small and medium scale scenarios may be more suitable due to a moderate landscape sensitivity rating compared to moderate-high under the largest scale scenario. Development in these parts of the assessment area would still involve loss of grade 3 agricultural land and encroachment on a noisy area, although mitigation would again potentially be possible in relation to noise issues and it is not clear if the grade 3 agricultural land is grade 3a or the lower quality grade 3b. Development in the central region of the assessment area would be located within an Odour Monitoring Zone of a sewage treatment works.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A40 (Golden Valley Roundabout), B4063 and A4019 (linking to M5 Junction 10), providing good links to Cheltenham and Gloucester.</p> <p>M5 / A4019 (junction 10) is also adjacent to the north of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond 90% of its design capacity in 2031 (at between 91% and 97% Ratio to Flow Capacity during the AM and PM peak periods, respectively).</p> <p>A40/ B4063 Roundabout Arle Court is also adjacent to the south east of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond its design capacity in 2031 (at between 112% and 185% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>M5/ A40 (Junction 11) is also adjacent to the south west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at between 89% and 94% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces accessible within 45 minutes = 137,204</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with high-frequency bus services operating along the key arterial routes to Cheltenham and Gloucester.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 284,313</p> <p>Access from the assessment area to employment by Car scores high, due to the well-connected local road network to key urban centres / employment sites.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (urban centres, healthcare and education facilities) within 20mins travel time by public transport services along the B4063 and within 20-40mins travel time by public transport services along the A4019.	
Private car use by commuters	% Driving a Car or Van = 69% Car based commuter trips currently account for an average of 69% of journeys in LSOAs covered by the assessment area, reflecting its proximity to the strategic road network. Enhancing existing high-frequency public transport services / P&R scheme provides opportunities to encourage mode shift away from car based trips into Cheltenham.	
Proximity to sustainable transport networks	The assessment area is within the 5km catchment of Cheltenham Spa Rail Station and is close to, but not directly served by to high-frequency public transport services. National Cycle Network - Route 41 currently runs along the southern boundary of the assessment area, providing strategic walking / cycling connectivity between Cheltenham and Gloucester.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-			

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
		25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable			
	Rail transport	Within 5km of Cheltenham mainline station and with two high frequency bus routes serving it.			
	Bus transport	Within 500m of existing high frequency bus routes and close enough to Cheltenham to mean that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J10 and J11 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Only higher scales of growth likely to be sufficient to secure levels of investment needed to deliver infrastructure improvements to bus networks.			
	Cycle transport	Southern end of area is close to existing cycle network and also close enough to Cheltenham to mean that improvements could result in reasonably high numbers of cycle trips. Proximity to M5 J10 and J11 would require significant cycle network expansion to avoid overloading SRN network with significant additional car traffic. Only higher scales of growth likely to be sufficient to secure levels of investment needed to deliver infrastructure improvements to cycle networks.			

Viability

	Development Type					
	Small Extension			Medium Extension	Large Extension	
Dwellings	500	1,000	2,500	500	1,000	2,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	40,000	40,000	40,000	40,000
Viability	High	High	High	High	High	High

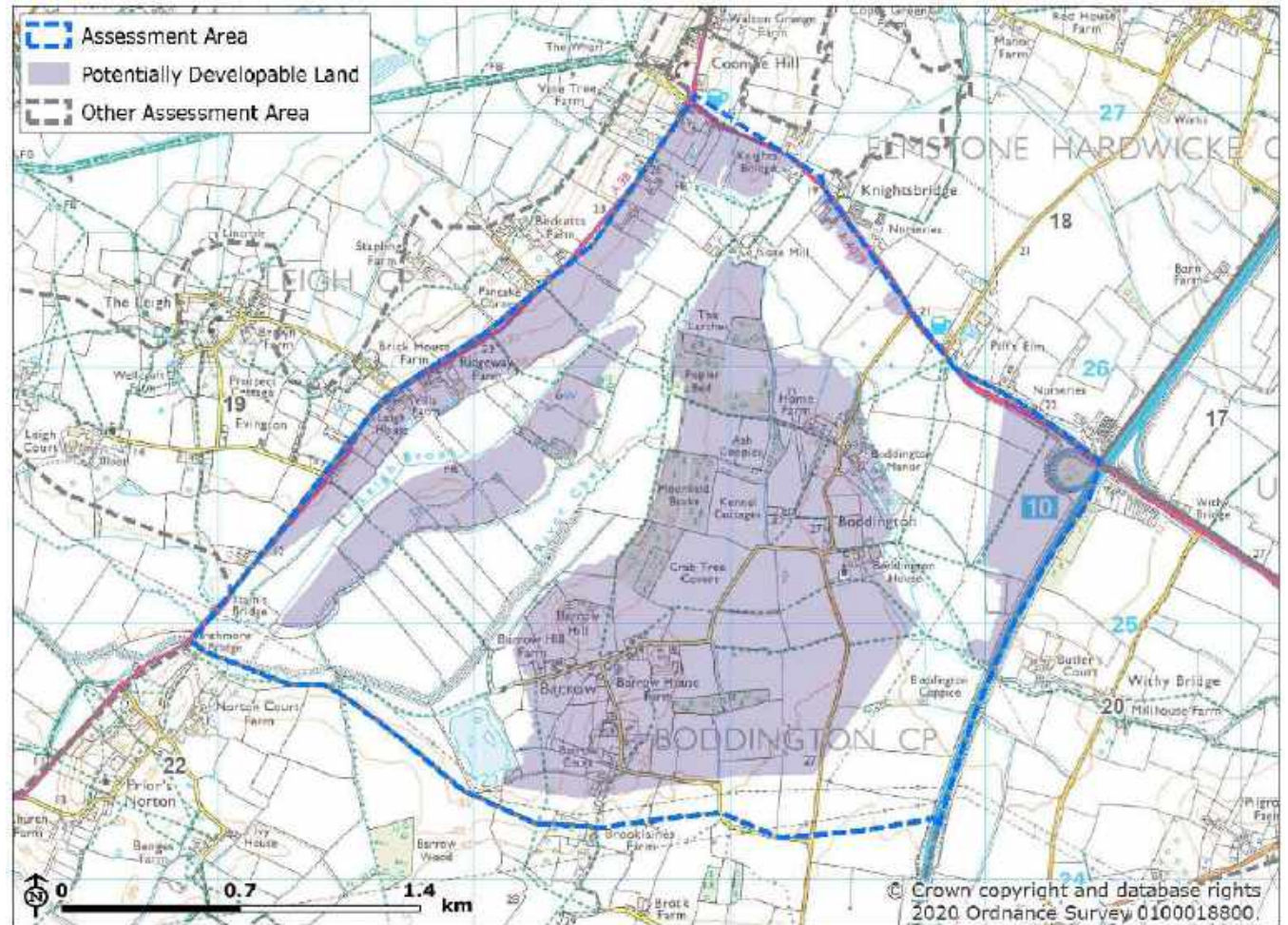
Assessment Area 21 – New Settlement: Land Northwest of Cheltenham

Assessment Area Ref: 21

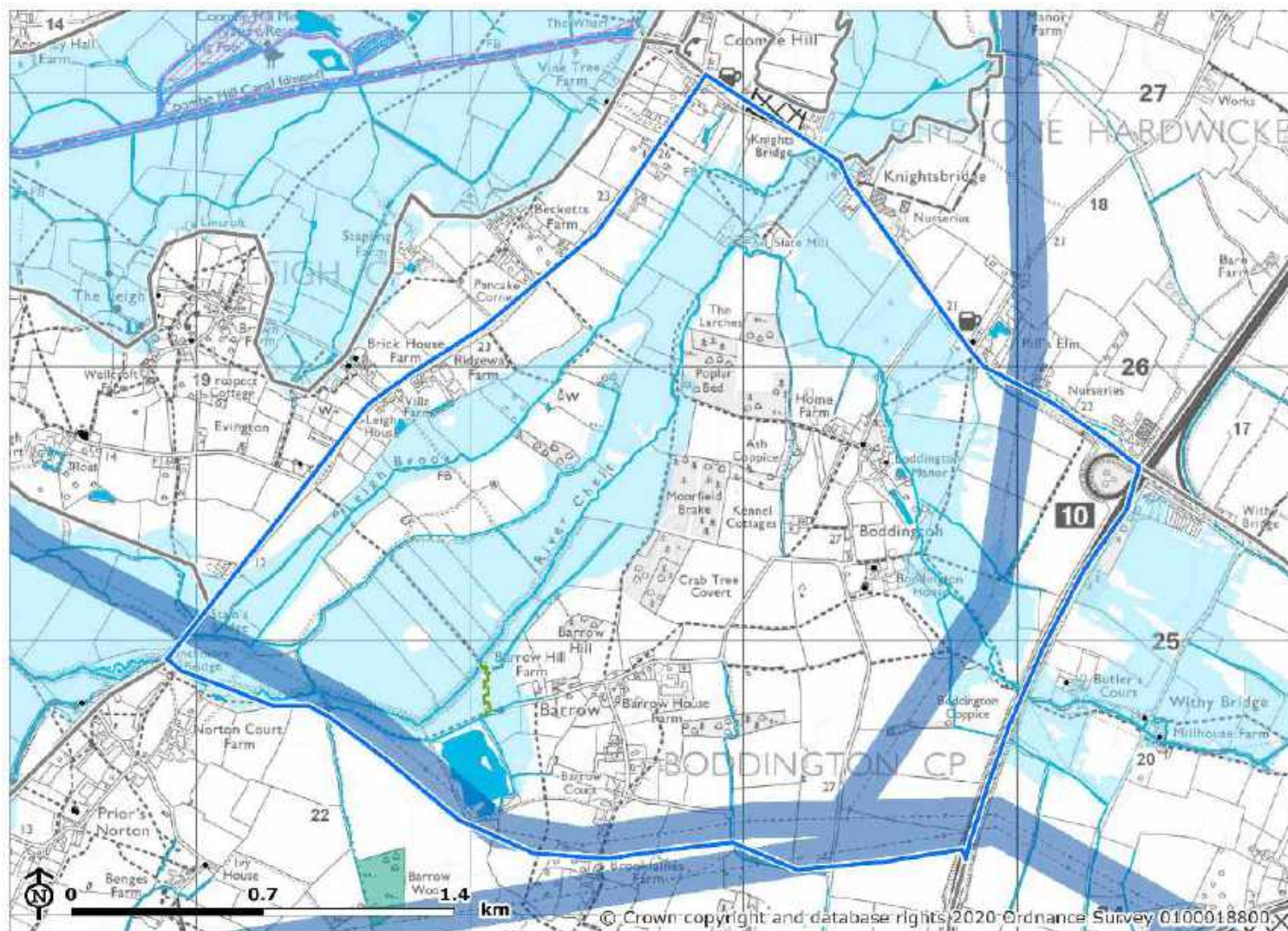
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

Area: ~589ha



Primary Constraints



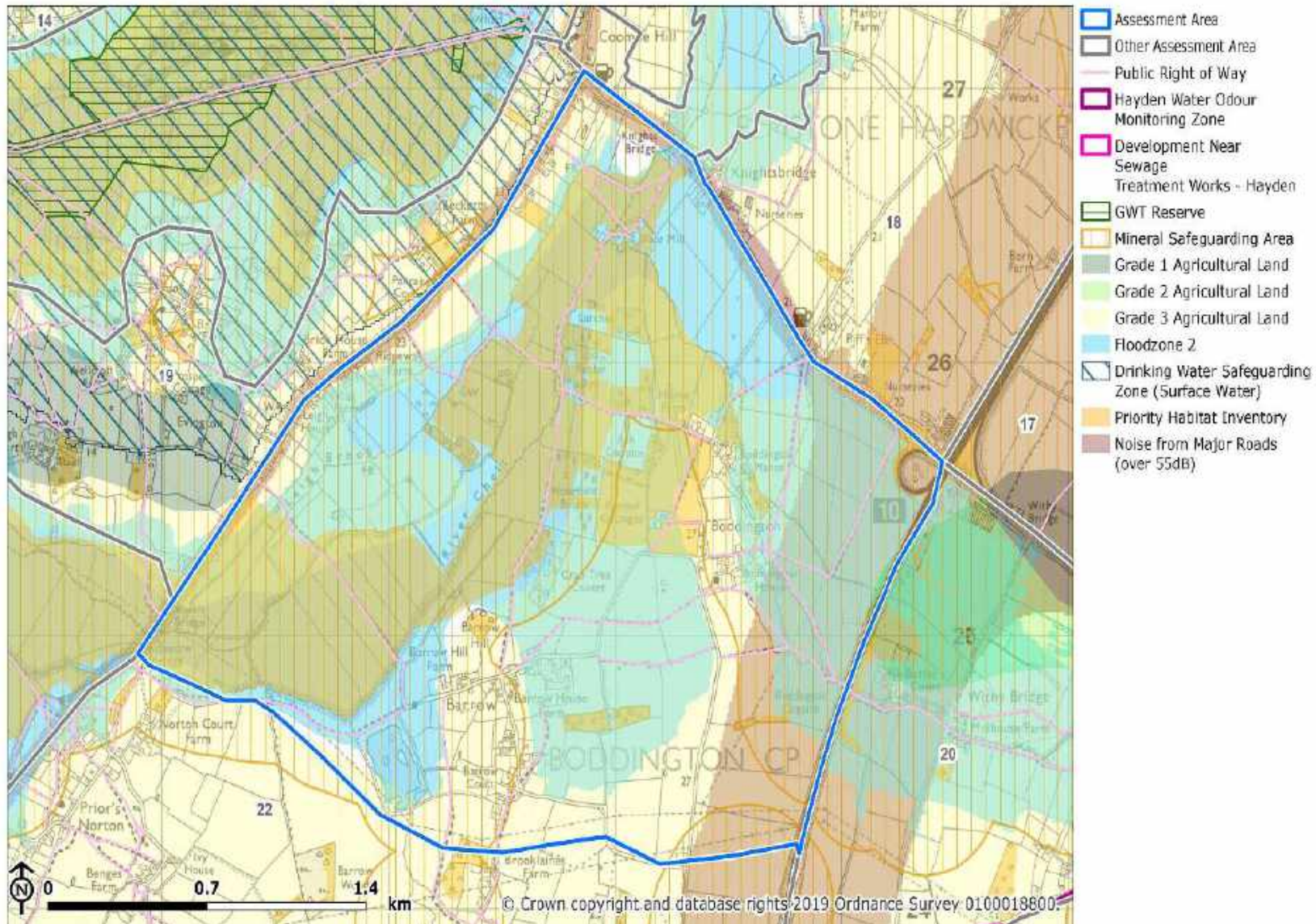
- Assessment Area
- Other Assessment Area
- Excluded Existing Allocation**

Primary Constraints

- Other Assessment Area
- Water Feature
- Floodzone 3
- Listed Building
- Sites of Special Scientific Interest
- Open Access Land (Area 7)
- Ancient Woodland Inventory
- 132kV Overhead Line Buffer Zone

Note:
 ** For information on all Excluded Areas refer to Table 2.1.

Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are five listed buildings within the assessment area. These include the grade I Church of St Mary Magdalene, the cemetery of which contains a grade II listed burial monument. The other listed buildings are all grade II and include Boddington House – a former farmhouse - Boddington Manor and a dovecote at the manor. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a number of non-designated heritage assets within the assessment area. These include but are not limited to: <ul style="list-style-type: none"> Possible prehistoric ring ditch near The Larches and a disputed barrow at Barrow Hill; Site of a Roman building at Barrow; 	<p>The key sensitivities of the assessment area are the listed buildings at Boddington. To the east of Boddington Manor are two fields that were formerly its parkland. These retain some parkland trees and therefore may be of more than local significance. There is also a potential medieval settlement here that could be of regional or greater significance. Any new development should avoid coalescence with this historic settlement.</p> <p>It is unlikely that a large village or town could be developed without causing harm to the assets in Boddington, which could be significant.</p> <p>It is considered that a 'small village' development may be able to be set back from Boddington in the north western third of the area, resulting in a reduction of harm, however due to the potential harm to the setting of the historic environment assets, even from only a small village, minor negative effects are anticipated as a result of this development size.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Medieval deer park and settlement in Boddington; - The possible sites of multiple mills (some potentially extant) and a bridge; - Cropmarks and earthworks generally interpreted as agricultural features. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural landscape interspersed with historic settlements at Barrow and Boddington, the latter also featuring an area of post-medieval ornamental landscape. The agricultural landscape is comprised of a mix of irregular, less irregular, regular and less regular enclosures, as well as enclosed riverine pasture. The irregular and less regular enclosures have some time-depth and value in themselves. They could also include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are a number of listed buildings in the wider vicinity of the assessment area. Most our farmhouses that – in the event of development - would retain sufficient agricultural setting to remain legible. There are also a number of rural parish churches, which again should retain sufficient rural setting. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a number of non-designated assets in the wider vicinity. These include a possible round barrow near Coombe Hill which may be susceptible to meaningful setting change. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No designated assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Ancient Woodland (Barrow Wood) 200m south. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Coombe Hill Canal) 330m north-west; it's also a GWT reserve. <p>IRZs:</p> <ul style="list-style-type: none"> The IRZ for Coombe Hill Canal SSSI overlaps with the majority of the assessment area. This identifies that residential development over 1Ha in scale is a risk to the SSSI. <p>Minor negative effects may occur for the large village scale as it may not be possible to accommodate this scale of development without falling within 2km of the SSSI to the north. Negligible effects may occur for the small village scenario as there is potential to</p>	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance mitigation measures to ensure that wooded river corridor network is maintained.</p> <p>It will need to ensure that the areas of Deciduous Woodland and traditional orchards are maintained and that suitable buffering (of both construction and operation phase potential impacts).</p> <p>It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>It will be important to maintain/enhance the networks of priority habitat predominantly in the west, central and northwest parts of the assessment area. Severance of floodplain grazing marsh must be avoided and connectivity should be optimised at the landscape scale. There may also be implications for flood risk assessments and greater distance for impacts of infrastructure (e.g. roads).</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>accommodate this scale of development over 2km from this designation.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The majority of the assessment area is grade 3 agricultural land. There is approximately 202ha of land that is grade 4 but this is largely within Flood Zone 3.</p> <p>There is potential for development to result in the loss of high quality agricultural land.</p> <p>The effects are uncertain as there is no data available to distinguish whether the land is grade 3a or the lower quality grade 3b.</p>	<p>Due to the significant coverage of grade 3 agricultural land within the assessment area, loss of high quality soils (dependent upon whether it is grade 3a or grade 3b) may occur from development at all scales and potentially significant negative effects are therefore identified.</p>	N/A	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are anticipated in relation to water quality.</p>	N/A	N/A		
Flood Risk			N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>The majority of the assessment area is greenfield apart from the settlements of Barrow and Boddington as well as local roads and areas of agricultural development.</p> <p>The majority of land within the assessment area is within Flood Zone 2 due to the River Chelt passing through the area.</p> <p>Significant negative effects are identified as there is insufficient space to accommodate a new settlement outside Flood Zone 2.</p>	<p>There is some land within the developable part of the assessment area that is not located within Flood Zone 2, but it is insufficient to accommodate a new settlement at any scale due to existing development at Barrow and Boddington.</p>			
Mineral Resources	<p>The majority of land within the assessment area is within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur at the medium development size option as there is insufficient space to accommodate this scale of development outside of MSAs. Negligible effects are anticipated under the smallest development size as there is potentially sufficient space to accommodate this scale of development outside of MSAs.</p>	<p>There is an area of developable land between the settlements of Barrow and Boddington that could potentially accommodate development under the smallest development size option outside of MSAs. The large village development option size would result in a loss of mineral resources, and significant negative effects are therefore identified. Suitable mitigation may also be possible for a larger scale development to overcome mineral resourcing issues, such as extraction prior to development.</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Noise	<p>There is land adjacent to the western, northern and eastern boundaries located within an area of high noiseNoisy area due to the presence A38, A4019 and M5 respectively.</p> <p>There is potentially sufficient space within the assessment area to accommodate development at the small development size option outside of noisy areas. Therefore, negligible effects are anticipated in relation to noise. However, significant negative effects may occur for the large village scale as there is insufficient space to accommodate this scale of development outside of noisy areas.</p>	<p>There is potentially sufficient space between the settlements of Barrow and Boddington to accommodate the small village scale outside of noisy areas. Suitable mitigation may also be possible to overcome any noise related issues should development be proposed within an area of high noiseNoisy area.</p>	N/A	*	
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are anticipated in relation to odour for all development sizes.</p>	N/A	N/A		

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitives:</p> <ul style="list-style-type: none"> • Strong rural character with the small settlements of Boddington and Barrow. • Locally prominent hills. • Areas of mixed woodland. • Estate character around Boddington Manor. • Views to the Cotswolds AONB. <p>Landscape sensitivity is moderate-high for small and medium options as the key characteristics and qualities of the landscape may be sensitive to development at these scales.</p>	N/A	M-H	M-H

Summary of Constraints and Landscape Sensitivity

There is insufficient potentially developable land within the assessment area for a large new settlement. The east of the assessment area (Boddington) is the most sensitive with respect to the historic environment. All development scales would encroach on Flood Zone 2. The majority of the assessment area is comprised of grade 3 agricultural land and therefore development has the potential to result in the loss of high quality agricultural land (dependent upon whether it is grade 3a or grade 3b). A medium scale development may require a fragmented/irregular form due to the presence of Flood Zone 3. Landscape sensitivity is moderate-high for both the small and large village scenarios. A new settlement in any location or scale is likely to interrupt the strong rural character of the area.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the strategic network via the A38 (Gloucester Road) and the A4019 (Cheltenham Road), providing links into Cheltenham and Tewkesbury.</p> <p>M5 / A4019 (junction 10) is also adjacent to the west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond 90% of its design capacity in 2031 (at between 91% and 97% Ratio to Flow Capacity during the AM and PM peak periods), and at a level where a degree of congestion-related delay would be expected.</p> <p>The A4019 Tewkesbury Rd / A38 Coombe Hill is also considered a 'critical junction' within the JCS modelling and the Do Nothing and Do Minimum model tests forecast that this junction will operate over its design capacity in 2031 (at between 102% and 115% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 21</p> <p>A very low number of workplaces (jobs) can currently be accessed by public transport from within the assessment area, reflecting that the assessment area is currently served by a low frequency public transport service.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that both education and healthcare facilities can be accessed within 20mins travel time by public transport, whilst urban centres are between 20 and 40mins travel time.</p>	

Criterion	Rationale	Score
Private car use by commuters	% Driving a Car or Van = 69% Car based commuter trips currently account for an average of 69% of commuter journeys in LSOAs covered by the assessment area, which is expected given its proximity to the strategic road network and low frequency public transport services.	
Proximity to sustainable transport networks	The assessment area is partially within the 5km catchment of Cheltenham Spa Rail Station, and is served by low-frequency bus services. The assessment area is divorced from strategic walking and cycling routes.	

