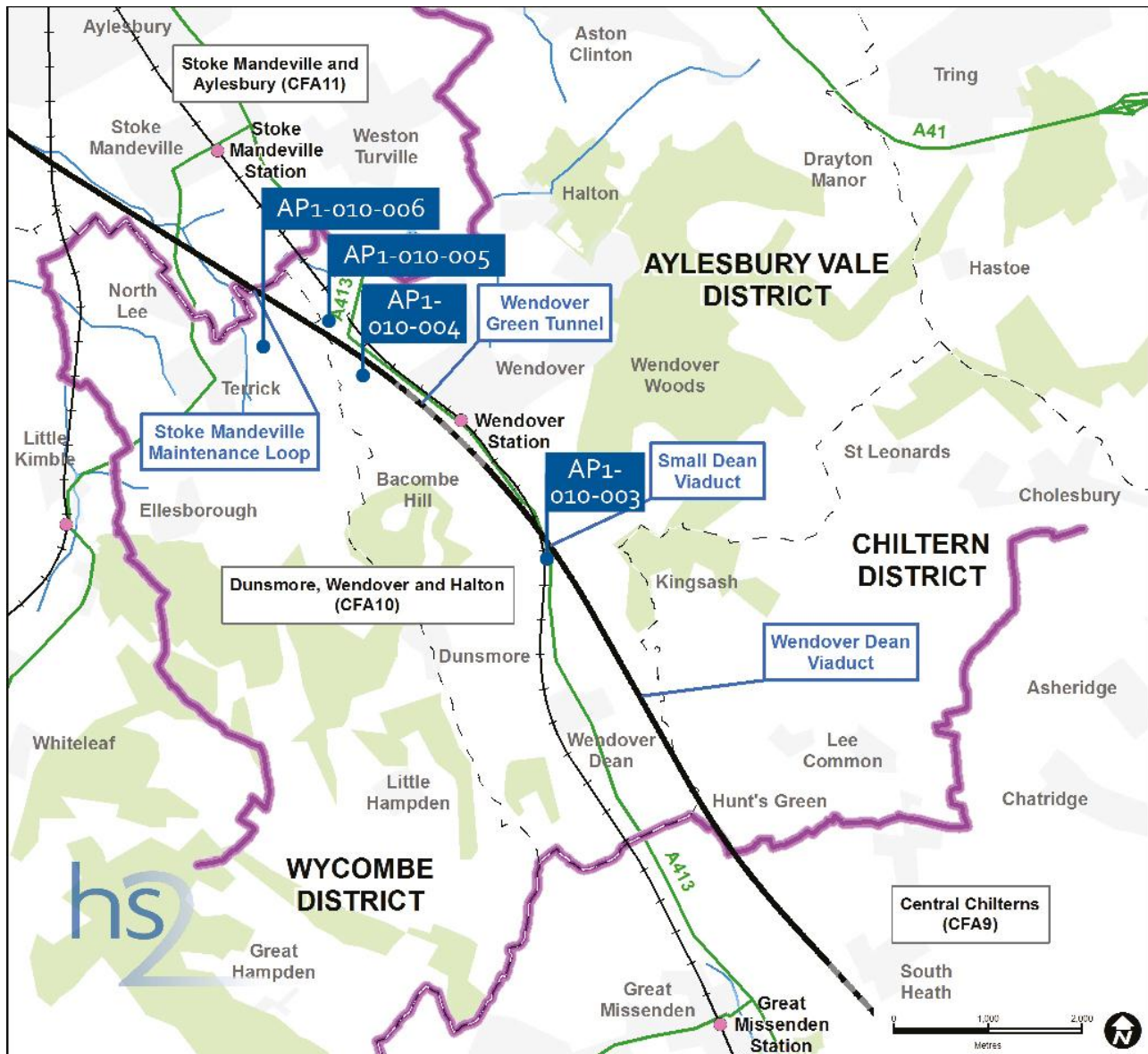


# CFA10, Dunsmore, Wendover and Halton

## 5 Overview of the amendments

5.1.1 Table 3 provides a summary of the amendments in the Dunsmore, Wendover and Halton community forum area (CFA10) and Figure 4 shows the locations.