Deliverability/Infrastructure

Criterion	Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)	
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25).	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer. Easement would require high pressure pipeline diversion which would incur a cost to developer.	N/A		
	Rail transport	Only a small eastern part of the area is within 5km of Cheltenham mainline station.	N/A		
	Bus transport	Within 500m of existing high frequency bus route and close enough to Cheltenham to mean that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J10 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Higher scales of growth increase prospects of securing levels of investment needed to deliver significant bus infrastructure improvements (prospects would increase if developed jointly with assessment area 20).	N/A		
	Cycle transport	Distant from existing cycle network and too far from Cheltenham to mean that cycle improvements would significantly increase cycle trips.	N/A		

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	N/A	N/A
Viability	High	High	High	High	N/A	N/A

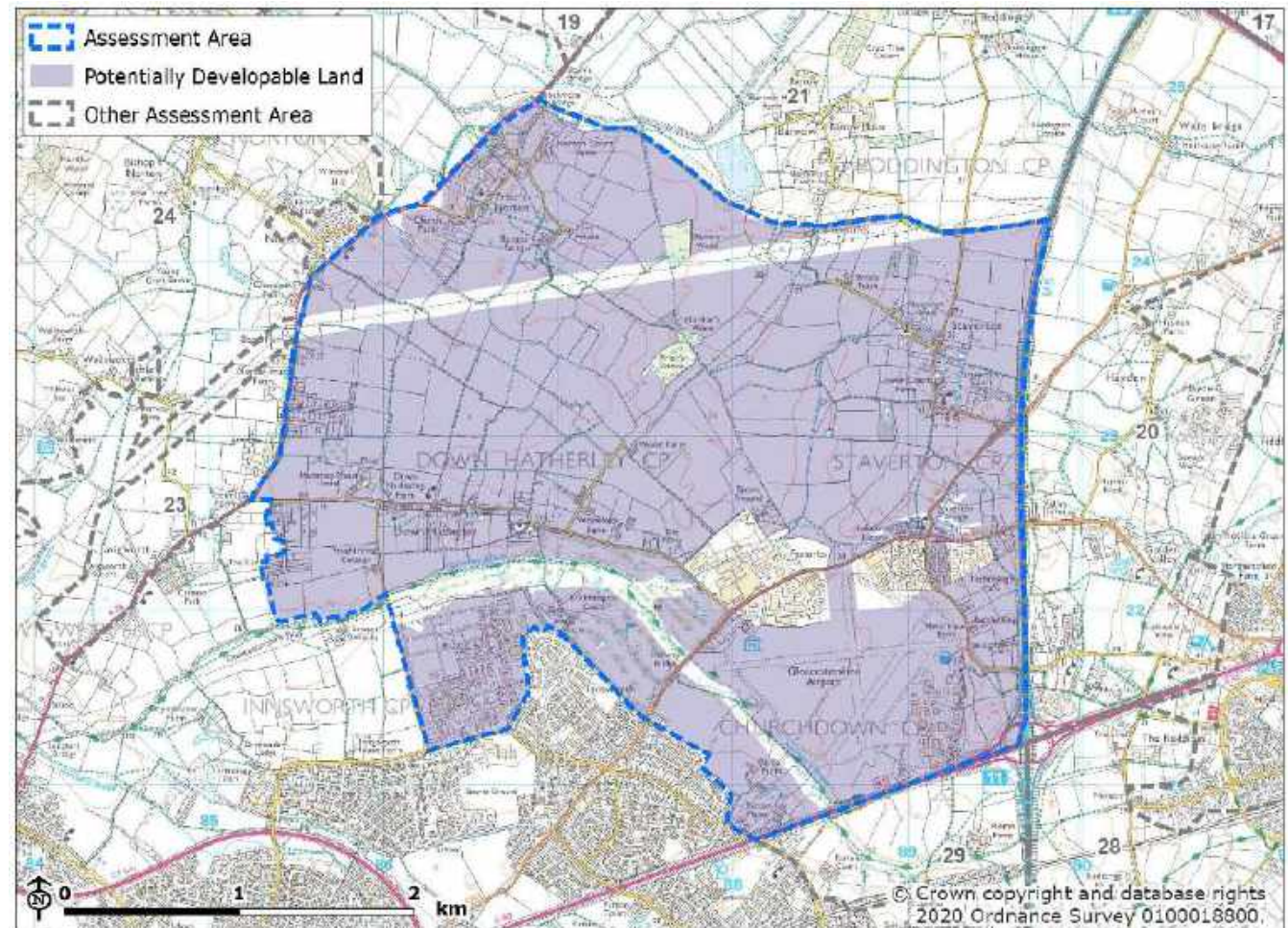
Assessment Area 22 – Urban Extension: Land North of Innsworth

Assessment Area Ref: 22

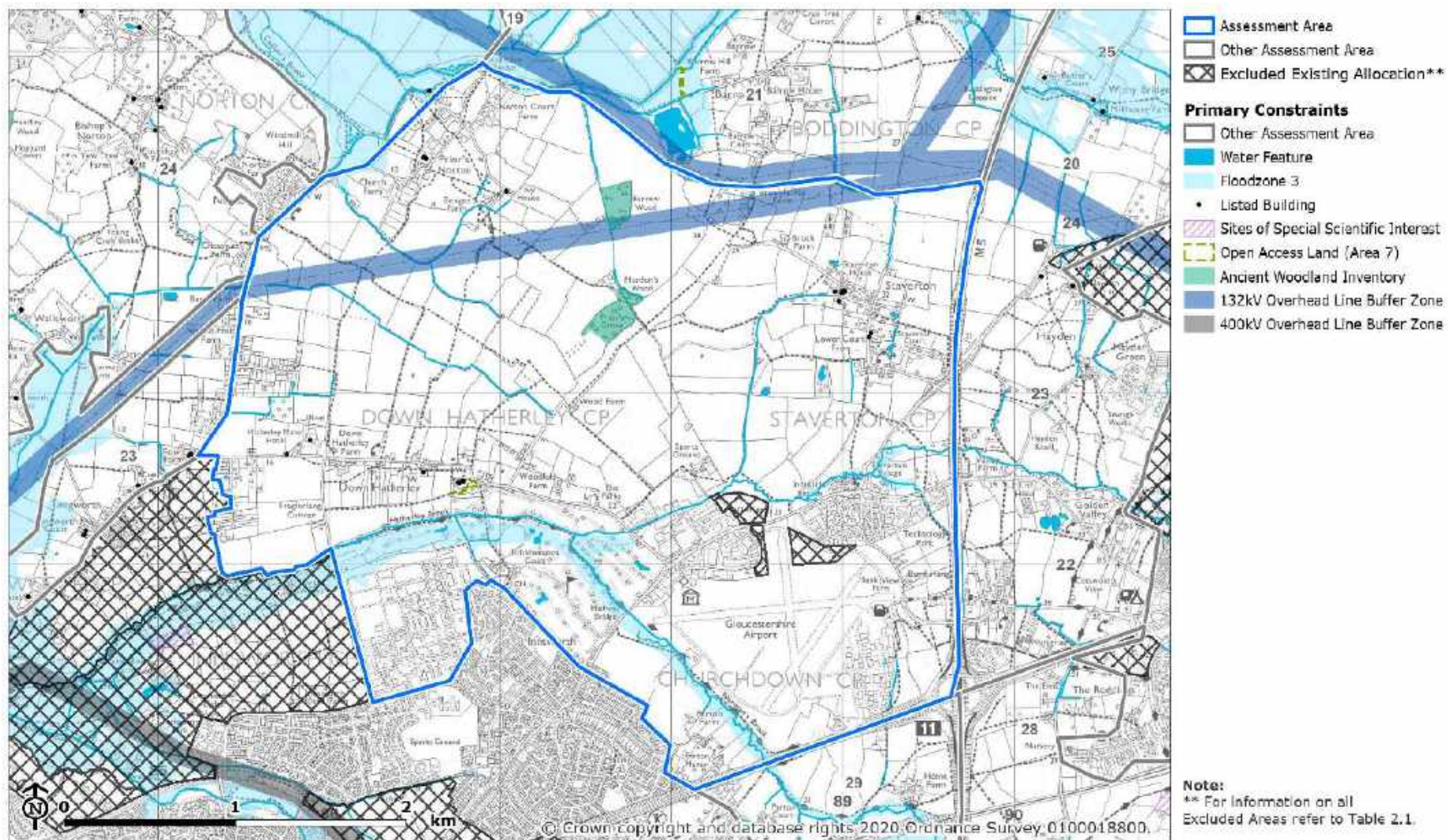
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

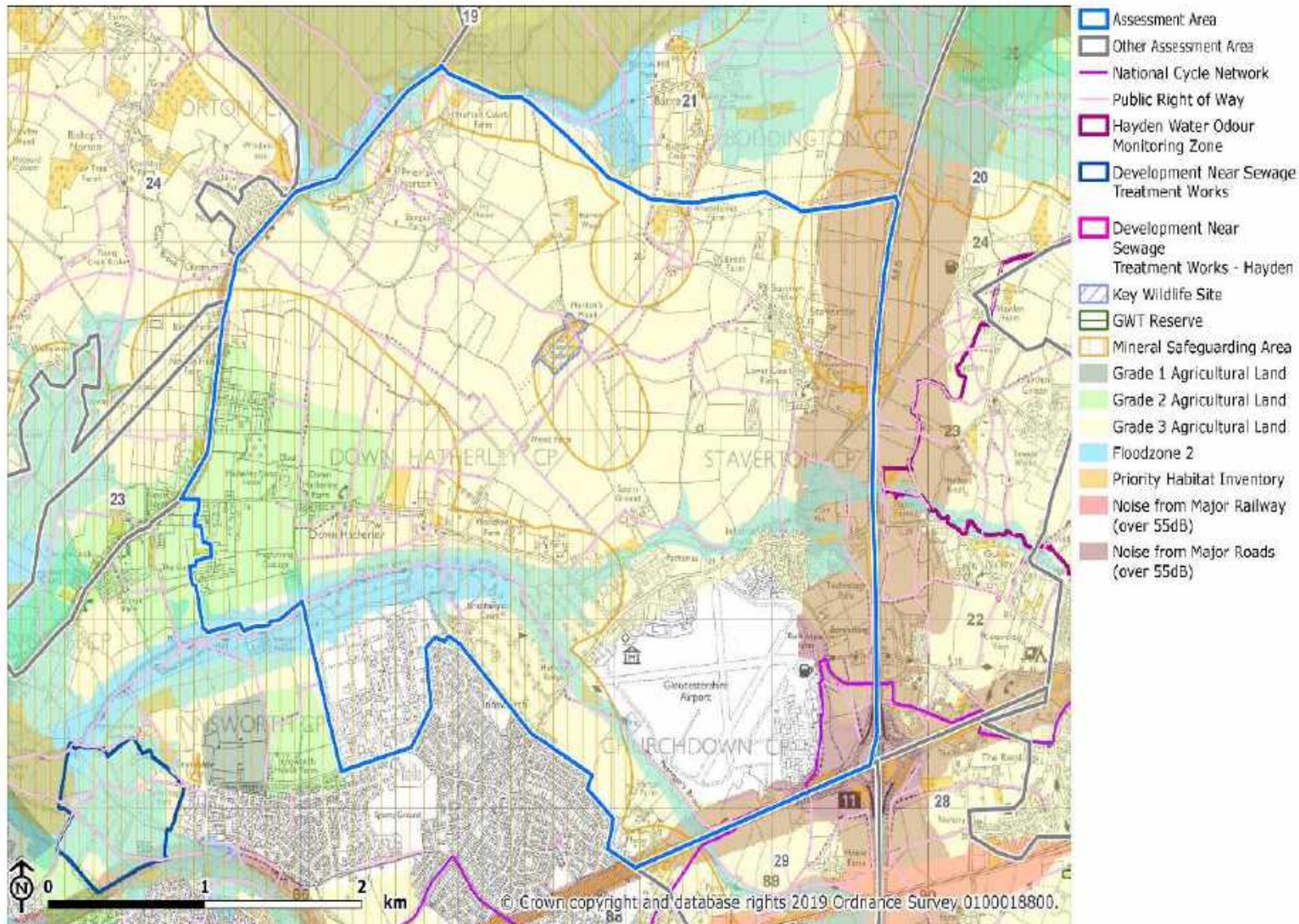
Area: ~1,310ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 21 listed buildings within the assessment area; these are all grade II listed except for three grade II* listed churches. The listed buildings are clustered within three historic rural settlements - Staverton (to the east), Down Hatherley (to the west) and Prior's Norton (to the north). In addition to the churches they typically comprise burial monuments, former manors, farmhouses and cottages. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a very large number of heritage assets, including but not limited to: <ul style="list-style-type: none"> Prehistoric settlement at Bamfurlong Farm; 	<p>The listed buildings and historic rural settlements in which they lie are key sensitivities that make development higher risk in the northern half of the assessment area. The risk of coalescing Down Hatherley into Gloucester – affecting its rural character and the setting of listed buildings within it – is a potential limitation to any extension north of Innsworth beyond Hatherley Brook. The same applies to Staverton and the listed buildings therein.</p> <p>Some of the non-designated archaeological assets could be of high significance, for example the moated sites, which again lie in the northern half of the assessment area.</p> <p>To avoid / minimise negative effects to the historic environment development would be best limited to the southern half of the assessment area (e.g. south of Hatherley Brook). This area could potentially accommodate small, medium and large size urban extensions. However, due to the potential for setting impacts in relation to such development, minor negative effects are likely to occur.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Roman site and ditches at Twigworth and another possibly west of Staverton; - Multiple cropmarks and earthworks, including extensive ridge and furrow; - Staverton Medieval settlement and shrunken village earthworks at Prior's Norton; - Medieval moated site at Hatherley Court and possibly another at Norton; and - Extensive WWII military features primarily associated with the defence of Staverton Airfield and Innsworth Royal Airforce Camp, both in the south of the assessment area. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a landscape with small areas of settlement set within a primarily agricultural landscape, save for the military airfield and nearby industrial areas. The agricultural land comprises a mix of irregular, less regular and 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>regular enclosures. The older enclosures are generally towards the edges of the northern half of the assessment area. They have some time-depth and value in themselves, and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of grade II listed buildings to the west of the assessment area in Twigworth that could be susceptible to setting change. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • No non-designated assets recorded by the HER have been identified within the wider area as being particularly susceptible to setting change as a result of development within the assessment area. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Two areas of Ancient Woodland (Barrow Wood and Priors Grove), the latter of which is also a key wildlife site, in the northern half of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Large area of floodplain grazing marsh priority habitat adjacent to the northern boundary of the assessment area. There are also small deciduous woodlands along the assessment area boundary to the west, southeast and east. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Innsworth Meadow) 900 m to the southwest of the assessment area. SSSI (Badgeworth) 1.3km south-east. Also a GWT reserve. SSSI (Coombe Hill Canal) 2km to the north of the assessment area. SSSI (Wainlode Cliff) 1.9 km to the northwest of the assessment area. 	<p>Any spatial distribution of development within the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the areas of Ancient Woodland are maintained and also that the wooded areas of priority habitat are maintained/enhanced. This will include ensuring that supporting transport infrastructure minimises severance of habitats in the area.</p> <p>Severance of ancient and deciduous woodlands must be avoided and connectivity – be it additional woodland or complementary habitats – should be optimised at the landscape scale.</p> <p>There is potentially sufficient space in the eastern half of the assessment area to accommodate development at the small and medium extension sizes over 250m from local designations and over 2km from national designations. The area to the west of the airport could potentially accommodate a large extension with negligible effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> Two Key Wildlife Sites 1.2km to the south of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> Multiple IRZs associated with designations in the surroundings overlap with the assessment area and flag residential development as a potential risk. <p>Negligible effects may occur for all development size options as there is potentially sufficient space to accommodate these scales of development over 250m from local designations and over 2km from national designations.</p>				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 108ha adjacent to the western boundary of the assessment area that is grade 2 agricultural land. There is also non-agricultural land within the assessment area, with an urban area in the south-western corner on the fringe of Innsworth and land associated with Gloucester airport in the south-east.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant</p>	<p>There is significant potential for all development sizes to avoid the loss of grade 2 agricultural land as this area is restricted to a pocket of land adjacent to the western boundary of the assessment area. However, the remainder of the assessment area is still grade 3 agricultural land and therefore development located within the majority of the assessment area has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	negative effects may occur in relation to soil quality for all development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or grade 3b.				
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones.</p> <p>As such, negligible effects are anticipated in relation to water quality at all development sizes.</p>	N/A			
Flood Risk	<p>A large proportion of the overall assessment area is greenfield. However, the settlements of Prior's Norton and Staverton are located in the northern half of the assessment area and the settlement of Down Hatherley is located in the south. There is also an industrial estate in the south-west corner and Gloucestershire Airport and ancillary buildings are located in the south-east corner. The B4063 passes through the southern half of the assessment area and there are also local roads distributed throughout the assessment area.</p> <p>There is land in the southern half of the assessment area located within Flood Zone 2 due to Hatherley Brook passing through from west to east. There is also</p>	<p>There is significant potential for development to avoid land within Flood Zones 2 and 3 due to these areas being restricted to the banks of watercourses in the southern half of the assessment area and the north-west. The vast majority of land in the north of the assessment area is not constrained by Flood Zones and therefore all development sizes could potentially be located in this assessment area. A large urban extension could also be accommodated in the south of the assessment area outside of Flood Zone adjacent to Innsnorth.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>small section of land in the north-western corner of the assessment area located within Flood Zone 2 due to the presence of a watercourse outside the assessment area boundaries.</p> <p>However, the majority of the assessment area is not located within any Flood Zones and therefore negligible effects are anticipated in relation to flood risk under all development sizes.</p>				
Mineral Resources	<p>Around a third of the assessment area is designated as a Mineral Safeguarding Area (MSA). The majority of this designation is located in the south-east of the assessment area, with smaller pockets of safeguarded land located in the centre, north and north-east.</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, there is potentially sufficient space to accommodate all development sizes outside of MSAs and therefore negligible effects are anticipated.</p>	<p>There is over 200ha of land in the north-west of the assessment area that is not located within a MSA that could potentially accommodate development under all development option sizes, avoiding the sterilisation of mineral resources. However it is important to note that this would lead to a disjointed development form as the MSA largely hugs the boundary with Gloucester.</p> <p>There is over 100ha of unsafeguarded land in the north-east that could potentially accommodate development at the smallest and medium development option sizes. In addition, there is also unsafeguarded land in the south that could potentially accommodate all development sizes. However, development just in these locations would be disconnected from Innsworth to the south.</p> <p>It may also be possible to accommodate development without the sterilisation of mineral</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
		resources by extracting minerals prior to development.			
Noise	<p>Land adjacent to the eastern boundary of the assessment area and the south-eastern boundary is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 and A40 respectively. Additionally, there is also a smaller area of land adjacent to the north-western boundary of the assessment area that is also within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A38.</p> <p>However, there is sufficient space within the assessment area to accommodate development at all sizes outside of noisy areas and therefore negligible effects are anticipated in relation to noise.</p>	<p>As land within noisy areas is restricted to the boundaries of the assessment area, there is sufficient space within the assessment area for development at all sizes to be set back from these areas.</p> <p>Furthermore, mitigation may also be possible to overcome noise related issues should it be required to develop within the and area of high noiseNoisy area.</p>			
Odour	The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones. As such, negligible effects are anticipated in relation to odour.	N/A			

Landscape Sensitivity

<p style="text-align: center;">Overview of Sensitivity and Spatial Variation</p>	<p style="text-align: center;">Sensitivity Rating: Large extension (3,500 dwellings)</p>	<p style="text-align: center;">Sensitivity Rating: Medium extension (1,500-3,500 dwellings)</p>	<p style="text-align: center;">Sensitivity Rating: Small extension (500-1500 dwellings)</p>
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Contribution to the sense of separation between Cheltenham and Gloucester. • Intervisibility with the Cotswolds AONB. • Locally prominent hills. • Strong rural character and setting provided to existing settlements. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for lowest size option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	<p>H</p>	<p>H</p>	<p>M-H</p>

Summary of Constraints and Landscape Sensitivity

The majority of the assessment area is comprised of grade 3 agricultural land and therefore development of any scale has the potential to result in the loss of higher quality agricultural land, dependent upon whether it is grade 3a or grade 3b. There are three main areas of least constrained land within the assessment area. In the north-west, there is over 200ha of less constrained land that could potentially accommodate a large development. The potential for a development of this scale is restricted by an overhead powerline that crosses the area. Development in this location would also be required to provide suitable avoidance/mitigation measures with respect to impacts on Ancient Woodland.

In the northeast, there is over 100ha of less constrained land (in the majority of respects) that could potentially accommodate a small or medium development. However, a medium extension here would potentially involve coalescence with the existing settlement of Staverton.

The northern part of the assessment area, however, has high sensitivity with respect to the historic environment. Additionally, due to the degree of separation from Innsworth, development in the northern half of the assessment area would be considered a new settlement rather than an urban extension.

Therefore, the less constrained land to the south of Hatherley Brook adjacent to and including Gloucestershire Airport may provide the greatest potential to accommodate an urban extension at all scales. Land at the fringe of Innsworth in the south-west that is located within a MSA could also be incorporated as part of an urban extension as it may be possible to extract mineral resources prior to development.