Figure 4: Locations of amendments in the Dunsmore, Wendover and Halton area



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Table 3: Summary of amendments in the Dunsmore, Wendover and Halton area (CFA10)

CFA	Amendments	Description of the original scheme	Description of the revised scheme
10	Additional land required for utility works and access to the south of Small Dean Lane  AP1-010-003	The temporary reconductoring (i.e. re-stringing of overhead power lines) as part of the works to realign the 400kV overhead power lines 50m to the south of their existing route south of Wendover.	Additional land is required temporarily to erect scaffolding to support netting over the Marylebone to Aylesbury Line in order to undertake the reconductoring works. Additional land is also required temporarily for a working area to undertake the reconductoring works to the pylon south of Small Dean Lane.
10	Additional land required for utility works to the north of Wellwick Farm  AP1-010-004	The temporary diversion, 70m to the south, of the existing 400kV overhead power line, with permanent reinstatement along its existing alignment west of Wendover.	The amendment relates to additional land required temporarily for a working area to undertake the works to one temporary pylon to the north of Wellwick Farm.
10	Change to land required for reconfiguration of road layout of Nash Lee Lane and HS2 maintenance access  AP1-010-005	The permanent realignment of Nash Lee Lane and junction with B4009 Nash Lee Road and provision of a junction for maintenance access to the original scheme.	The road layout requires additional land to reconfigure the junction and an amendment on the Bill plans and in the Bill to the description of the work. The Nash Lee Lane access from the B4009 Nash Lee Road has been realigned, providing a gentler curve and flatter gradient. A reconfigured 'T'-junction off Nash Lee Lane will provide safer maintenance access to the original scheme. Maintenance access to the adjacent balancing pond has been relocated. An area of agricultural land south-east of Nash Lee Lane has also been removed from the Bill to allow access between fields adjacent to The Hollies, a residential property.
10	Additional land to erect temporary scaffolding over B4009 Nash Lee Road  AP1-010-006	The temporary diversion, 70m to the south, of existing 400kV overhead power lines and pylons, with permanent reinstatement along its existing alignment west of Wendover.	Additional land to erect temporary scaffolding to support netting over B4009 Nash Lee Road and for additional working area to reconductor the overhead power lines along their existing alignment.

## 6 Additional land required for utility works and access to the south of Small Dean Lane (AP1-010-003)

### 6.1 Overview of amendment

- 6.1.1 The Bill provides land for the permanent realignment, 50m to the south of the existing alignment, of the 400kV overhead power line and pylons to the west of Small Dean Viaduct (refer to the main ES map CT-05-37 in the main ES Volume 2, CFA10 Map Book). Since submission of the Bill, a requirement has been identified for an additional 0.5ha of land to temporarily erect scaffolding to support netting over the Marylebone to Aylesbury Line to allow the reconductoring (i.e. restringing of the overhead power lines) work to be undertaken safely. An additional area of approximately 0.3ha of land is also required temporarily for a working area around a pylon (see grid reference E7, AP map CT-05-37 in AP ES Volume 2, Map Book Part 1 of 6) which lies immediately to the west of this railway and to the south of Small Dean Lane. The additional land required is outside the original limits of the Bill, hence the need for this amendment.
- 6.1.2 The ground will be prepared before the scaffolding is erected, vegetation will be cleared where necessary and topsoil stripped within the working area and temporarily stored adjacent to the working area for later re-use. The scaffolding will take approximately one to two months to erect. It will be constructed beneath the existing overhead power line that crosses the Marylebone to Aylesbury Line, to protect the railway.
- 6.1.3 The reconductoring involves taking the overhead power line down and replacing it between the existing pylons using winches and a work platform.
- 6.1.4 In the original scheme, a corridor of land 50m wide along the centre line of the conductor route was required. Vegetation will be cleared as necessary to maintain a safe working area and to prevent the conductor being damaged during reconductoring. The scaffolding will extend from above the Marylebone to Aylesbury Line railway to the highest conductors on the pylons. Earthing will be undertaken at all pylons being worked on and three pylons back from the winching pylon. The total duration of the works within the land required for the amendment will be approximately six months. Topsoil will be reinstated at the end of the works.
- 6.1.5 The revised land requirements and restringing are not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: air quality; community; land quality; sound, noise and vibration; socio-economics; traffic and transport; and water resources and flood risk assessment. However there were changes where reassessment was considered to be required in respect of: agriculture, forestry and soils; cultural heritage; ecology; and landscape and visual assessment.

## 6.2 Agriculture, forestry and soils

### Scope, assumptions and limitations

- 6.2.1 The assessment scope, key assumptions and limitations for agriculture, forestry and soils are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. On completion of the works, the land required for the amendment will be restored to its former agricultural use.

### Environmental baseline

#### *Existing baseline*

- 6.2.2 The additional area of land affected has soil in the Charity 2 association and comprises well drained (Wetness Class I (WC)<sup>6</sup>) silty loam soils developed in flinty chalky drift, as described in the main ES (see Volume 2, CFA Report 10, Dunsmore, Wendover and Halton, Section 3). The quality of the agricultural land affected is assessed as Subgrade 3a.
- 6.2.3 Two holdings already affected by the original scheme would be further affected by the amendment, namely CFA10/7 (Road Barn Farm) and CFA10/10 (Grove Farm). Road Barn Farm is a 28ha grassland unit that will be affected by demolition and will lose the farmhouse and farm buildings as a result of the original scheme, along with approximately 10.3ha of agricultural land, or 37% of the holding. The effect was reported as moderate adverse in the main ES, since the holding is considered to have a low sensitivity to change.
- 6.2.4 Grove Farm is an 89ha grassland farm used for rearing dairy heifers. It is considered to be of medium sensitivity to change. The main ES reported a minor adverse effect during construction due to an area of land required temporarily for the original scheme of approximately 7.9ha, or 9% of the holding, reducing to a negligible effect once the agricultural land required during construction is restored.

### Effects arising during construction

- 6.2.5 The temporary requirement for an additional area of approximately 0.8ha of agricultural land in Subgrade 3a does not change the significance of the effect on best and most versatile (BMV) agricultural land (Grades 1, 2 and 3a) reported in the main ES (i.e. moderate adverse).
- 6.2.6 Road Barn Farm is considered to be of low sensitivity to change since it is a small holding that does not rely on the availability of land for its commercial viability. The temporary requirement for approximately 0.3ha for the working area around the pylon will add to the overall impact of the original scheme but will not alter the significance of effect (moderate adverse).
- 6.2.7 The additional area of land temporarily required from Grove Farm for the revised scheme is approximately 0.5ha for the scaffolding. This will marginally increase the percentage of the holding required during construction by 0.6%. This land requirement is still assessed as a temporary impact of low magnitude, giving a minor adverse temporary effect during construction.

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<sup>6</sup>The Wetness Class of a soil is classified according to the depth and duration of waterlogging in the soil profile and has six bands.

## Effects arising from operation

- 6.2.8 There are no additional impacts to agriculture, forestry and soil receptors during the operation of the scheme.

## Mitigation and residual effects

- 6.2.9 The land required temporarily for construction would be restored to its former agricultural use once the works are completed. The soil handling will involve stripping, storing and reinstating topsoils on land required for the temporary works, following best practice guidance for handling soil set out in the draft Code of Construction Practice (CoCP). Therefore, it is predicted that there will be no residual effects to agriculture, forestry and soil receptors as a result of the additional works required for the revised scheme.

## 6.3 Cultural heritage

### Scope, assumptions and limitations

- 6.3.1 The assessment scope, key assumptions and limitations for cultural heritage are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 6.3.2 It is assumed that topsoil will be removed, as a minimum, for scaffolding areas around each pylon and that all archaeological remains and earthworks within the footprint of the amendment will be removed or disturbed.
- 6.3.3 Information on the potential archaeological remains at this location is based on desk based research (sources including the historic environment record (HER), historic maps and aerial photographs) and non-intrusive surveys comprising LiDAR<sup>7</sup> and hyperspectral survey.