In all locations, landscape sensitivity is higher under the larger scale development scenarios and therefore a smaller scale extension may be more suitable. However, landscape sensitivity is still moderate-high under the small extension scenario.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A38 (north), A40 (south) and the B4063 which runs through the centre of the assessment area. The A40 provides a strategic link to Junction 11 of the M5.</p> <p>M5/ A40 (Junction 11) is adjacent to the south east of the assessment area and is considered a 'critical junction' within the JCS modelling work. This evidence base Do Nothing and Do Minimum model tests forecast that this junction will operate at/over 90% of its design capacity in 2031 (at between 89% and 94% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>A40/ B4063 Roundabout Arle Court is also 1 mile to the south east of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyondn its design capacity in 2031 (at between 112% and 185% Ratio to Flow Capacity during the AM and PM peak periods).</p>	

Criterion	Rationale	Score
	To the north, the A4019 Tewkesbury Rd / A38 Coombe Hill is also considered a 'critical junction' within the JCS modelling. The Do Nothing and Do Minimum model tests forecast that this junction will operate over its design capacity in 2031 (at between 102% and 115% Ratio to Flow Capacity during the AM and PM peak periods).	
Access to employment	Number of workplaces (jobs) accessible within 45 minutes = 136,797 A high number of workplaces (jobs) can be accessed from the assessment area within 45mins during the AM peak by public transport. The assessment area benefits from a high frequency public transport route (Stagecoach 94 service), which provides direct connections between Cheltenham, Churchdown and Gloucester	
	Number of workplaces (jobs) accessible within 30 minutes = 284,454 Access from the assessment area to employment by Car scores high , due to the well-connected local road network to key urban centres / employment sites.	
Access to other key services and facilities by public transport	The bulk of assessment area has good accessibility to a number of key services and facilities by public transport along the key highway links, including urban centres, and healthcare facilities (within 20-40 mins) and education facilities within 20mins travel time.	
Private car use by commuters	% Driving a Car or Van in LSOA = 67% Despite its good connectivity to key services and employment by public transport, car mode share for commuter trips accounts for an average of 67% of commuter journeys in LSOAs covered by the assessment area.	
Proximity to sustainable transport networks	The assessment area is located within 500m of a high frequency bus route and is within 5km of Cheltenham Spa Railway station. The assessment area partially linked to the National Cycle Network.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable.			
	Rail transport	Approximately 25% of the assessment area is within 5km of Cheltenham mainline station and a separate 10% within 5km of Gloucester branch line station.			
	Bus transport	Within 500m of existing high frequency bus routes serving both Cheltenham and Gloucester and close enough to both key destinations to mean that improvements in frequency could result in high levels of bus patronage. Proximity to M5 J11 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Higher scales of growth increase likelihood of securing sufficient levels of investment needed to deliver bus infrastructure improvements (prospects would be further enhanced if developed jointly with assessment area 23).			

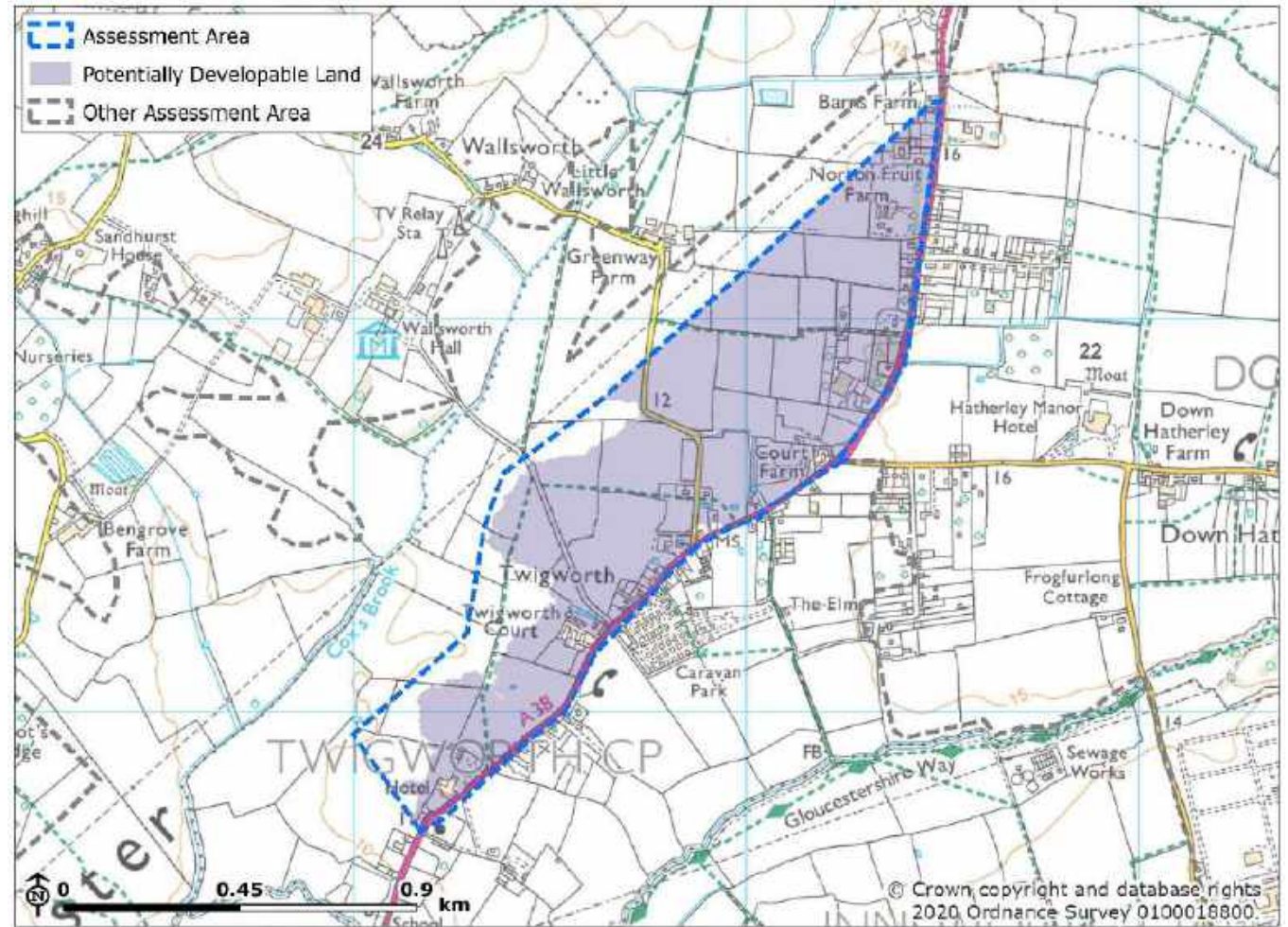
Assessment Area 23 – Urban Extension: Land North of Twigworth

Assessment Area Ref:

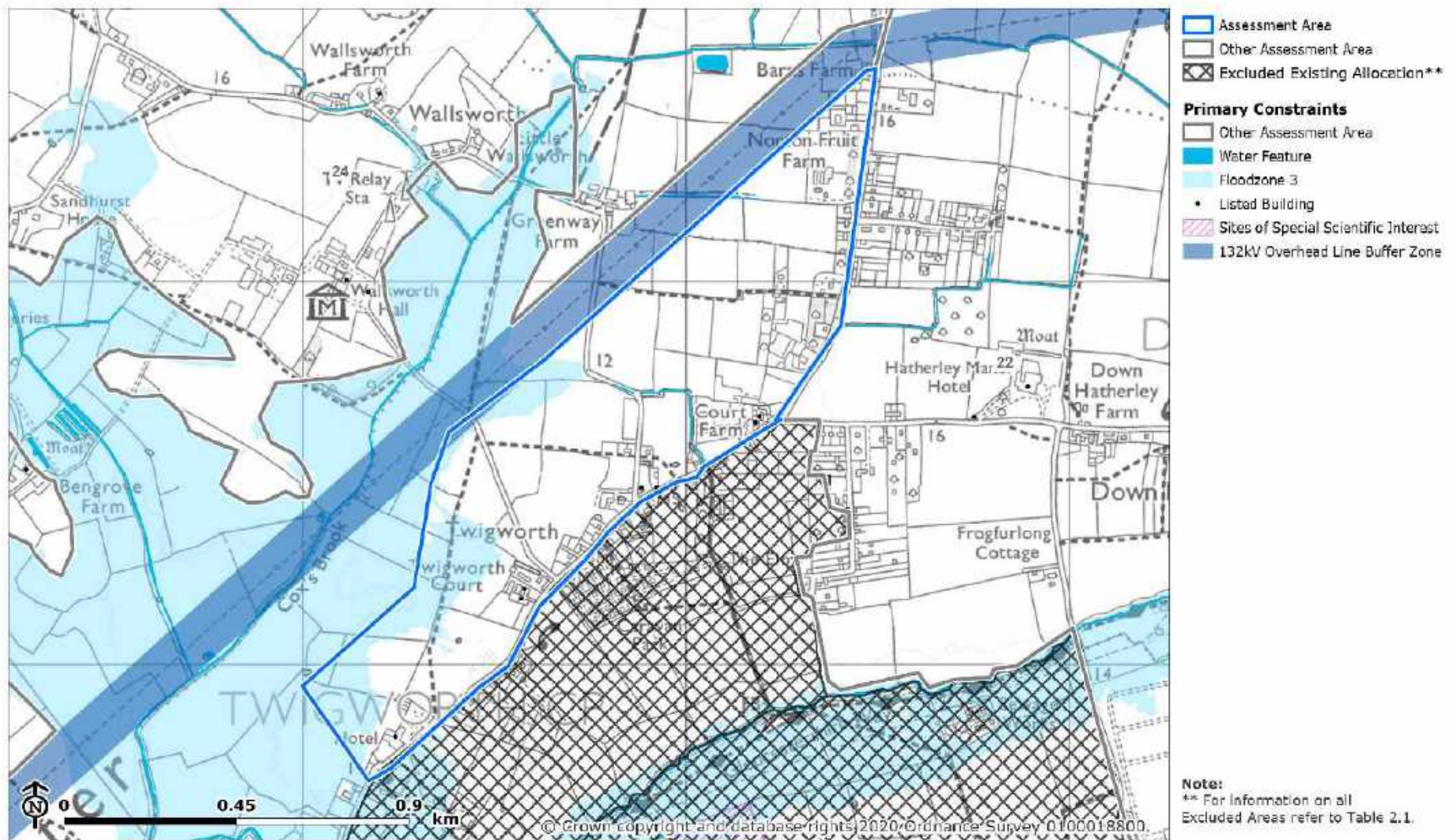
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

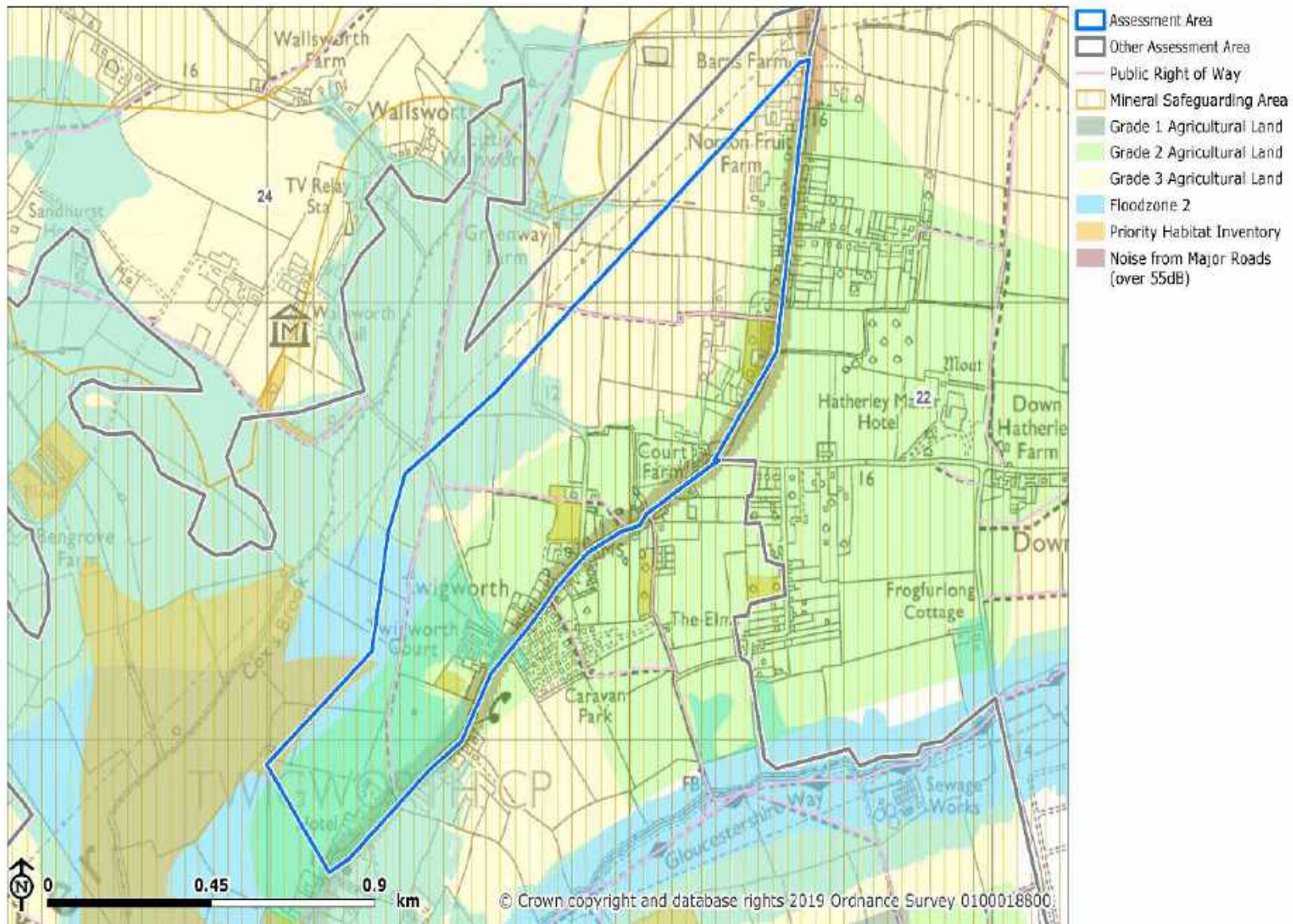
Area: ~107ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Relevant assets and identification of potential effects	Assessment of spatial variation within assessment area, development capacity implications and potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are ten grade II listed buildings within the assessment area. These include detached houses, farmhouses, a cottage, stables and a barn, a war memorial and milestone. All are located to the south in Twigworth, along the A38. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records only a limited number of assets within the assessment area. These comprise: <ul style="list-style-type: none"> A Late Iron Age to Roman settlement south of Twigworth Court; A Roman settlement and cemetery north of Twigworth Court and ditches/ gullies in the wider area; A Roman road west of Twigworth Court (the A38 is 	<p>The listed buildings within the assessment area represent a key sensitivity in terms of physical/setting change, and several are likely to have their rural setting contribute to their legibility.</p> <p>To the east of the assessment area the grade II* Wallsworth Hall represent a key sensitivity. It is orientated towards the assessment area meaning that new development may be experienced from the house. Furthermore, it appears to have historically and functionally related non-designated buildings and parkland - of more than local significance - within the assessment area, which could be lost/ changed as a result of development.</p> <p>The assessment area also contains a range of non-designated archaeological assets that would be highly susceptible to physical change. The settlement evidence is likely to be of local (low) value, but could be regional (medium) depending on its survival, rarity, etc.</p> <p>The southern half of the assessment area is more sensitive than the northern half due both to the presence of designated and non-designated assets. Beyond Court Farm there is an area with no known designated or non-designated sensitivities, however, the northern area would only accommodate a small extension developed at the lowest end of the quantum. For this reason, a small extension</p>	N/A	?	?

Topic	Relevant assets and identification of potential effects	Assessment of spatial variation within assessment area, development capacity implications and potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>also marked on historic maps as a Roman road);</p> <ul style="list-style-type: none"> - Medieval and later ridge and furrow earthworks; - A former turnpike road (now the A38); - The route of a military pipeline; and - Undated u-shaped features at Twigworth fields. <ul style="list-style-type: none"> • Additionally, it seems that a lodge house for Wallsworth Hall is located along the A38, next to Twigworth Court. This suggests that Wallsworth Hall has a parkland that extended into the assessment area. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural landscape comprised of irregular enclosures, less irregular enclosures and regular organised enclosures. The irregular and less irregular enclosures have some time-depth and value in themselves. They could include hedgerows that qualify as important under the archaeology 	<p>has been assessed as having highly uncertain significant negative effects.</p>			

Topic	Relevant assets and identification of potential effects	Assessment of spatial variation within assessment area, development capacity implications and potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>and history criteria of The Hedgerow Regulations 1997. The area is interspersed with the historic linear settlement that has been subject to modern infill.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> To the west of the assessment area is the grade II* Wallsworth Hall – a country house – and to the east the grade II listed Hatherly Manor and its similarly listed lodge. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> Non-designated assets that may be susceptible to setting change include the Church of St Matthew immediately south of the assessment area. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p>	Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the areas of wooded priority habitat are maintained. This will include	N/A	*	*

Topic	Relevant assets and identification of potential effects	Assessment of spatial variation within assessment area, development capacity implications and potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> No designations identified. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Innsworth Meadow) 650m south. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within a number of SSSI IRZs, which indicate that developments resulting in a net gain in residential units have the potential to impact the statutory designations within the wider landscape. <p>Minor negative effects may occur for the applicable development sizes as there is a national designation within 2km of the assessment area. Potential negative effects in all cases are likely to be contingent on detailed development design and other mitigation measures.</p>	ensuring that supporting transport infrastructure minimises severance of habitats.			
Soil Quality	Roughly half of the developable land in the assessment area is grade 2 agricultural land (in the east and south-east) and half grade 3 agricultural land (in the west and north-west).	There is potentially sufficient space for a small extension type to avoid the grade 2 agricultural land completely. However, it will still result in the loss of grade 3 agricultural land. A medium extension would result in the loss of both Grade 2 and 3 land.	N/A		?

Topic	Relevant assets and identification of potential effects	Assessment of spatial variation within assessment area, development capacity implications and potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>There is therefore potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality at all potential development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>				
Water Quality	<p>The assessment area is not located in any drinking water safeguarding zones or source protection zones and therefore negligible effects are anticipated in relation to water quality at all potential development sizes.</p>	N/A	N/A		
Flood Risk	<p>The assessment area is predominantly greenfield, but the settlement of Twigworth is located in the south and part of the A38 also passes through the southern part of the assessment area.</p> <p>There is approximately 36ha of land in the west and south-west of the assessment area that is within Flood Zone 2. Within this area, there are also smaller areas of land that are located within Flood Zone 3.</p> <p>Significant negative effects may occur in relation to flood risk under the medium development size option as there is insufficient space to accommodate this</p>	<p>There is potentially sufficient space to accommodate a small extension in the north eastern half of the area outside Flood Zone 2.</p>	N/A		

Topic	Relevant assets and identification of potential effects	Assessment of spatial variation within assessment area, development capacity implications and potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	scale of development outside Flood Zone 2. Negligible effects are identified in relation to flood risk for the smallest development option size as there is potentially sufficient space to accommodate this scale of development within Flood Zone 1.				
Mineral Resources	<p>The entirety of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur at all development sizes.</p>	There may be potential to mitigate impacts on mineral resources e.g. by extracting minerals prior to development.	N/A	*	*
Noise	<p>Land directly adjacent to the eastern boundary and in the south is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A38.</p> <p>However, there is potentially sufficient space to accommodate all potential development sizes outside noisy areas and therefore negligible effects are anticipated.</p>	There is potential to set development back from the A38 and it may also be possible for suitable mitigation to overcome any noise related issues.	N/A		

Topic	Relevant assets and identification of potential effects	Assessment of spatial variation within assessment area, development capacity implications and potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Odour	The assessment area is not located in any Odour Monitoring Zones or Cordon Sanitaire Zones.	N/A	N/A		
	As such, negligible effects are anticipated in relation to odour for all potential development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> The area provides a sense of separation and prevents the coalescence of Twigworth with Gloucester. Rural setting to existing settlement. <p>As such, landscape sensitivity is high for the medium and small scale development options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales.</p>	N/A	H	H

Summary of Constraints and Landscape Sensitivity

Overall, there is no land within the assessment area that is free from multiple constraints. However, the north is likely to be the most suitable for a small or medium urban extension as the south is occupied by grade 2 agricultural land, historic assets, a Mineral Safeguarding Area and a noisy area. The north is less constrained, although includes grade 3 agricultural land (whether 3a or 3b is unknown) and a Mineral Safeguarding Area. In terms of landscape, the area is considered to have high sensitivity to even development at the lowest end of the scale.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The A38 provides primary access to the assessment area, with direct connections to Gloucester and Tewkesbury. No junctions in the immediate vicinity of the assessment area were reported to be 'critical' or under pressure in the JCS Transport Evidence Base.</p> <p>The A40/ A38 Longford Roundabout is located south of the assessment area and is considered a 'critical junction' within the JCS modelling work. This evidence base Do Nothing and Do Minimum model tests forecast that this junction will operate over its design capacity in 2031 (at between 105% and 140% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>To the north the A4019 Tewkesbury Rd / A38 Coombe Hill is also considered a 'critical junction' within the JCS modelling and the Do Nothing and Do Minimum model tests forecast that this junction will operate over its design capacity in 2031 (at between 102% and 115% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 97,636</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with a high-frequency bus services in proximity to the assessment area.</p>	
Access to other key services and facilities by public transport	<p>Number of workplaces (jobs) accessible within 30 minutes = 291,819</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to Tewkesbury and Cheltenham.</p>	
Access to other key services and facilities by public transport	<p>The assessment area has good accessibility to a number of key services and facilities by public transport along the A38, including urban centres, and healthcare facilities (within 20-40 mins) and education facilities within 20mins travel time.</p>	

Criterion	Rationale	Score
Private car use by commuters	% Driving a Car or Van = 74% Car based commuter trips currently account for an average of 74% of journeys in LSOAs covering the assessment area. This high mode share is likely attributed to the proximity to the A38 corridor, as the primary access route, to key urban centres / employment sites.	
Proximity to sustainable transport networks	The majority of the assessment area is within the 5km catchment of Gloucester Rail station and the assessment area is served by relatively frequent bus services to key destinations. The site is divorced from strategic cycling and walking routes.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	At lowest scale of growth, load is acceptable unless also connected with assessment area 24, in which case reinforcement of pipeline network would	N/A		

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
		be required, with the cost of downstream reinforcement to be borne by developer. Higher scale of growth would require network reinforcement.			
	Rail transport	Within 5km of Gloucester branch line station. Provision of improved bus/cycle linkages could result in higher levels of rail patronage.	N/A		
	Bus transport	Within 500m of existing low frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in increased levels of bus patronage. Improvements to bus accessibility would be needed at A38/A40 junction to avoid severance issues. Higher scales of growth increase likelihood of securing levels of investment needed to address this and significantly improve bus networks (unless developed jointly with assessment area 22).	N/A		
	Cycle transport	Distant from existing cycle network although close enough to Gloucester to mean that significant investment in cycle infrastructure could result in reasonably high numbers of cycle trips. Improvements to cycle accessibility would be needed at A38/A40 junction to avoid severance issues. Higher scales of growth increase likelihood of securing levels of investment needed to address this and significantly improve cycle networks (unless developed jointly with assessment area 22).	N/A		

Viability

	Development Type					
	Small Extension			Medium Extension		Large Extension
Dwellings	500	1,000	2,500	500	1,000	2,500
Indicative developer contributions and affordable housing pool/per unit (£)	20,000	15,000	10,000	20,000	15,000	10,000
Viability	Medium	Medium	Medium	Medium	Medium	Medium

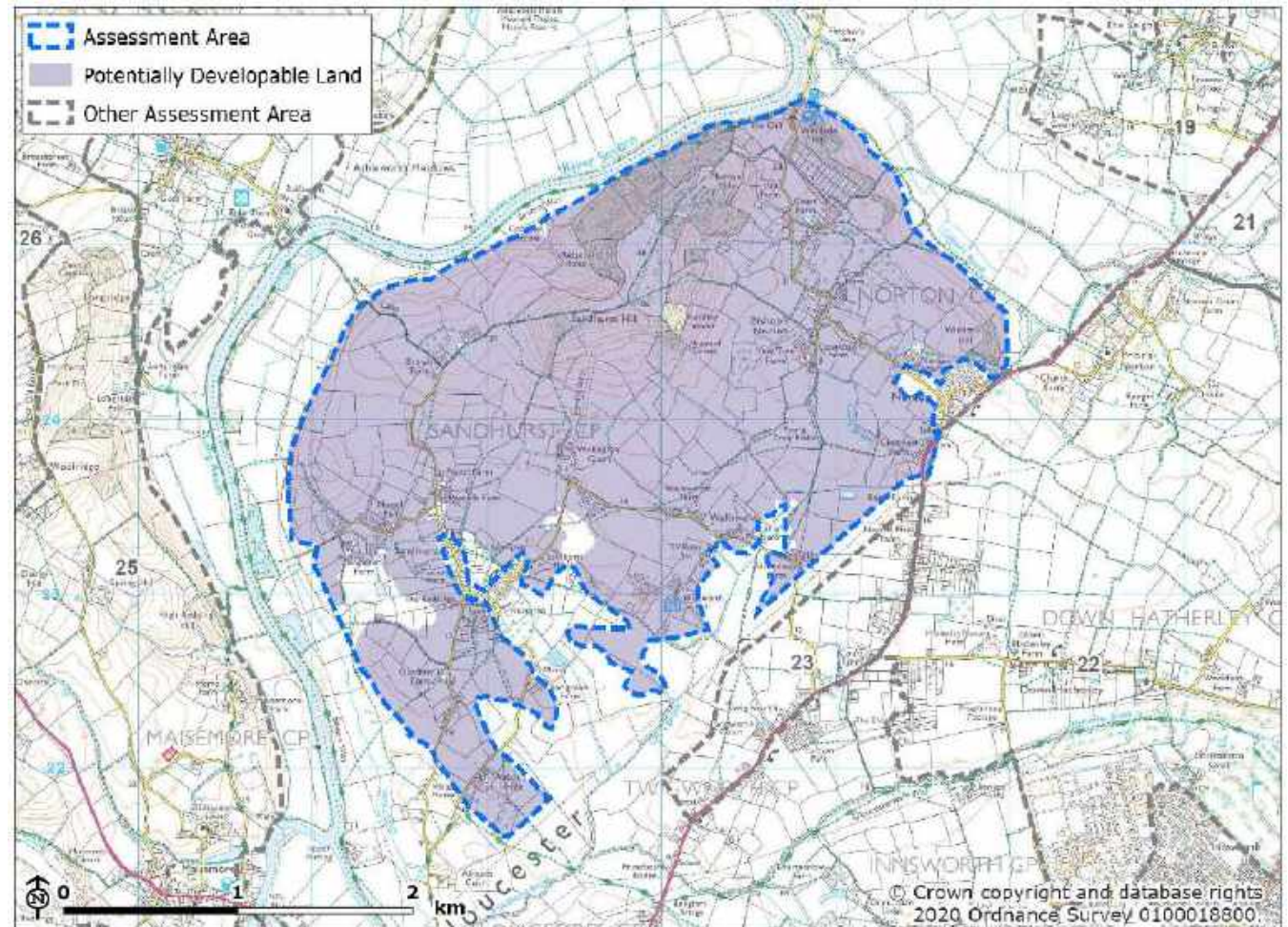
Assessment Area 24 – New Settlement: North of Gloucester

Assessment Area Ref: 24

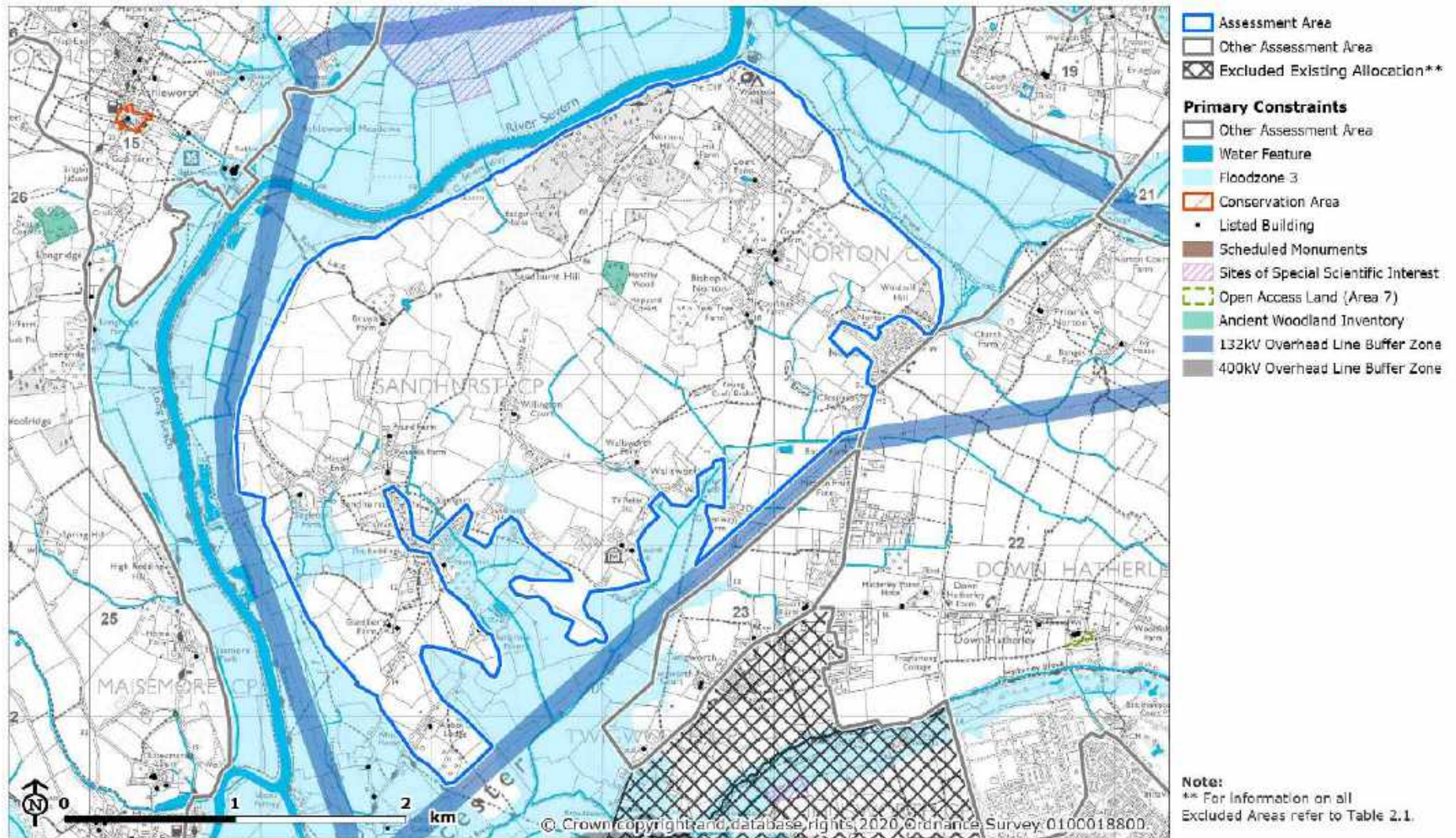
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

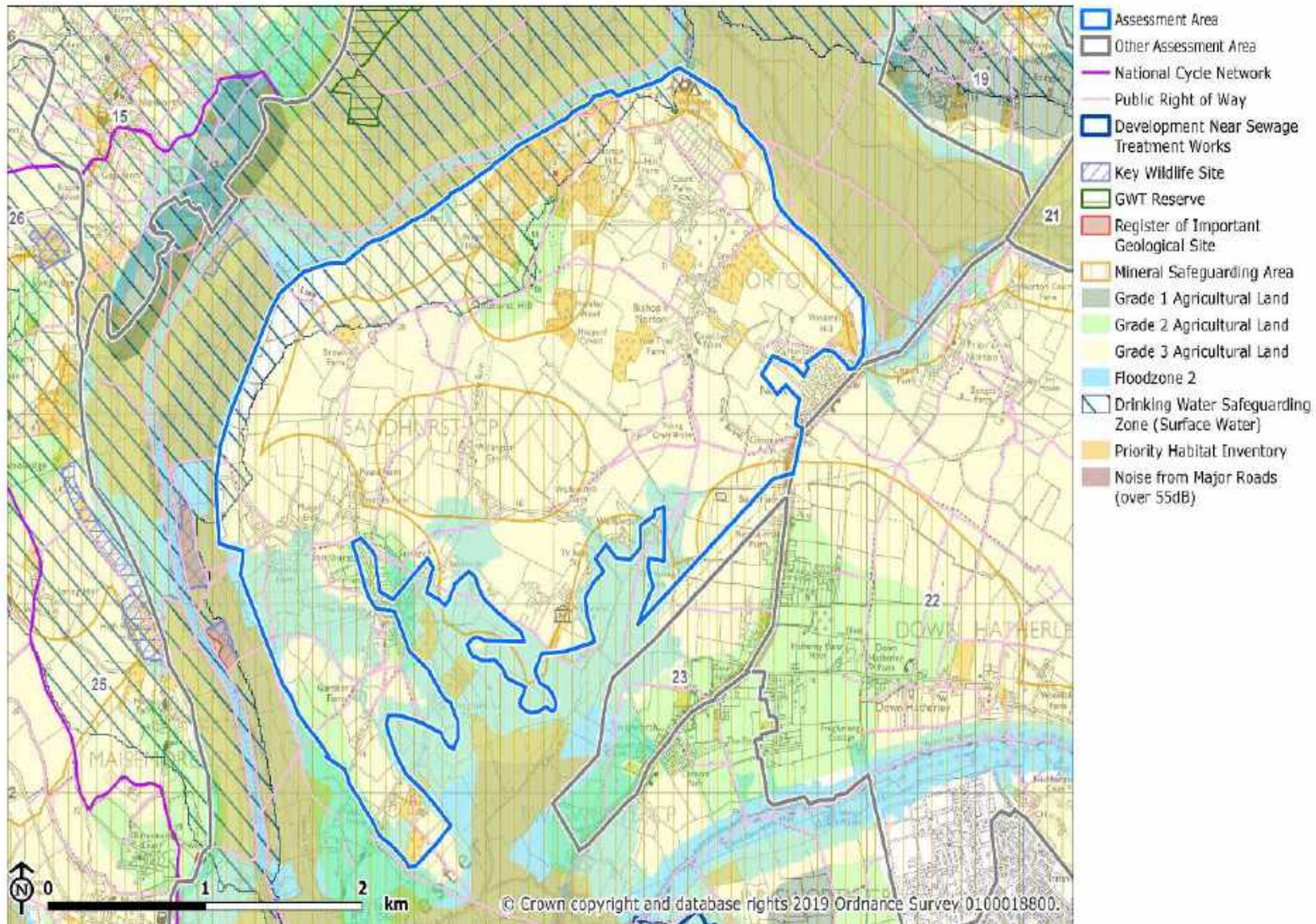
Area: ~879ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the search area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 25 listed buildings within the search area; these are all grade II save for three grade II* listed buildings – Wallsworth Hall (including the separately listed gate piers) and the Church of St Lawrence. These are typically clustered at the settlements of Sandhurst and Bishop’s Norton, or located along the roads leading to/from these. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a very large number of non-designated heritage assets within the search area. These include, but are not limited to: <ul style="list-style-type: none"> - Cropmarks and earthworks; - The Birmingham to Gloucester Roman Road; - Willington Court Roman Villa and a second possible 	<p>The majority of listed buildings within the search area are agricultural buildings which will have a functional and historical relationship with the surrounding agricultural land making them highly susceptible to harm in the event of development within their setting. The rural parish church of St Lawrence is also particularly sensitive along with Wallsworth Hall.</p> <p>There are a number of non-designated archaeological assets that could be of high significance and require preservation in-situ. These include the Roman villas, the moated sites and the deserted medieval settlement. These are located in and near Sandhurst and on Sandhurst Hill. Effects to other archaeological assets are likely to be able to be appropriately mitigated.</p> <p>Due to the spread of listed buildings, which is quite uniform throughout this assessment area, significant negative effects are anticipated as a result for all of the potential development sizes.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Roman villa site to the northeast;</p> <ul style="list-style-type: none"> - The sites of two windmills; - A possible deserted medieval settlement (southwest of Handley Wood) and several other medieval sites; - Possible site of Sandhurst church house; - Moated sites at Bengrove Farm and Moat Farm; - Several medieval-post-medieval hollow ways and trackways; - Fairly extensive ridge and furrow earthworks and some former field boundaries; and - Four WWII military sites. <ul style="list-style-type: none"> • There are likely to be built structures that qualify as non-designated heritage assets within the study area. • The proximity if the search area to the River Severn highlights a potential for alluvial deposits and the archaeology/geoarchaeology typically associated with these. <p><i>Historic Landscape</i></p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> The HLC data indicates a predominantly agricultural landscape interspersed with post-medieval settlements at Sandhurst and Bishops Norton. The agricultural landscape comprises of irregular and regular enclosures. The irregular enclosures have time-depth and are of value in themselves; they may also contain hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the search area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are a large number of listed buildings of all grades in the wider vicinity of the search area. One of the listed buildings – Ashleworth Tithe Barn – is also scheduled. To the northwest of the search area is Ashleworth Conservation Area. <p><i>Non-designated</i></p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> There are a large number of non-designated assets in the vicinity of the search area. <p>Development within this assessment area has the potential to affect the physical nature of and / or setting of these assets.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> SSSI (Wainlode Cliff), designated for geology features, is just within the assessment area on the northern boundary. A small Ancient Woodland is located in the north of the assessment area (Sandhurst Hill). Extensive network of Priority deciduous woodland is located north of Sandhurst Hill, with a few scattered stands to the northeast and east. Designated site of geological importance (Norton Hill Gravel Pit) in the north of the assessment area. <p>Assets within 250m:</p>	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the SSSI in the northern part of the assessment area is protected from harm.</p> <p>Similarly, the area of Ancient Woodland in the northern half of the assessment area should be protected.</p> <p>It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>Buffers around deciduous woodland within the assessment area and floodplain habitat adjacent to the assessment area should be avoided or considered carefully to ensure that viability of the wider, cohesive habitat is maintained. Such buffers offer opportunity for creation of habitats of greatest buffering, and potentially also ecosystem service, functionality.</p>	*	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> Two Key Wildlife Sites (Sandhurst Brickpits) around 220m from the western boundary, part of which is also a designated site of geological importance. Large areas of coastal and floodplain grazing marsh priority habitat adjacent to the majority of the assessment area boundaries. A Key Wildlife Site (Wainlode Pond) around 200m north. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Ashleworth Ham) around 460m north, part of which is also a nature reserve. SSSI (Coombe Hill Canal) around 800m north-east, part of which is also a nature reserve. SSSI (Innsworth Meadow) around 1.3km southeast. <p>IRZs:</p> <ul style="list-style-type: none"> Several IRZs overlap with the assessment area and flag residential development as a potential risk. <p>Minor negative effects may occur at the large and medium development size as this scale of could avoid intersection with the local designations but would</p>	<p>The mosaic of priority habitats with key wildlife areas, especially to the west of the area boundary, should be maintained and, where possible, connectivity between the network of linear corridors and stepping stones optimised.</p> <p>The nearby river and floodplain forms a key component of the habitat connectivity through the local landscape, the wider functionality of which should be maintained.</p> <p>The locations of the SSSI and Ancient Woodland, along with areas of deciduous woodland and traditional orchard priority habitat, are likely to constrain development in the northern section of this assessment area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>still be within 2km of the SSSIs in the area. Negligible effects may occur at the smallest development size as this scale of development could potentially be accommodated over 2km from any designations.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is a 21ha pocket of grade 2 agricultural land in the northern half of the assessment area as well as two further smaller pockets of grade 2 land in the south-western corner of the assessment area, comprising around 24ha.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects are anticipated in relation to soil quality. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>Development of all scales are likely to be able to avoid the loss of grade 2 agricultural land through detailed design, as these areas are restricted to small pockets of land. However, the remainder of the assessment area is still grade 3 agricultural land and therefore development within any part of the area has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality	<p>There is around 121ha of land adjacent to northern and north-western boundaries of the assessment area that</p>	<p>There is sufficient space within the assessment area for all potential development sizes to be located outside of the drinking water</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>is located within a drinking water safeguarding zone.</p> <p>However, the majority of the assessment area is outside of drinking water safeguarding zones. Therefore, negligible effects are anticipated as there is potentially sufficient space to accommodate all development options outside of drinking water safeguarding zones.</p>	<p>safeguarding zone, as this area is restricted to the northern boundary.</p>			
Flood Risk	<p>The majority of the assessment area is comprised of greenfield land. However, the settlement of Bishop's Norton is located in the north-east of the assessment area and the settlement of Wallsworth is in the southern part of the assessment area. There are also local roads and residential/agricultural buildings distributed throughout the assessment area.</p> <p>There are three pockets of land adjacent to the southern boundary of the assessment area that are located within Flood Zone 2 due to the presence of watercourses, the largest of these (34ha) being located in the south-west. There is also an area of approximately 120Ha of land adjacent to the northern boundary of the assessment area that is located within Flood Zone 2.</p> <p>However, the majority of the assessment area is not located within</p>	<p>There is sufficient space within the assessment area for all potential development sizes to be located outside of Flood Zone 2, given that these areas are restricted to the vicinity of watercourses in the south and a small region on the northern boundary.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	any Flood Zones. Therefore negligible effects are anticipated in relation to flood risk as there is potentially sufficient space to accommodate all development options outside of Flood Zones.				
Mineral Resources	<p>Approximately 50% of the assessment area is located within a Mineral Safeguarding Area (MSA). This designation covers almost the whole perimeter of the assessment area, with larger pockets of safeguarded land being located in the south-western, central and northern parts of the assessment area.</p> <p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur at the medium and large development options as there is insufficient space to accommodate these scales of development outside of MSAs (in the case of the medium scale development it could potentially be accommodated, but not as continuous development). Negligible effects are anticipated in relation to mineral resources under the smallest size option as there is sufficient space to accommodate this scale of development outside of MSAs.</p>	<p>Due to the extent of MSA coverage, it is not considered feasible to develop a new settlement of the town/city or large village development sizes within this assessment area without the direct loss of mineral resources, as such significant negative effects are identified against these.</p> <p>There is land in the north-west and north-east of the search area that is not within MSAs, which could potentially accommodate a small new settlement option, avoiding the sterilisation of mineral resources. Negligible effects are therefore anticipated for this development size.</p> <p>Suitable mitigation may also be possible for large developments to overcome mineral resourcing issues such as extraction prior to development.</p>	*	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Noise	<p>There is less than 2ha on the eastern boundary of the assessment area that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A38. The vast majority of the assessment area is not located within any areas of high noise Noisy area.</p> <p>Due to the significant opportunity to avoid areas of high noise Noisy area, negligible effects are anticipated for all potential development option sizes.</p>	<p>There is significant potential for development to avoid land within a noisy area on the eastern boundary and suitable mitigation may be possible to overcome any noise related issues.</p>			
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones and therefore negligible effects are anticipated in relation to odour for all development option sizes.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Undulating landform containing the distinct features of Sandhurst Hill and Norton Hill. • Strong wooded character with deciduous woodlands and some Ancient Woodland. <p>As such, landscape sensitivity is high under the medium and largest development option size as the key characteristics and qualities of the landscape may be highly sensitive to change from residential development of these scales. Landscape sensitivity is reduced to moderate-high under the small development option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

The majority of the assessment area is comprised of grade 3 agricultural land and therefore development of any scale may result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.

The potential for new settlements of a larger scale within this assessment area on unconstrained land is limited. The two areas of least constrained land within the assessment area are located to the south of Bishop's Norton and in the north-west region. These areas could potentially accommodate a small village whilst avoiding the majority of constraints. In the case of the north-west region, it may be possible to accommodate a large village if land located further to the east in the central region of the assessment area is also developed. MSAs are a constraint in these areas, but it may be possible to extract resources prior to development. However, the entire assessment area is considered highly sensitive with respect to the areas historic environment for all development scales, due to the relatively even distribution of listed buildings throughout the area. Additionally, the area is considered to be of high landscape sensitivity to the larger scales of development, particularly around the steep slopes of Sandhurst Hill and Norton Hill. Landscape impacts may be potentially reduced in the smallest development scenario, but landscape sensitivity is still considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A38, which provides strategic links to Gloucester City Centre and Tewkesbury.</p> <p>The A40/ A38 Longford Roundabout is located south of the assessment area and is considered a 'critical junction' within the JCS modelling work. This evidence base Do Nothing and Do Minimum model tests forecast that this junction will operate over its design capacity in 2031 (at between 105% and 140% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>To the north the A4019 Tewkesbury Rd / A38 Coombe Hill is also considered a 'critical junction' within the JCS modelling and the Do Nothing and Do Minimum model tests forecast that this junction will operate over its design capacity in 2031 (at between 102% and 115% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 25</p> <p>The assessment area is currently partially served by a low-frequency bus route, meaning that currently access to workplaces / employment is scored as very low.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 286,559</p> <p>Access from the assessment area to employment by Car scores relatively high, due to its direct road network connections to Tewkesbury and Cheltenham.</p>	
Access to other key services and facilities by public transport	<p>Locations in the assessment area that are close to the A38 demonstrate good accessibility to a number of key services and facilities by public transport, including urban centres, and healthcare facilities (within 20-40 mins) and education facilities within 20mins travel time. However, the majority of the area has very poor public transport accessibility – reflecting a lack of current services into the area.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 72%</p> <p>Car based commuter trips currently account for an average of 72% of travel to work journeys in LSOAs covering the assessment area, which is expected given its relatively rural location and low frequency public transport services.</p>	

Criterion	Rationale	Score
Proximity to sustainable transport networks	The assessment area is divorced from strategic walking and cycling routes, including the NCN, and is only partially within the 5km catchment area of Gloucester rail station and partially in proximity to a high-frequency bus route.	

Deliverability/Infrastructure

DeCriterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer. Easement would require high pressure pipeline diversion which would incur a cost to developer.			
	Rail transport	Within 5km of Gloucester branch line station. Provision of improved bus/cycle linkages could result in higher levels of rail patronage.			

DeCriterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Bus transport	Within 500m of existing high frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in reasonably high levels of bus patronage. Improvements to bus accessibility would be needed at A38/A40 junction to avoid severance issues. Higher scales of growth increase likelihood of securing levels of investment needed to address this and significantly improve bus network (unless developed jointly with assessment areas 22 and 23).			
	Cycle transport	Distant from existing cycle network although close enough to Gloucester to mean that significant investment in cycle infrastructure could result in reasonably high numbers of cycle trips. Improvements to cycle accessibility would be needed at A38/A40 junction to avoid severance issues. Higher scales of growth increase likelihood of securing levels of investment needed to address this and significantly improve cycle networks (unless developed jointly with assessment areas 22 and 23).			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	35,000	35,000	30,000	30,000	25,000	15,000
Viability	High	High	High	High	High	Medium

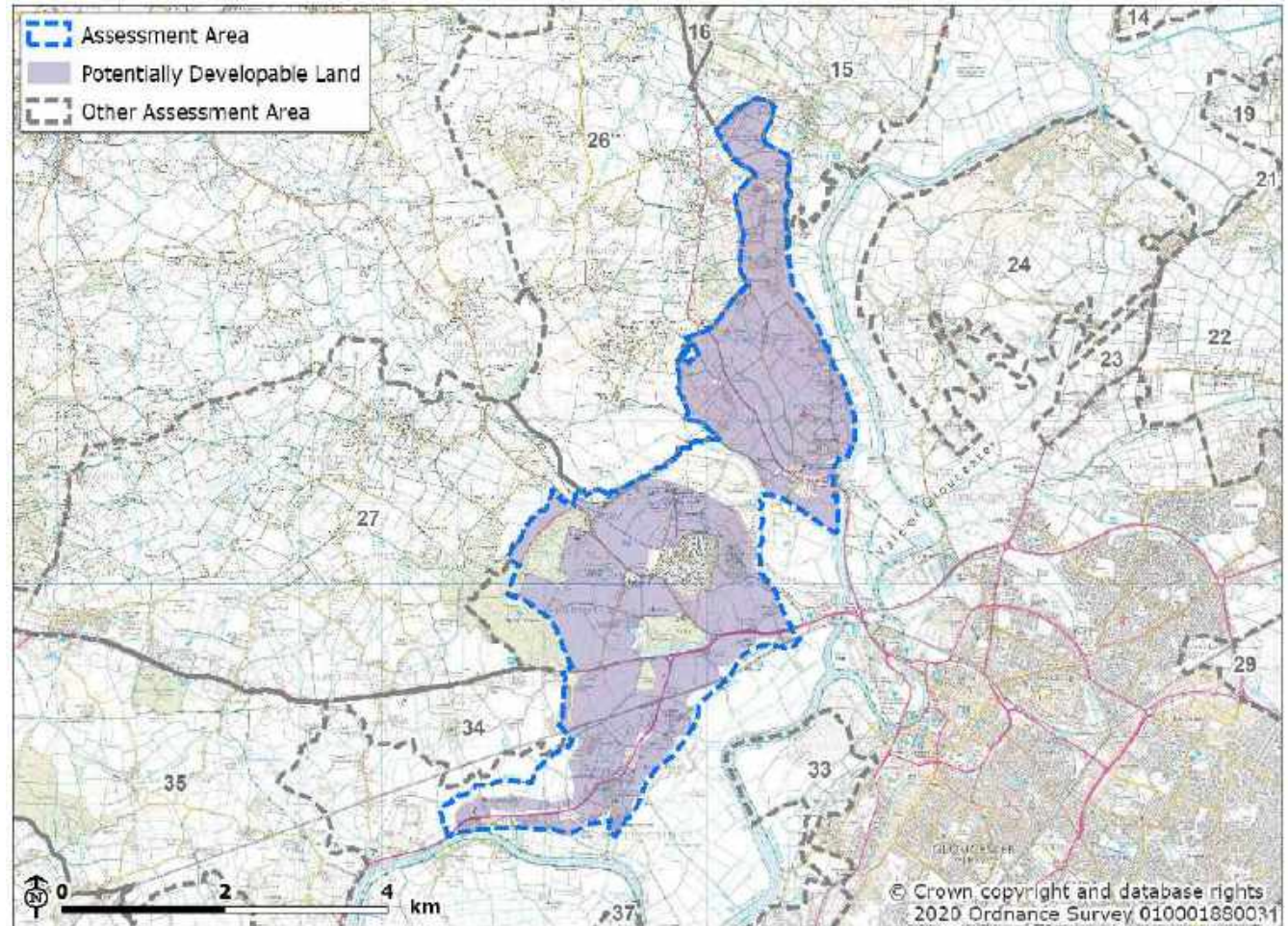
Assessment Area 25 – New Settlement: Land Northwest of Gloucester

Assessment Area Ref: 25

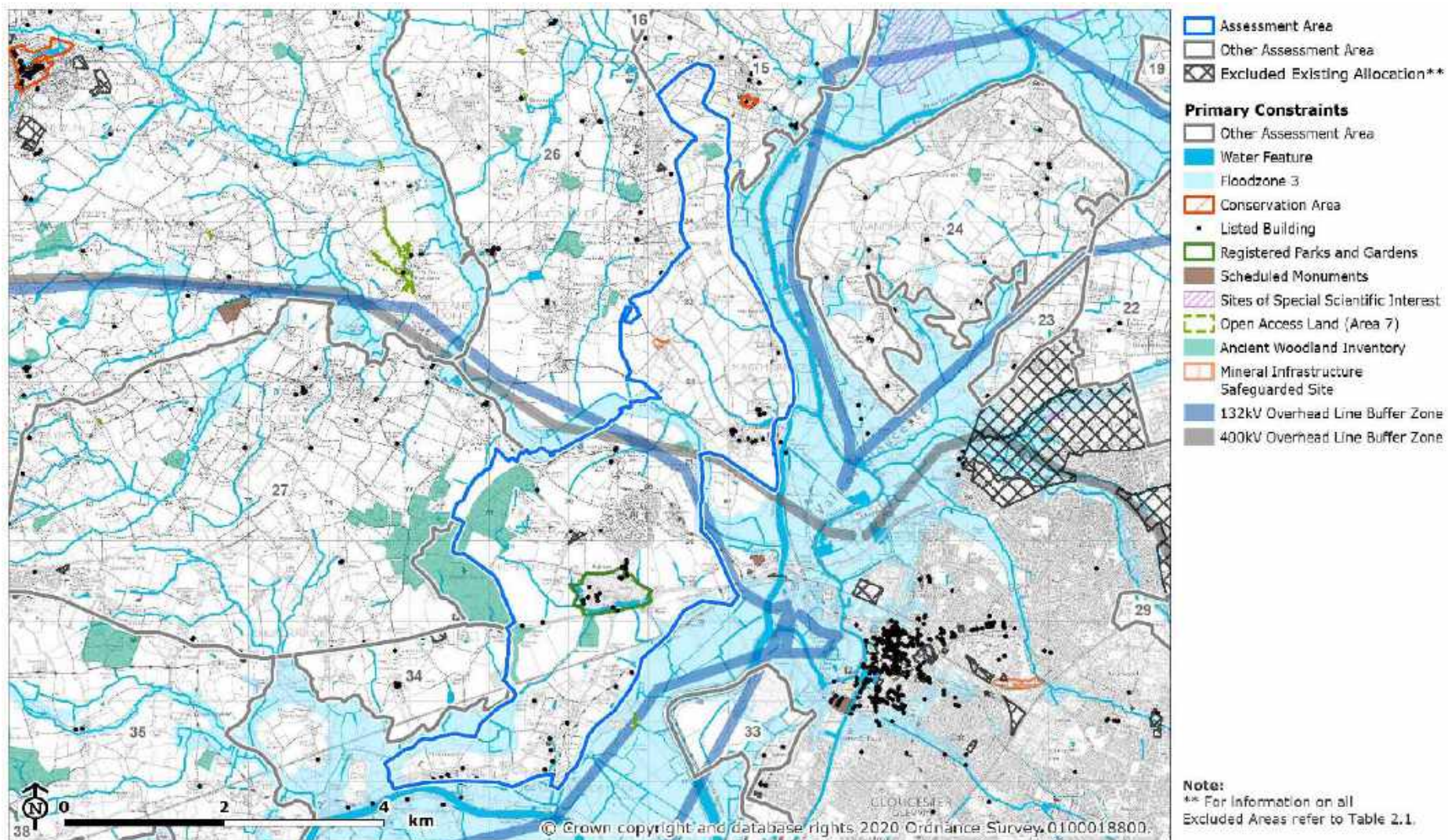
Authority Area: Tewkesbury Borough

Development Typology: New Settlement

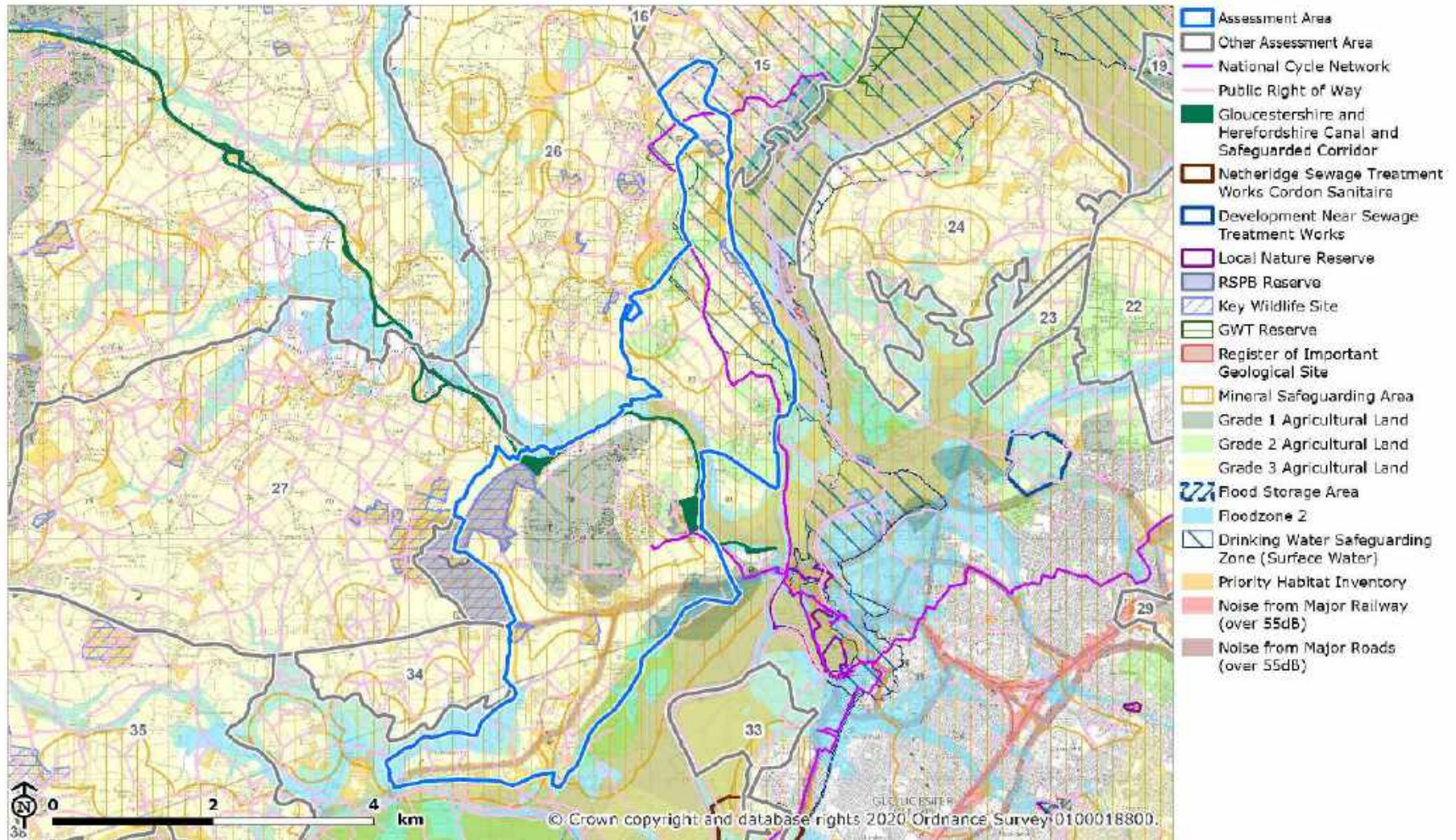
Area: ~1,750ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 72 listed buildings of all grades within the assessment area. These are typically clustered around Maisemore and Lassington, to the north, Highnam Court, to the centre and Minsterworth to the south. There are also a number of outlying listed buildings in the southern half of the assessment area. The listed buildings comprise a mix of buildings including churches, burial monuments, farmhouses, agricultural buildings, cottages and milestones. Towards the centre of the site is a Grade II* registered park and garden – Highnam Court. It is associated with 17 Grade I and II listed buildings. There are three scheduled monuments within the assessment area: two – an 	<p>The distribution of the designated heritage assets within the assessment area is such that the southern half is likely to be more sensitive to development.</p> <p>A number of the archaeological assets recorded by the HER could be of high value and represent a significant constraint to development. Again the majority of these are distributed towards the south of the assessment area; however the deserted medieval settlement of Overton is located to the north at Overton Farm. Assuming a worst case scenario this means that it may not be possible to accommodate even a small village without resulting in significant negative effects. However, if the deserted medieval settlement is of less than high significance – or the small village is towards the lower end of the development quantum - it may be possible to accommodate a small village with minor negative effects, provided it was located to in the northern half of the assessment area.</p>	<p>?</p>	<p>?</p>	<p>?</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>earthwork and bridge - are in the eastern part of the assessment area; and the third is a cross in St Giles Churchyard, in the southwest.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records a very large number of non-designated assets within the assessment area. These include but are not limited to: <ul style="list-style-type: none"> - A prehistoric burial mound at Over; Multiple sites of post-medieval buildings, trackways and roads; - Roman settlement at Minsterworth and a road at Maisemore; - Cropmarks and earthworks including and extensive ridge and furrow; - Possible moated sites at Highnam, Brook Farm Minsterworth and Castle Pool; - A possible Roman road; - Medieval settlements at Highnam, Over and Linton. - Possible shrunken medieval settlement at Homestead moat and a deserted 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>medieval settlement at Maisemore Court and Overton;</p> <ul style="list-style-type: none"> - Multiple civil war sites; - Multiple modern military sites/ features focused around Highnam; and - A WWII aircraft crash site. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates several areas of small settlements throughout the assessment area; these are focused to the south along the A40, with Highnam and Maisemore to the north. These settlements are set within a primarily agricultural landscape comprised of irregular, less irregular and regular enclosures. Those that are not regular have some time-depth and value and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> There is a small number of grade II listed buildings that lie near to the northern half of the assessment area that could be susceptible to meaningful setting change. Ashleworth Conservation Area is also to the north of the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets have been identified as being particularly susceptible to setting change at this stage. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Large area of Ancient Woodland (listed as Corseleas Brake within Highnam woods extending to Pinchfield Wood) overlapping the western boundary of the assessment area, as well as further Ancient Woodland (Pipers Grove) just east of Highnam Woods and (Deans Coppice) in the northernmost part of the assessment area, all of which are also designated as Key Wildlife Sites. Highnam Woods is also a RSPB reserve. Further 	<p>An area of floodplain grazing marsh priority habitat adjacent to a watercourse bisects the central region of the assessment area. Further mosaics of floodplain grazing marsh are also found along the southern boundary (Moorcroft and Minsterworth).</p> <p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the areas of Ancient Woodland and floodplain grazing marsh along the River Severn are maintained and that the networks of priority habitats are also maintained/enhanced. This will include ensuring that supporting transport</p>	*	*	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Ancient Woodland to the south of Highnam (Pipers Grove). The Reddings, west of Maisemore, is a small stand of Ancient Woodland in the centre of the area.</p> <ul style="list-style-type: none"> • Key Wildlife Site (Maisemore Roughett) adjacent to the north-eastern boundary of the assessment area, as well as another Key Wildlife Site (Lassington Wood) adjacent to the settlement of Highnam. <p>Assets within 250m:</p> <ul style="list-style-type: none"> • Large area of Ancient Woodland (Corseleas Brake within Highnam Woods) adjacent to the western boundary. Also a Key Wildlife Site. • Ancient Woodland (Darley Wood) 200m west of the north-western boundary. • There is a Local Nature Reserve adjacent to the mid-section of the eastern boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Walmore Common) 1.5km to the south-west of the assessment area, part of which (southern section) is also 	<p>infrastructure minimises severance of habitats in the area.</p> <p>As the south-western corner of the assessment area is within several levels of IRZ for Walmore Common, it may be that habitats within the assessment area could be used by the notified feature (Bewick's Swan). As such any residential development of 50 or more houses outside existing settlements/urban areas poses a risk for the outer two levels of IRZ. Any residential development of 10 or more houses outside existing settlements/urban areas for the inner level of IRZ (extending to Brook Farm) poses a risk.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>designated as an SPA and Ramsar (for Bewick's swan).</p> <ul style="list-style-type: none"> SSSI (Ashleworth Ham) 1.9km to the northeast of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> IRZs associated with designations in the surroundings overlap the east and south of the assessment area and flag residential development as a potential risk. <p>Significant negative effects may occur at the large scale development size option as it is unlikely this scale of development could be accommodated without intersecting with local designations. Minor negative effects may occur at the smallest and medium development size options as these scales of development could potentially be accommodated without intersecting with local designations but would still be within 250m.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	The majority of the assessment area is comprised of grade 3 agricultural land. However, in the central region of the	There is potential for development at the small and medium option sizes to avoid the loss of grade 1 or grade 2 agricultural land as there is		?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>assessment area, there are two large pockets of grade 1 agricultural land, comprising around 250ha. Additionally, there are also smaller pockets of grade 2 agricultural land in the northern half of the assessment area adjacent to the western and eastern boundaries as well one further pocket adjacent to the south-eastern boundary. There is also an area of floodplain land adjacent to a watercourse that bisects the area which is designated as grade 4 and a further small pocket of grade 4 land adjacent to the south-western boundary due to the presence of another watercourse.</p> <p>There is potential for development within the assessment area to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for the largest size option as it may not be possible for this scale of development to avoid the regions of grade 1 and grade 2 land. Significant negative effects may also occur for the small and medium size options but there this is uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>over 200ha of grade 3 agricultural land in the north and in the south that could potentially accommodate these scales of development. However, the remaining land is still grade 3 and therefore development at any location with the assessment area has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>			
Water Quality	<p>There is approximately 255ha of land in the northern extent of the assessment</p>	<p>There is potentially sufficient space to the west of Highnam to accommodate a development at the small or medium option sizes, whilst</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>area that is located within a drinking water safeguarding zone.</p> <p>Negligible effects are anticipated at all scales of development as there is potentially sufficient space to accommodate development outside of the drinking water safeguarding zone.</p>	<p>avoiding the drinking water safeguarding zone in the north. There is also potentially sufficient space outside of drinking water safeguarding zones to accommodate a development at the smallest option size adjacent to the A417 in the north or adjacent to A48 in the south. The largest scale of development could potentially be accommodated outside of the water safeguarding zone in the north, but not as a continuous development as it would be bisected by the River Leadon.</p>			
Flood Risk	<p>The majority of the assessment area is comprised of greenfield land. However, there are a number of small settlements throughout the assessment area and the larger settlement of Highnam is located in the centre of the assessment area. There are also multiple main and local roads that pass through the assessment area as well as areas of agricultural development.</p> <p>There is developable land in the central and southernmost parts of the assessment areas that is located within Flood Zone 2, which is due to the presence watercourses bisecting the assessment area. Additionally, there is further land in the southernmost part of the assessment area that is also located within Flood Zone 2.</p> <p>However, the assessment area is large and there is potentially sufficient space</p>	<p>There is potentially sufficient space within the assessment area for all scales of development to be accommodated within Flood Zone 1. However, this may require provision of a disjointed development form which crosses the Flood Zone related to the River Leadon, which bisects the assessment area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	to accommodate all scales of development outside of Flood Zone. Therefore, negligible effects are anticipated in relation to flood risk.				
Mineral Resources	<p>The majority of the assessment area is located within Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development within the assessment area to result in the sterilisation of a significant amount of mineral resources. As such, significant negative effects may occur in relation to mineral resources at the medium and large development size options. Negligible effects may occur in relation to mineral resources for the smallest size option as there is potentially sufficient space to accommodate this scale of development outside of MSAs.</p>	<p>There is potentially sufficient space to the north of the A417 in the north of the assessment area to accommodate a development at the smallest size option, avoiding the sterilisation of mineral resources. For large and medium development scales, suitable mitigation may also be possible at large development size to overcome mineral resourcing issues such as extraction prior to development.</p>	*	*	
Noise	<p>Land adjacent to the A48 and A40 in the southern half of the assessment area is located within an area of high noise Noisy area.</p> <p>However, there is potentially sufficient space outside noisy areas to accommodate development at all development sizes and therefore negligible effects are anticipated.</p>	<p>There is potential for development to be located in the north of the area outside of noisy areas and suitable mitigation may be possible to overcome any noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Odour	The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.	N/A			
	As such, negligible effects are considered likely in relation to odour.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Steep undulating hills, particularly in the north of the area. Frequent areas of mixed woodland on the ridges. Long views across the adjacent low lying plain. Strong sense of place due to the location of the area adjacent to the River Severn. <p>As such, landscape sensitivity is high under the medium and largest development option sizes as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the smallest development option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

This assessment area is particularly sensitive with respect to heritage assets, although it may be possible to accommodate a small village to north with only minor effects. However, due to the steeply sloping landform, the north of the area has the highest landscape sensitivity. It is unlikely to be possible to deliver a town/city without encroaching on grade 1-2 agricultural land. The south and central region of the assessment area is less suitable for a new settlement of any size due to the presence of constraints such as existing development, heritage and ecological assets and grade 1-2 agricultural land (MSAs are also present although impacts could be mitigated). Land to the north of the River Leadon may offer potential for development avoiding the majority of constraints, although development might encroach here on a Drinking Water Safeguarding Zone. Landscape sensitivity is reduced under the smallest development scenario, but it is still considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A417, A48 and the A40 which runs through the centre of the assessment area, providing connections to Gloucester, Cheltenham and the Forest of Dean District.</p> <p>The JCS Transport Evidence base modelling shows three 'critical junctions' (the A40 / A417 'Over roundabout', A40/ B4215 Newent Junction, and A40/ A48 Highnam Rbt) located within or adjacent to the assessment area.</p> <p>The JCS modelling work's Do Nothing and Do Minimum model tests forecast that the A40 'Over Roundabout' junction will operate over its design capacity in 2031 (at between 115% and 117% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ B4215 Newent Junction will operate over its design capacity in 2031 (at between 115% and 118% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Similarly, the modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ A48 Highnam Roundabout will operate over its design capacity in 2031 (at between 135% and 140% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 54,857</p> <p>Access to workplaces (jobs) by public transport services is scored as high due to the assessment area being served by a high-frequency bus service linking Higham, Gloucester, Newent and Ledbury.</p>	

Criterion	Rationale	Score
	<p>Number of workplaces (jobs) accessible within 30 minutes = 289,419</p> <p>Access from the assessment area to employment by Car scores high, due to direct road links into Gloucester and proximity to the strategic road network.</p>	
<p>Access to other key services and facilities by public transport</p>	<p>TRACC Accessibility outputs show that education facilities are accessible within 20 mins travel time by public transport, whilst healthcare facilities and urban centres would take between 20 and 40 mins to get to by public transport. Generally, accessibility to key services is scored as good for the assessment area due to the high frequency bus routes across the area.</p>	
<p>Private car use by commuters</p>	<p>% Driving a Car or Van = 73%</p> <p>Car based trips for travel to work / commuting accounts for an average of 73% of journeys in LSOAs covered by the assessment area, reflecting the assessment area's proximity to the strategic road network. Further enhancements to public transport services, as part of any development proposals, would likely improve mode share and mitigate additional trips on the network.</p>	
<p>Proximity to sustainable transport networks</p>	<p>The majority of the assessment area is located within 5km catchment area of Gloucester Railway Station, providing local and national connections on the mainline. High frequency bus services currently serve the key corridors, whilst the assessment area is also located along the existing National Cycle Network (NCN), providing further opportunities to enhance active travel routes across the area.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Development of any scale would require significant work to develop a new source or mitigate Water Framework Directive pressures on water resources. Additional work and funding would be required for this but resources unlikely to be available in the next 5 -10 years.			
	Electricity	Part of site served by Newent Primary Substation which currently has less than 10% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Eastern half of area within 5km of Gloucester branch line station. Provision of improved bus services could result in higher levels of rail patronage.			
	Bus transport	Within 500m of existing high frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in increased levels of bus patronage. Improvements to bus accessibility would be needed along A40 and at junction with A417 but higher scales of growth likely to be sufficient to secure levels of investment needed to improve bus networks.			
	Cycle transport	On existing cycle network and close enough to Gloucester to mean that improvements could result in reasonably high numbers of cycle trips. Improvements to cycle accessibility would be needed along A40 and at			

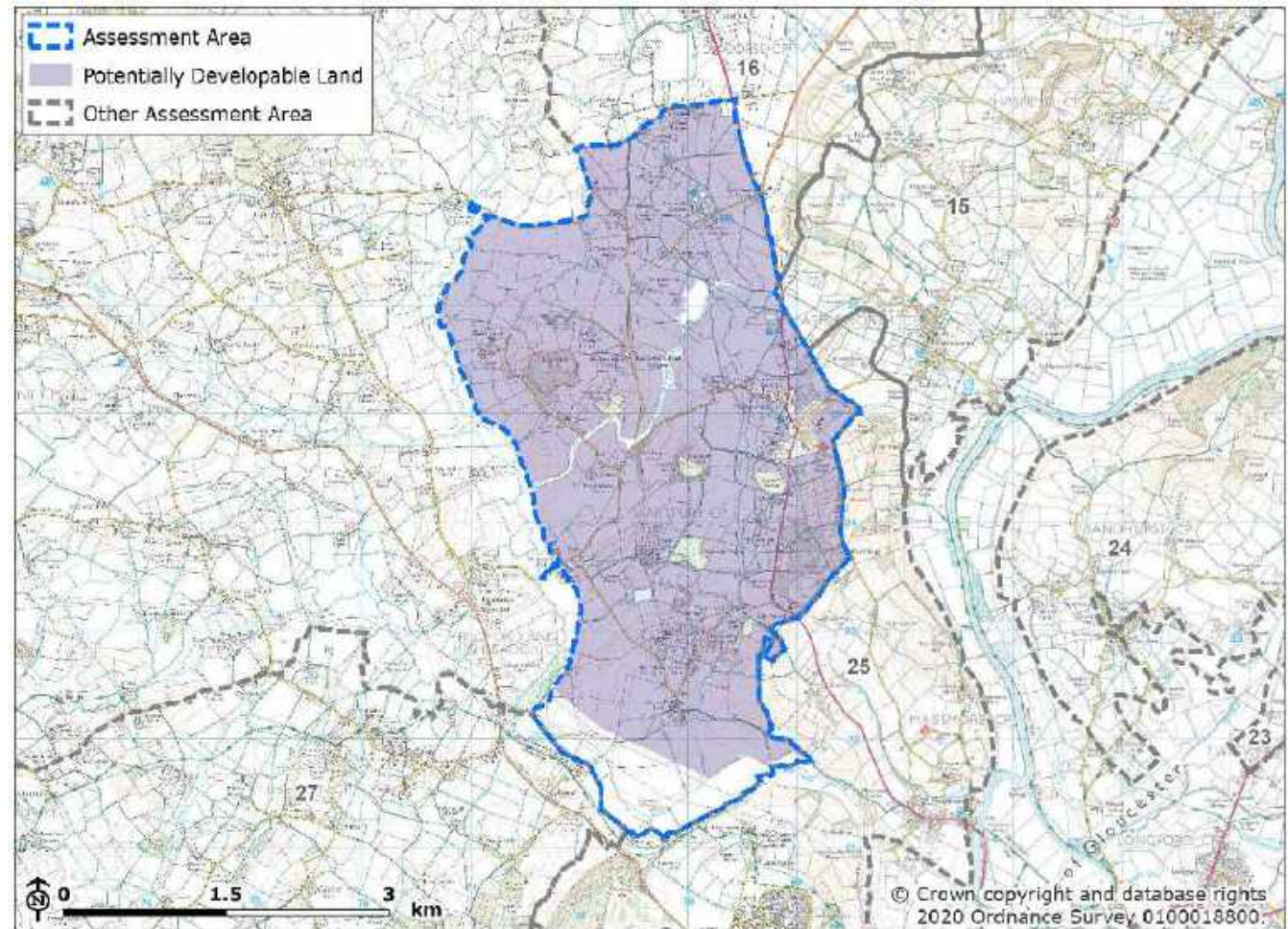
Assessment Area 26 – New Settlement: Land West of A417

Assessment Area Ref: 26

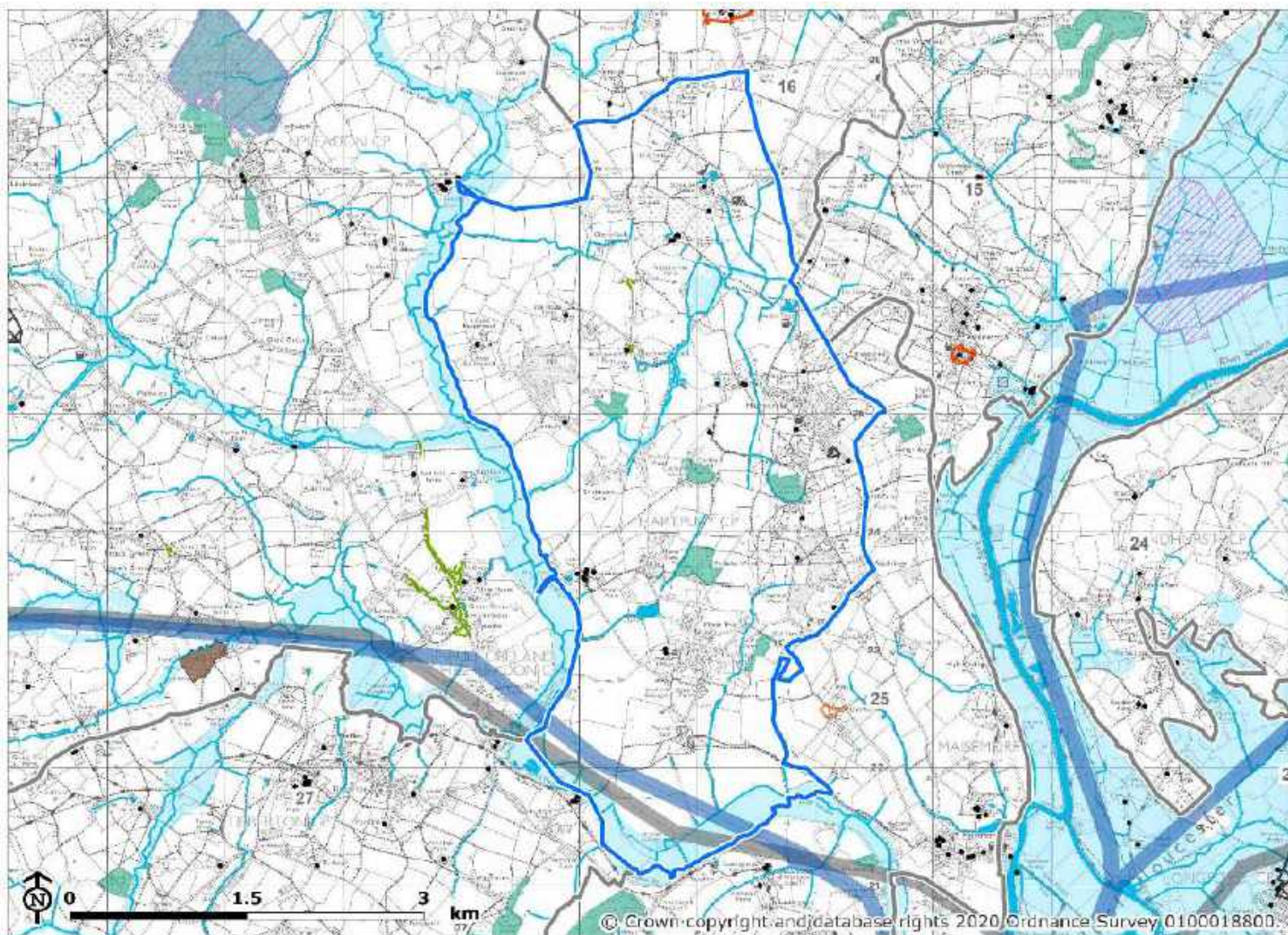
Authority Area: Forest of Dean District

Development Typology: New Settlement

Area: ~1,550ha



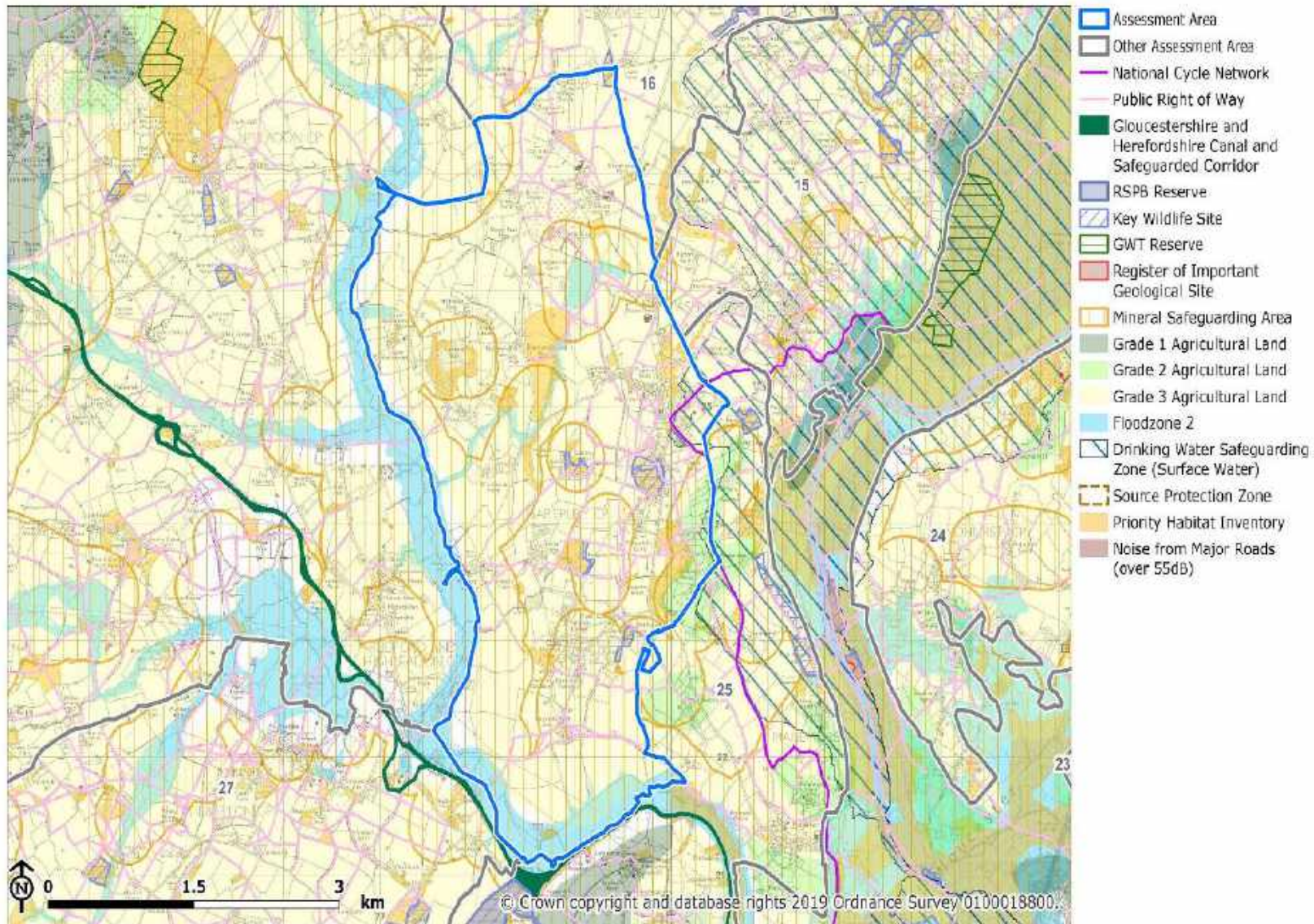
Primary Constraints



- Assessment Area
 - Other Assessment Area
 - Excluded Existing Allocation**
- Primary Constraints**
- Other Assessment Area
 - Water Feature
 - Floodzone 3
 - Conservation Area
 - Listed Building
 - Scheduled Monuments
 - Sites of Special Scientific Interest
 - Open Access Land (Area 7)
 - Ancient Woodland Inventory
 - Mineral Infrastructure Safeguarded Site
 - 132kV Overhead Line Buffer Zone
 - 400kV Overhead Line Buffer Zone

Note:
 ** For information on all Excluded Areas refer to Table 2.1.

Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There is a scheduled monument in the west of the moated site, 'Moated Site at Hartpury Court'. • There are 31 listed buildings of all grades. Several of these are located at Hartpury Court; the rest are dispersed across the assessment area. The majority of the listed buildings are churches, burial monuments, farmhouses and agricultural buildings and cottages, but – amongst others - there is also a large country house, Methodist chapel, pub and a church spire. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records a large number of non-designated heritage assets within the assessment area. These include but are not limited to: <ul style="list-style-type: none"> - Multiple post-medieval industrial features; 	<p>The wide dispersal of designated assets within the assessment area makes it highly unlikely that a town or large village could be appropriately accommodated without resulting in setting change and harm to the significance of designated assets, which as per the methodology used herein would result in a significant effect to the historic environment. The scheduled site at Hartpury presents an absolute constraint to development.</p> <p>Non-designated heritage assets that may potentially present the greatest constraint to development include the medieval moated sites and settlements, which are typically, located in areas with existing settlement e.g. Hartpury, Blackwells End Green, Moor End, and Oridge, as well as the water meadows to the east and south of the assessment area.</p> <p>It may be possible to accommodate a small village at the lower end of the spectrum along the northern edge of the assessment area near Oridge with only minor negative effects to the historic environment.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Water meadows near Highleadon Court and Lassington Court; - Earthworks at Hartpury and Prestberries Farm; - Medieval moated sites at Hartpury, Blackwells End Green and Moor End; - A deserted medieval village at Hartpury and a shrunken one at Oridge; - Roman features at Hartpury; - Multiple trackways/ hollow way and isolated areas of ridge and furrow earthworks; and - Two WWII military sites near Hartpury. <ul style="list-style-type: none"> • In addition, the former parkland associated with Hartpury House may be considered a non-designated heritage asset of more than local value due to its contribution to the significance of the grade II* Hartpury House. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates an area of settlement at Hartpury set within an agricultural landscape mainly comprised of irregular and less 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>regular enclosure. These are likely to have sometime-depth and value in themselves but may also include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. There are also several areas of ancient woodland.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of listed buildings in the wider vicinity of the assessment area. Most are unlikely to experience any meaningful setting change but the three to the south at Rudford may. So may the two grade II listed farmhouses on the eastern edge of the assessment area, north of Hartpury. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • There are no non-designated assets recorded by the HER in the wider area that have been identified as particularly 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	susceptible to setting change at this stage.				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> There is part of a SSSI (Oridge Street Meadows) located in the north-easternmost corner of the assessment area. Six Key Wildlife Sites (Rudgeley Wood, Carter's Grove, Hartpury Meadows, Darley Wood, Catsbury Wood and Hartpury, Top Lodge) located in the eastern side of the central region of the assessment area. Four of these are also areas of Ancient Woodland (Carters Grove, Catsbury Wood, Darley Wood) and there is a further area of Ancient Woodland (Mount Oliver Wood) further north-east in the central region of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Large area of Ancient Woodland (Corseleas Brake), which is also Key Wildlife Site and RSPB reserve, around 220m south of the assessment area. 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the areas of floodplain grazing marsh and Ancient Woodland, and adjoining areas of wooded priority habitat are maintained/enhanced</p> <p>A suitable buffer region should be established between any development and the SSSI in the north. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>A small village could potentially be accommodated in the south of the assessment area that would be over 250m from local designations and over 2km from any national designations.</p> <p>Multiple areas of priority habitats are found within the assessment area, including:</p> <ul style="list-style-type: none"> deciduous woodland priority habitat in the central and northern regions of the assessment area. large area of traditional orchard priority habitat in the northern half and further smaller areas on the eastern boundary. Good quality semi-improved grassland in the east (near Woolridge). 	*	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> Ancient Woodland (Deans Coppice) 100m east, which is also a key wildlife site. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Collin Park Wood), which is also Ancient Woodland and GWT reserve around 1.7km north-west of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> There are several IRZs associated with designations in the surroundings that overlap with the assessment area and flag residential development as a potential risk. <p>Minor negative effects may occur for the medium and large development options as these scales of development could potentially be located over 2km from national designations but not over 250m from the Key Wildlife Sites/Ancient Woodland. The effects are reduced to negligible for the small development option as this scale of development could potentially be accommodated within the area at a sufficient distance from national and local designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>	<ul style="list-style-type: none"> A very small area of floodplain grazing marsh extending out from the assessment area to the wider floodplain. And two unspecified priority habitats in the northern area. <p>Several priority habitats are found along the assessment boundary which offer connectivity to wider habitats such as deciduous wood leading to Corseleas Brake Ancient Woodland, the floodplain grazing marsh in the southeast which connects to the wider Severn floodplain, and smaller patches of traditional orchards.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 35ha of land adjacent to the eastern boundary that is grade 2. In addition, floodplain land directly adjacent to the almost the whole of the western and southern boundaries is classified as grade 4.</p> <p>There is potential for development within the assessment area to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is potential for development at all development options to avoid the loss of grade 2 agricultural land as this area is restricted to a relatively small pocket of land on the eastern boundary. However, the majority of land within the assessment area is grade 3 and therefore development has the potential to result in the loss of high quality agricultural land in the majority of the area, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality	<p>There is around 23ha of land within the assessment area adjacent to the eastern boundary that is located within a Drinking Water Safeguarding Zone.</p> <p>However, the majority of the assessment area is located outside this zone and therefore it is considered possible to accommodate each of the development sizes outside this area, resulting in negligible effects for all development sizes.</p>	<p>There is significant potential for development within the assessment area to avoid deterioration in water quality as the area within a water safeguarding zone is restricted to a small pocket of land on the eastern boundary.</p>			
Flood Risk	<p>The majority of the assessment area is greenfield but there are multiple small settlements distributed throughout the</p>	<p>There is potentially sufficient space within Flood Zone 1 either north or south of the</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>area as well as agricultural developments. The A417 passes through the eastern half as well as multiple local roads within the assessment area.</p> <p>There is developable land within the assessment area that is located within Flood Zone 2, which is due to a watercourse bisecting the centre of the area from west to east and watercourses on the southern and western boundaries.</p> <p>However, there is potentially sufficient space to accommodate all development sizes within Flood Zone 1 and therefore negligible effects are anticipated in relation to flood risk.</p>	<p>watercourse that bisects the assessment area to accommodate development at all sizes.</p>			
Mineral Resources	<p>Over 50% of land within the assessment area is located within Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur in relation to mineral resources at the large scale. Negligible effects are anticipated in relation to mineral resources for small and medium scale options as there is potentially sufficient space outside of MSAs to accommodate development.</p>	<p>There is over 200ha of land in the north-east of the assessment area outside of MSAs that could potentially accommodate development at the small and medium scale size options, avoiding the sterilisation of mineral resources. In addition, there is also over 100ha of unsafeguarded land in the east of the assessment area that could potentially accommodate a smaller development.</p> <p>Suitable mitigation may also be possible for a larger development through extraction of mineral resources prior to development.</p>	*		
Noise	<p>The assessment area does not contain any land that is located within an area recognised as having noise levels in</p>	N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours and therefore negligible effects are anticipated for all development sizes.				
Odour	The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.	N/A			
	As such, negligible effects are anticipated in relation to odour.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Distinct rounded hills including Limbury Hill and Catsbury Hill. • Strong rural character with high levels of tranquillity. • Frequent orchards and areas of mixed woodland. • Important historic features including churches and moated sites <p>As such, landscape sensitivity is high under the medium and largest development option sizes as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the smallest development option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

The least sensitive part of the assessment area with respect to the historic environment is near the northern boundary (for a small village development scale) – the remaining parts of the assessment area are highly sensitive with respect to the historic environment. A small village scale development may have reduced adverse impacts on landscape compared to the larger scales, but landscape sensitivity is still considered to be moderate-high in the small village scenario. Oridge Street Meadows SSSI is a key ecological sensitivity in this northern part of the assessment area. Grade 3 agricultural land is prevalent and over 50% of the assessment area is subject to MSAs, although it is not known if the Grade 3 land is 3a or 3b. Impacts on minerals resources can potentially be mitigated.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is adjacent to the A417 which bisects the area running north-south. It provides direct highway links to Hartpury, Ledbury, the Forest of Dean District and Gloucester city centre.</p> <p>The A40 / A417 'Over roundabout' and A40/ B4215 Newent Junction, both to the south of the area, are 'critical junctions' on the county's road network. Modelling undertaken for the JCS Transport Evidence base forecasts that they junction will be required to operate over-capacity, at between 115% and 118% of their design capacity, in the AM peak period respectively, in order to accommodate all predicted vehicle trips.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 48,904</p> <p>A relatively high number of workplaces (jobs) are accessible by public transport in the AM peak, although large sections of the assessment area are currently only served by low frequency public transport services.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 283,690</p> <p>Access from the assessment area to employment by Car scores high, due to the well-connected local road network to key urban centres / employment sites.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that parts of the assessment area along key highway links (A417) are accessible to urban centres and healthcare services by public transport within 20 and 40mins travel time. Education sites are accessible within 20 mins along key highway links. Large parts of the assessment area have poor accessibility to services by public transport.	
Private car use by commuters	% Driving a Car or Van = 64% Car-based mode share for commuter trips accounts for an average of 64% of journeys in LSOAs covered by the assessment area, which is lower than surrounding assessment areas.	
Proximity to sustainable transport networks	The assessment area is outside of the 5km catchment area of a local rail station, however there are several low-frequency bus routes within proximity to the assessment area. The assessment area is also partially located along the existing National Cycle Network, providing sustainable links to Gloucester and further afield to Tewkesbury.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Development of any scale would require significant work to develop a new source or mitigate Water Framework Directive pressures on water resources. Additional work and funding would be required for this but resources unlikely to be available in the next 5 -10 years.			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Electricity	All of site served by Newent Primary Substation which currently has less than 10% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Not proximate to rail stations or lines.			
	Bus transport	Within 500m of existing low frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in increased levels of bus patronage. Improvements to bus accessibility would be needed along A417 and at junction with A40 and higher scales of growth increase likelihood of securing levels of investment needed to deliver necessary bus infrastructure improvements (prospects would be further enhanced if developed jointly with assessment area 25).			
	Cycle transport	Close to existing cycle network although outside of reasonable distance to enable significant increase in cycle trips.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	10,000	10,000	10,000	10,000	25,000	15,000
Viability	Medium	Medium	Medium	Medium	High	Medium

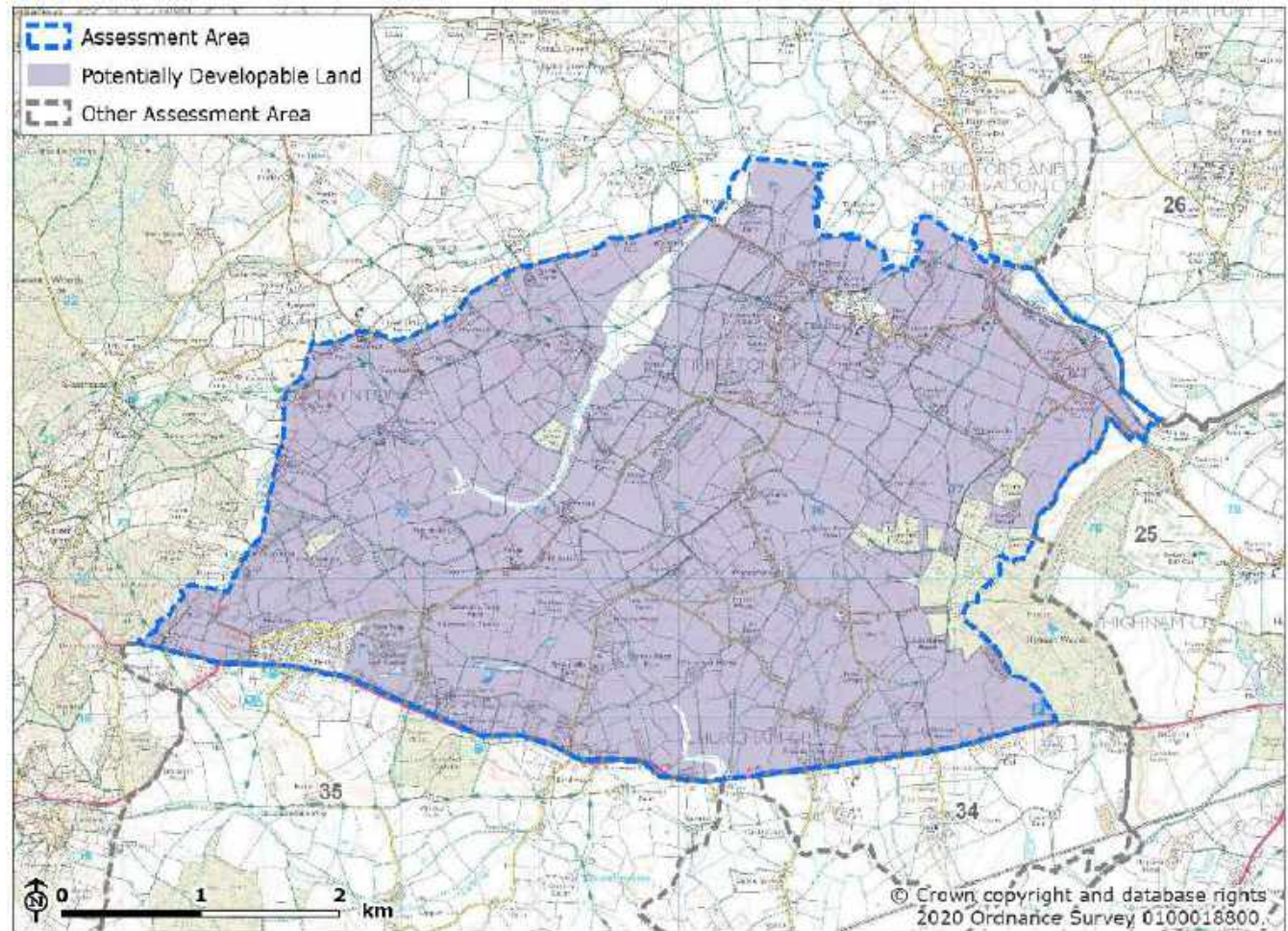
Assessment Area 27 – New Settlement: Land Northwest of Gloucester

Assessment Area Ref: 27

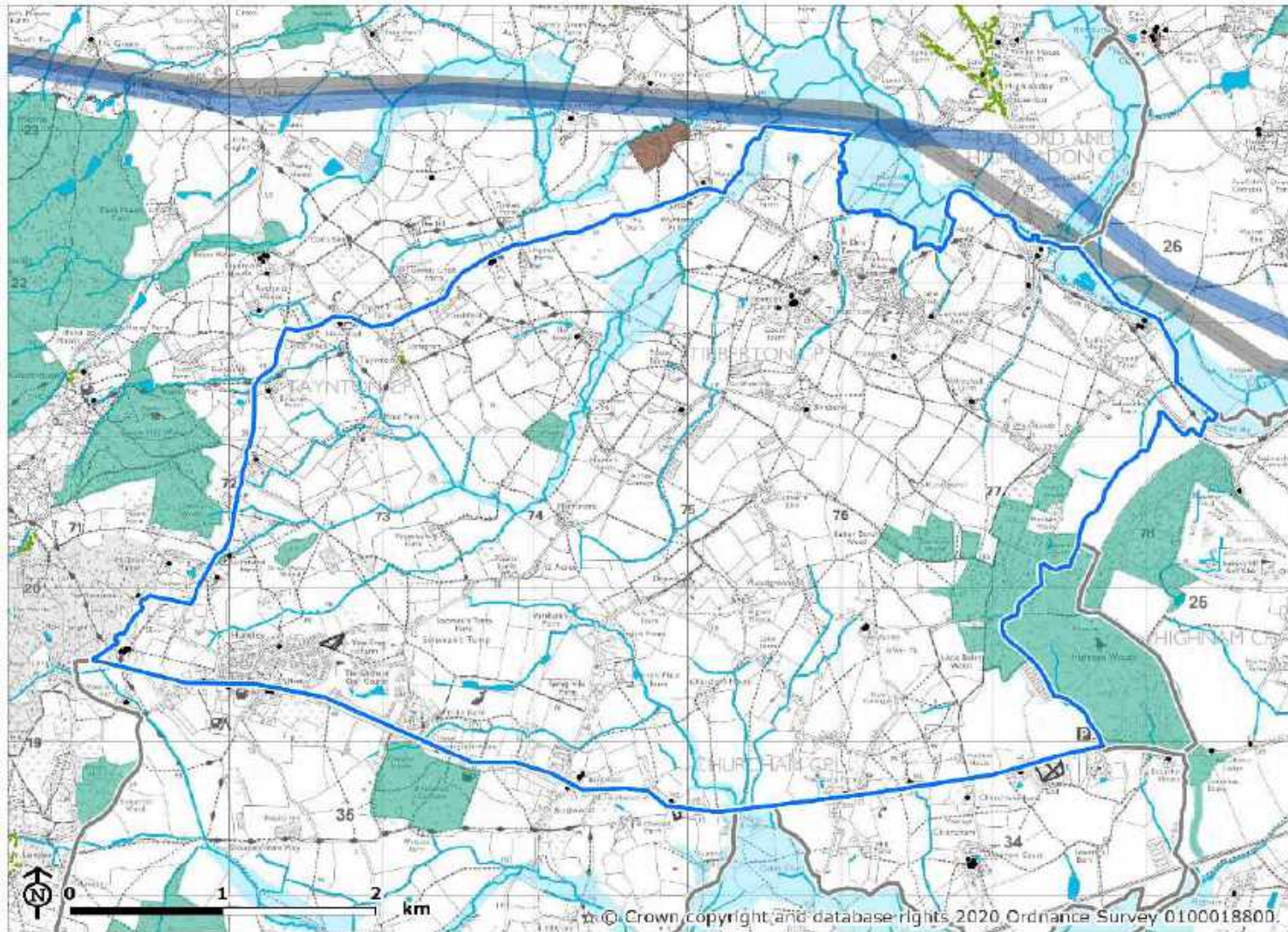
Authority Area: Forest of Dean District

Development Typology: New Settlement

Area: ~1,985ha



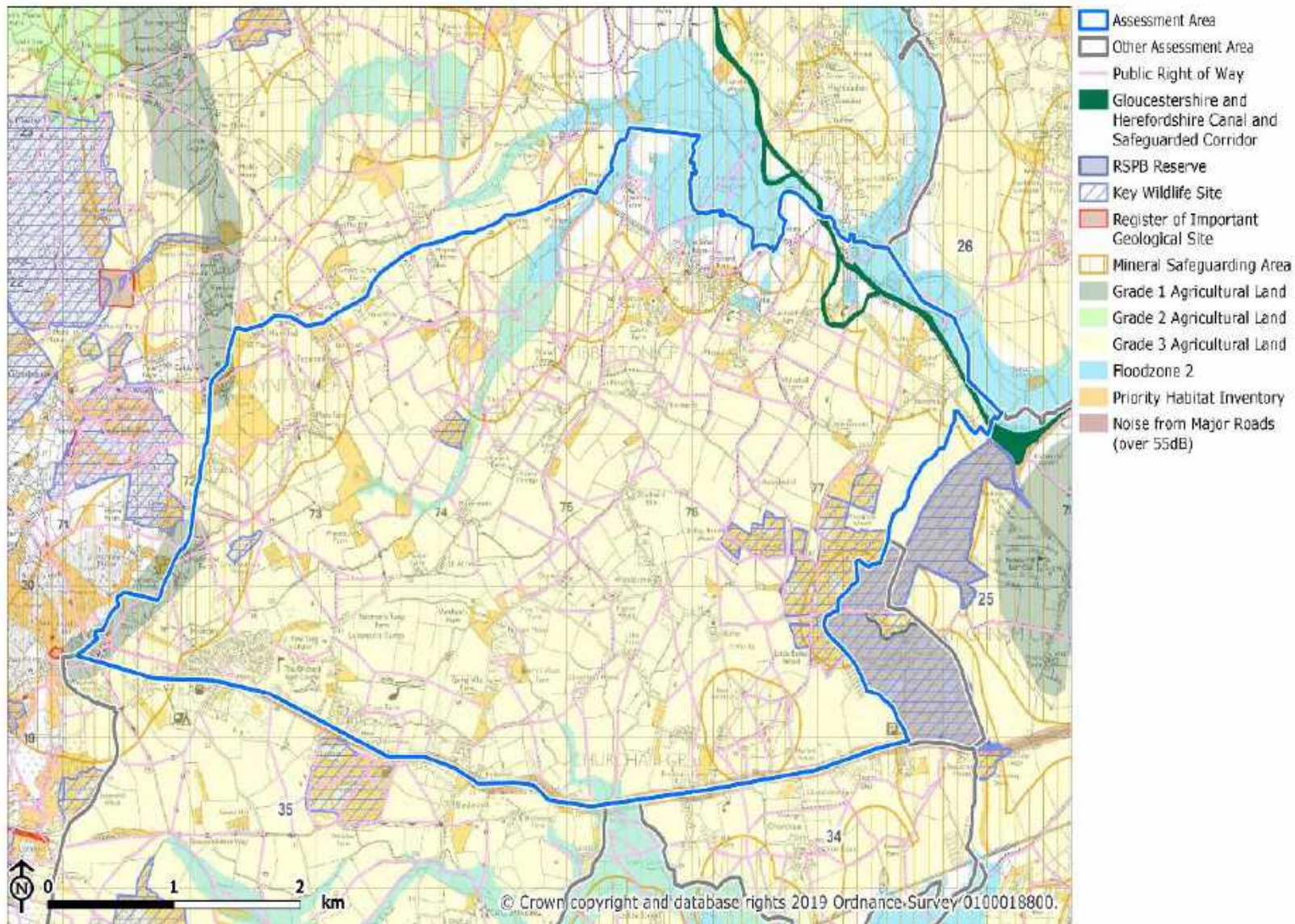
Primary Constraints



- Assessment Area
 - Other Assessment Area
 - Excluded Existing Allocation**
- Primary Constraints**
- Other Assessment Area
 - Water Feature
 - Floodzone 3
 - Listed Building
 - Registered Parks and Gardens
 - Scheduled Monuments
 - Open Access Land (Area 7)
 - Ancient Woodland Inventory
 - 132kV Overhead Line Buffer Zone
 - 400kV Overhead Line Buffer Zone

Note:
 ** For information on all Excluded Areas refer to Table 2.1.

Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 61 listed buildings within the assessment area; these include four grade I listed churches and a grade II* listed church. The remaining grade II listed structures include multiple burial monuments, farmhouses, cottages, agricultural buildings, country houses, houses, schools, war memorials, lampposts, mileposts and a pub. The burial monuments are clustered towards the churches in Huntley, Bulley and Tibberton, while two more are rurally located. The rest of the listed buildings are grouped towards the northern half and west of the assessment area and the settlements in those locations. There are also several along the A40 to the south. <p><i>Non-designated</i></p>	<p>The listed buildings represent the key sensitivities of the assessment area. Many may have settings that contribute to their significance. For example, the churches and country houses have cemeteries or former parkland that is non-designated but due to its association with the designated assets is likely to be of more than local significance.</p> <p>Other non-designated heritage assets that may be of more local than significance include the moated sites, the deserted medieval settlement, and the Civil War sites. Impacts to these assets could therefore result in significant negative effects.</p> <p>The military aircraft site is controlled by the Protection of Military Remains Act 1986. Under this act it is an offence to tamper with, damage, move, or unearth any remains without a licence from the Ministry of Defence.</p> <p>The disused canal is also intended to be reinstated, presenting a constraint to development.</p> <p>There is a large area between Tibberton and Huntley that contains no listed buildings. There are two moated sites in this area at Mote Farm and The Moat Piece, but if these were adequately avoided, it is possible that a large village (at the lower end of the spectrum) might be developed incurring</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • The HER indicates that there are a number of non-designated heritage assets in the assessment area. These include but are not limited to: <ul style="list-style-type: none"> - Possible Late Iron Age settlement at Church Lane, Rudford; - Possible Roman metal working site at Cinders Field, Grove Farm, Taynton; - Site of a Roman building in Tibberton; - Multiple Roman roads; - A moated site at Mote Farm, Taynton, the Moat Piece Taynton, Huntley, and another to the southwest of Churcham House, Churcham; - Morton deserted medieval settlement (exact location unknown); - Site of a Civil War battle, cemetery and 19th century memorial at Barbers Bridge, Rudford; 	<p>minor negative effects to the historic environment.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Medieval reclaimed land; - Civil War earthworks at Rodway Pitch, Highnam; - The sites of several post-medieval buildings; - Extant non-designated historic buildings; - A disused canal; - A post-medieval landscape associated with the grade II listed The Grove; - Various earthworks and cropmarks; - Various hollow ways and trackways; - Multiple charcoal burning platforms; - A WWII crash site, Taynton; - Two turnpike roads. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural landscape interspersed with surviving early woodland, some of which is ancient woodland. The agricultural landscape is 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>comprised of a mix of irregular, less irregular regular and less regular enclosure as well as riverine pasture (now largely enclosed). The irregular and less regular enclosures have some time-depth and value in themselves. They could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are two scheduled monuments in the wider vicinity of the assessment area that both have important strategic locations, meaning that development of the assessment area could affect their significance. • Although there are a number of listed buildings in the wider vicinity of the assessment area most do not appear to have a relationship with it that would be affected in the event of development. Potential 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>exceptions, that may be susceptible to meaningful setting change, include the grade II listed Huntley Manor and the grade II Farmhouse and cheese room at Moorfields.</p> <p><i>Non-designated</i></p> <p>Although there are multiple non-designated heritage assets in the wider vicinity of the assessment area most do not appear to be particularly susceptible to setting change. The possible exception is the Civil War earthworks on Rodway Hill, immediately east of the assessment area.</p>				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> • Large Key Wildlife Site (Highnam Complex) in the west of the assessment area, which is also Ancient Woodland (Corsleas Brake). • Two smaller Key Wildlife Sites are found in the centre of the assessment area (Grove Wood) and close to the western boundary (Great Adam's Wood). These areas are both also areas of Ancient Woodland. 	<p>The assessment area is significantly overlapped by the IRZ of Walmore Common SPA/Ramsar/SSSI. As such it will be necessary to ensure future development proposals do not negatively impact on the notified feature (Bewick's swan) which could use habitats within the assessment area.</p> <p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the large areas of Ancient Woodland, within the eastern part of the assessment areas and to the west of the boundary, are maintained and suitably buffered.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • Key Wildlife Site (Barber’s Bridge) in the north-east of the assessment area. • Registered site of geological importance (Huntley Church Exposure) in the south-westernmost corner. <p>Assets within 250m:</p> <ul style="list-style-type: none"> • Several large Ancient Woodlands are found adjacent to the assessment site, including the rest of Corseleas Brake in the east, Birdwood Coppice in the south, and Castle Hill/Cherry Woods to the west. All three are also designated as Key Wildlife Sites. • The woodland of Corseleas Brake is incorporated within the wider Highnam Woods, which includes a key wildlife site and RSPB Reserve. • Two registered sites of geological importance 200m from the south-western boundary. • Multiple areas of priority habitats are scattered around the boundary of the assessment area. These include traditional orchard around the north, west, and south boundaries (forming 	<p>Small stands of priority habitat in the form of deciduous woods and traditional orchards are scattered across the assessment area. Two large, and one smaller, areas of good quality, semi-improved grassland priority habitat in the western half of the assessment area. With very small pockets of unspecified priority habitats found near Tibberton and Churcham.</p> <p>The networks of priority habitat throughout the assessment area should be maintained/enhanced, with severance of habitats avoided where possible. This will include ensuring that supporting transport infrastructure minimises severance of habitats in the area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>part of a wider mosaic), deciduous woodlands (primarily to the west), and good quality semi-improved grassland to the north (south of Taynton Pound Farm)</p> <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • Ecological SSSI (May Hill) is 1.8 km west of the assessment area. • Geological SSSI (Hobb's Quarry, Longhope) 1.6 and 1.8 km southwest, but their impact zones are very small, not encroaching on the assessment area in any way. • Floodplain grazing marsh ranges from 1.4 to 2 km from the south-eastern boundary of the assessment area. This priority habitat is extensive and closely associated with the River Severn. <p>IRZs:</p> <ul style="list-style-type: none"> • The westernmost tip of the assessment areas falls within an IRZ, which highlights the risk of 50 or more houses outside existing settlements/urban areas. <p>Negligible effects may occur for all development sizes as there is potentially</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	sufficient space to set back these scales of development from ecological assets (over 250m from local designations and over 2km from international/national designations).				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there are two pockets of grade 1 agricultural land on the western boundary, amounting to approximately 27ha.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur for all development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	There is significant potential for development to avoid the loss of grade 1 agricultural land as these areas are restricted to small pockets of land in the west. However, the majority of remaining land in the assessment area is still grade 3 and therefore development has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.	?	?	?
Water Quality	The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are anticipated in relation to water quality.	N/A			
Flood Risk	The majority of the assessment area is greenfield. However, the settlement of Tibberton is located in the north,	There is significant potential for development at all sizes to be located outside of Flood Zone 2 as these areas are restricted to the banks of			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Rudword is located in the north-east, Huntley is located in the south-west and Birdwood and Churcham are also located along the southern boundary. There are multiple local roads and areas of agricultural development throughout the assessment area. In addition, the B4125 passes through the north-eastern corner of the area.</p> <p>There is land to the north of Tibberton that is located within Flood Zone 2, due to the presence of Huntley Tibberton brook, which also flows to the central region of the assessment area with further land in Flood Zone 2 adjacent to it. There is also a smaller area of Flood Zone 2 on the southern boundary of the assessment area.</p> <p>However, there is potentially sufficient space to accommodate all development scales outside of Flood Zone 2 and therefore negligible effects are anticipated for all development sizes.</p>	<p>a watercourse and pockets of land adjacent to the assessment area boundaries. The presence of Flood Zone 2 bisecting half of the assessment area from north to south may restrict a development at the largest size in the western side of the assessment area.</p>			
Mineral Resources	<p>There are pockets of land within Mineral Safeguarding Areas (MSAs) on the western, northern and south-eastern boundaries, amounting to approximately 190ha, 343ha and 64ha respectively.</p> <p>However, the assessment area is large and there is potentially sufficient space to accommodate all development sizes outside of MSAs. As such, negligible</p>	<p>There is a significant amount of land in the central region and adjacent to the southern boundary of the assessment area outside of MSAs that could potentially accommodate development at all sizes, avoiding the sterilisation of mineral resources. It may also be possible to extract mineral resources prior to development.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	effects are anticipated in relation to mineral resources.				
Noise	<p>Land directly adjacent to the southern boundary of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A40.</p> <p>However, there is sufficient space outside of noisy areas for all development scales to be accommodated. As such, negligible effects are anticipated in relation to noise.</p>	There is significant potential for development to avoid being located within noisy areas as this area is restricted to land directly adjacent to the southern boundary of the assessment area. Suitable mitigation may also be possible to overcome any noise related issues.			
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are expected in relation to odour.</p>	N/A			

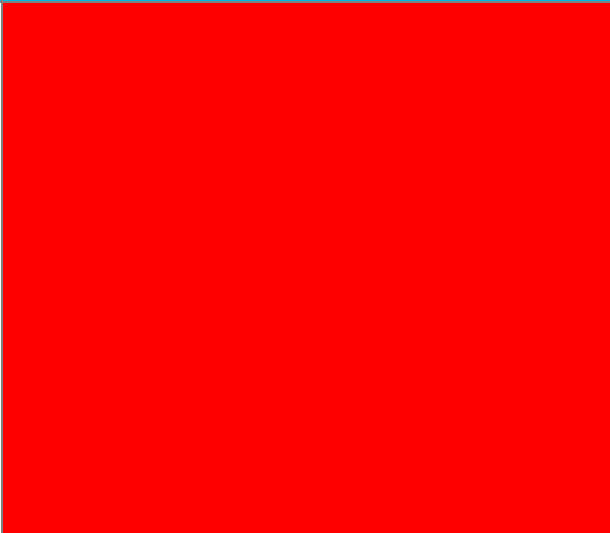


Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Wooded character with frequent orchards and blocks of mixed woodland (including some ancient woodland). • Narrow rural lanes. • Intact rural character with few modern intrusions <p>As such, landscape sensitivity is high for the medium and largest development sizes as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the smallest development size as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

The assessment area contains a large amount of land that is unaffected by the majority of constraints. The central region of the area between Tibberton and Huntley is free largely from constraints apart from grade 3 agricultural land, but it is not known whether it is grade 3a or the lower quality grade 3b. A small or large village between Tibberton and Huntley may only incur minor negative effects upon the historic environment of the area. In addition, any development would need to avoid the multiple pockets of designated woodland (some ancient) that are scattered throughout the area. In the southern half of the assessment area consideration would need to be given to suitable mitigation in relation to Walmore Common SSSI. Development at the smallest end of the spectrum may have reduced adverse impacts on landscape character compared to the larger scale development scenarios; however, this is still considered to be moderate to high under the small village scenario.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected via the A40 (South), B4215 (East) and B4216 (West), providing strategic links to Gloucester, Newent and the Forest of Dean District.</p> <p>The JCS Transport Evidence base modelling shows three 'critical junctions' (the A40 / A417 'Over roundabout', A40/ B4215 Newent Junction, and A40/ A48 Highnam Roundabout) adjacent to the east of the assessment area.</p> <p>The JCS modelling work's Do Nothing and Do Minimum model tests forecast that the A40 'Over Roundabout' junction will be required to operate beyond its design capacity in 2031 (at between 115% and 117% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ B4215 Newent Junction will operate over its design capacity in 2031 (at between 115% and 118% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Similarly, the modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ A48 Highnam Roundabout will operate over its design capacity in 2031 (at between 135% and 140% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 6,963</p> <p>Due to the proximity of the assessment area from a high-frequency public transport services, access to workplaces (jobs) by public transport scores low. An hourly public transport service currently serves some parts of the assessment area; connecting Gloucester, Newent and Ledbury.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 273,373</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the assessment area's proximity to the strategic road network.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that some educational sites located along the key highway links (A40 and B4215) are accessible by public transport within 20 mins, whilst urban centres / healthcare facilities are accessible between 20 and 40 mins travel time from the assessment area located along the key highway links (A40 and B4215). The remainder of the assessment area has poor public transport accessibility.	
Private car use by commuters	% Driving a Car or Van = 73% Car based mode share for commuter trips accounts for an average of 73% of journeys in LSOAs covered by the assessment area, reflecting the area's proximity to the strategic road network. Further enhancements to public transport services, as part of any development proposals, would likely improve mode share and mitigate additional trips on the network.	
Proximity to sustainable transport networks	The assessment area is outside of the 5km catchment area of Gloucester Rail Station and is divorced from the existing National Cycle Network. A number of low-frequency bus services provide links to Gloucester city centre and the Forest of Dean District, but enhanced public transport provision is expected to be needed in order to sustainably accommodate future development in the area.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Development of any scale would require significant work to develop a new source or mitigate Water Framework Directive pressures on water resources.			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
		Additional work and funding would be required for this but resources unlikely to be available in the next 5 -10 years.			
	Electricity	Part of site served by Newent Primary Substation which currently has less than 10% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Not proximate to rail stations or lines.			
	Bus transport	Within 500m of existing low frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in increased levels of bus patronage. Improvements to bus accessibility would be needed along A417 and at junction with A40 and higher scales of growth increase likelihood of securing levels of investment needed to deliver necessary bus infrastructure improvements.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	10,000	10,000	10,000	10,000	25,000	15,000
Viability	Medium	Medium	Medium	Medium	High	Medium

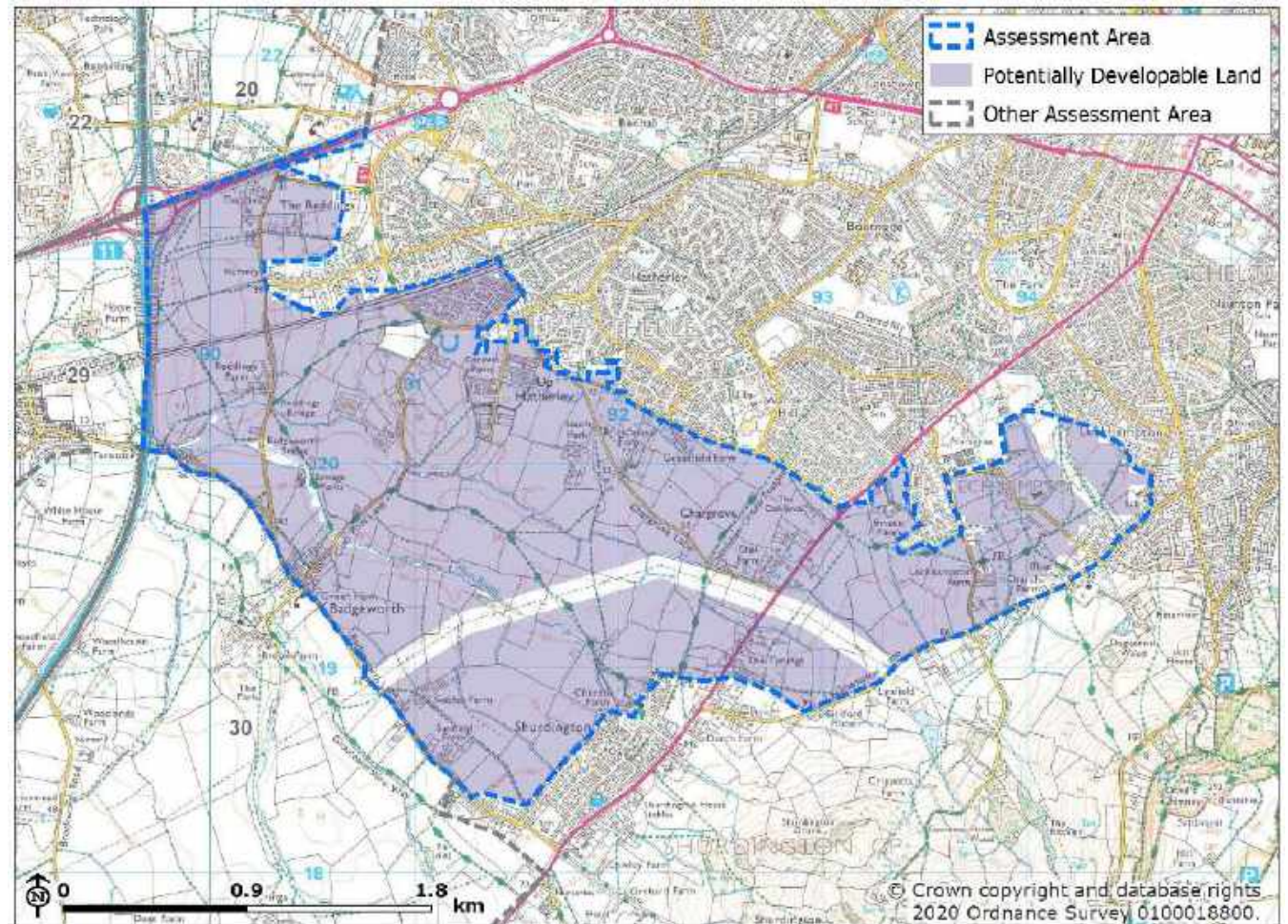
Assessment Area 28 – Urban extension: Southwest of Cheltenham

Assessment Area Ref: 28

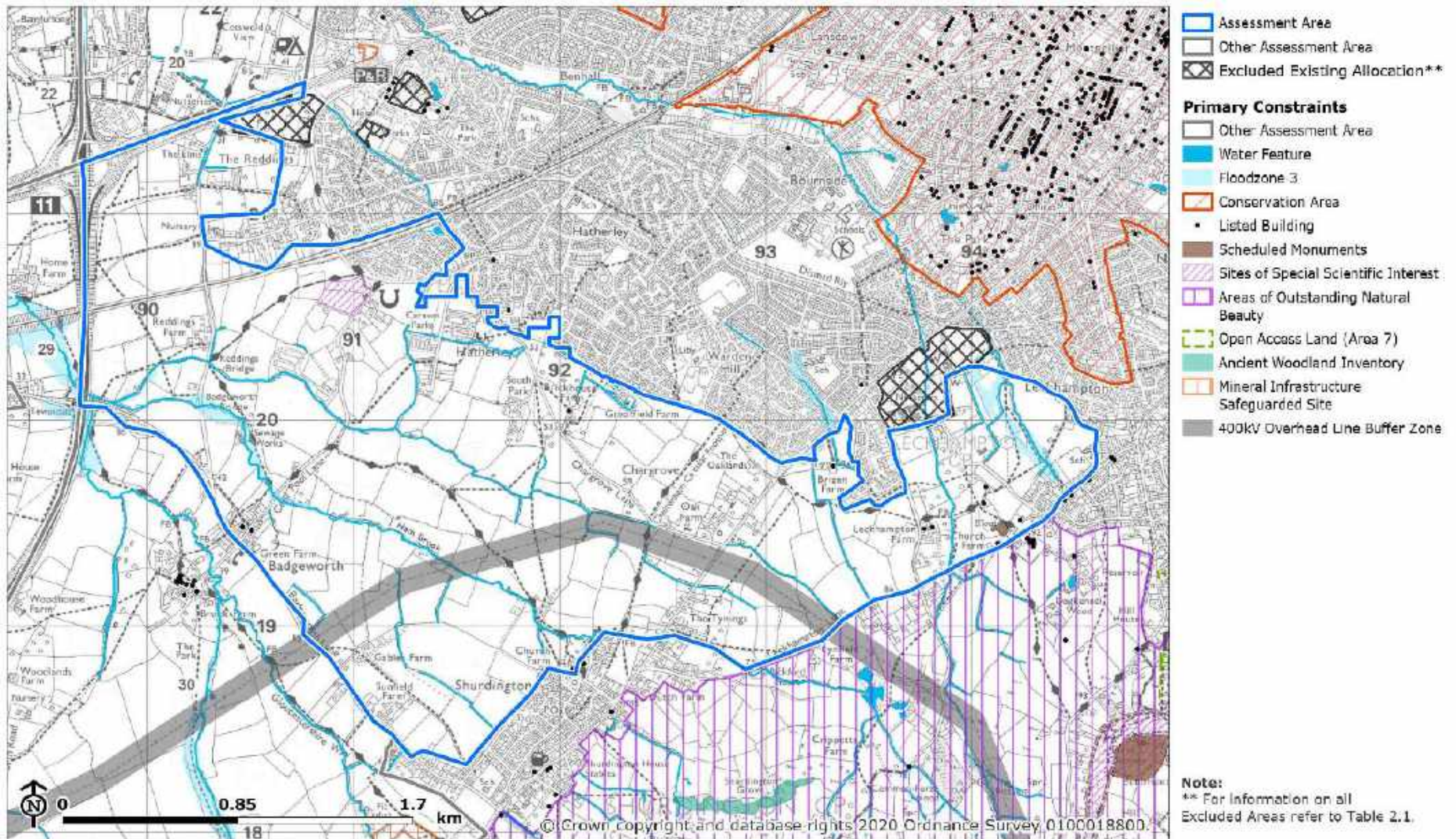
Authority Area: Tewkesbury Borough and partially Cheltenham Borough

Development Typology: Urban Extension

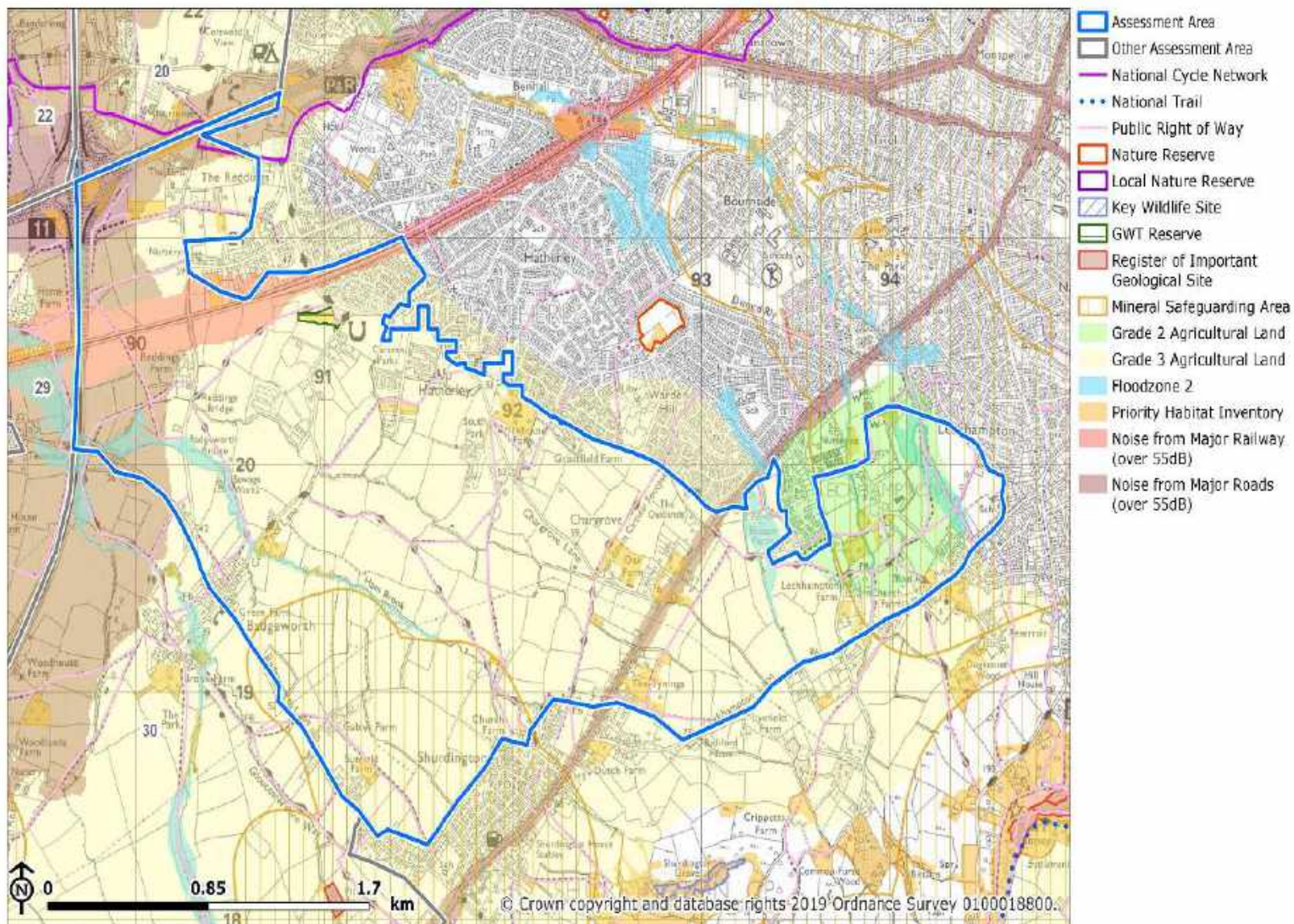
Area: ~675ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There is a Scheduled Monument – a moated site and fishponds at Church Farm- in the east of the assessment area. There are 12 grade II listed buildings within the assessment area. These are clustered near Badgeworth and to the east of the assessment area with outliers at Up Hatherley and Shurdington. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a very large number of assets within the assessment area. These include but are not limited to: <ul style="list-style-type: none"> Several locally listed buildings at Leckhampton and near the Reddings. A prehistoric burial; Roman settlements at Brizen playing field and 	<p>The listed buildings are key sensitivities. Most are agricultural buildings that – in the event of development - could be harmed as a result of setting change. The historic rural settlements that buildings typically form part of are also sensitive to development. Leckhampton has already coalesced with Cheltenham to some extent, but Shurdington and Badgeworth remain separate. New development should be planned to maintain their separation.</p> <p>The scheduled monument at Leckhampton is an area of high sensitivity to physical change; it is likely to be less sensitive to setting change.</p> <p>None of the known archaeological assets are immediately apparent as absolute constraints to development, but they would require further investigation and physical effects would need to be mitigated.</p> <p>Taking the above sensitivities into account effects to the historic environment would be best avoided/ minimised by limiting development to the northwest of the assessment area; in the centre of the assessment area - to the area southeast of Brickhouse Farm and north of Shurdington Road - and potentially to the east of the assessment area - north of Kidnappers Lane. These areas could accommodate a large extension and in theory only result in a minor negative effect.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Brizen farm, and field systems at Leckhampton and Shurdington.</p> <ul style="list-style-type: none"> - Medieval settlement at Brizen Farm and other features such as hollow ways and ditches. - Extensive ridge and furrow earthworks across the area; - Possible site of a civil war battle at Padsworth; - Multiple WWII sites including anti-aircraft batteries and military camps. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates an agricultural landscape comprised primarily of irregular and less irregular enclosures. These have some time-depth and value in themselves but could also feature hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. 				