### Environmental baseline

#### *Existing baseline*

- 6.3.4 The revised scheme will be constructed close to but outside of the boundary of heritage assets of low significance, associated predominantly with post-medieval or modern agricultural activity. Such assets include the farm complex at Road Barn Farm (asset reference DWH082) and a series of field boundaries (e.g. asset reference DWH068).
- 6.3.5 The part of the revised scheme closest to the farm complex lies approximately 40m to the west. The part of the revised scheme closest to the western end of the field boundary mentioned above is approximately 140m to the north-west. A railway overbridge (DWH151) and a roadside milestone (DWH071) are also in the area, located approximately 170m and 300m, respectively, away from the boundary of the revised scheme.
- 6.3.6 The baseline resources are as described in the main ES (see CFA Report 10, Section 6 and Volume 5 Appendix CH-001-010).

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<sup>7</sup>Light detection and ranging (LiDAR) is a high resolution remote sensing technique to capture 3D data.

### Effects arising during construction

- 6.3.7 The revised scheme does not change the results of the assessment or mitigation as set out in the main ES with respect to cultural heritage as it does not encroach onto any of the heritage assets previously identified or alter their settings.

### Effects arising from operation

- 6.3.8 As the additional land is only needed temporarily for the pylon works there will be no operational effects.

### Mitigation and residual effects

- 6.3.9 There will be no change to the mitigation and classification of residual effects reported in Volume 2 of the main ES.

## 6.4 Ecology

### Scope, assumptions and limitations

- 6.4.1 The assessment scope for ecology is as set out in Volume 1 of the AP ES. The key assumptions and limitations, and the methodology for determining significance of effects are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 6.4.2 The land required for the amendment is bordered by land already within the limits of the Bill which has been subject to desk-based ecological investigations as well as field survey and assessment for flora and fauna.
- 6.4.3 The ecological baseline of the land required for the amendment has therefore been based on field data collated for the main ES on land required for the amendment and adjacent land, aerial photography and relevant existing information gathered from national organisations and from regional and local sources including: Buckinghamshire and Milton Keynes Environmental Records Centre; Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust; Chilterns Conservation Board; North Bucks Bat Group; Berkshire and South Buckinghamshire Bat Group; Buckinghamshire Bird Club; and Buckinghamshire Amphibian and Reptile Group.
- 6.4.4 To address any limitations in data, a precautionary baseline has been considered, according to the guidance reported in the main ES Volume 5: Appendix CT-001-000/2. This constitutes a 'reasonable worst case' basis for the subsequent assessment.
- 6.4.5 The precautionary approach to the assessment that has been adopted identifies the likely significant ecological effects of the amendment.

### Environmental baseline

- 6.4.6 A summary of the baseline information relevant to the assessment of the amendment is provided below. For those receptors described in the main ES, further details are provided in the main ES Volume 2, CFA10, Section 7.3 and in Volume 5, including Maps EC-01 to EC-12, Ecology Map Book.

### *Designated sites*

- 6.4.7 The grassland at Wendover Rifle Range Biological Notification Site (BNS) (1.8ha) is located approximately 180m north-west of the land required for the amendment. The grassland at Wendover Rifle Range BNS is predominantly species-rich grassland and is of county/ metropolitan value, as reported in the main ES.
- 6.4.8 There are no other statutory designated nature conservation sites or ancient woodland within 500m of the land required for this amendment or otherwise relevant to the assessment. Statutory and non-statutory designated sites are described in the main ES, Volume 2, CFA10, Section 7 and are shown on the main ES Maps EC-01-019 to EC-01-021a, Volume 5, Ecology Map Book.

### *Habitats*

- 6.4.9 The land required for the amendment to the west of the Marylebone to Aylesbury Line comprises a small area of semi-natural broad-leaved woodland, scattered trees and shrubs and an area of semi-improved neutral grassland. These habitats are assessed as part of the woodland, scrub and grassland receptors which are each reported in the main ES as being of local/parish value. The land to the east of the Marylebone to Aylesbury Line that is required for the amendment is predominantly arable and cultivated land and is assessed as part of the arable and cultivated land evaluated in the main ES as being of local/parish value.
- 6.4.10 Habitats surrounding the land required for the amendment are described in the main ES, Volume 2, CFA10, Section 7 and are shown on the main ES Maps EC-03-059b to EC-03-067, Volume 5, Ecology Map Book.

### *Protected and/or notable species*

- 6.4.11 As reported in the main ES, a number of bat populations, ranging from local/parish to county/metropolitan value, were recorded as using the wider landscape for foraging and commuting. The soprano pipistrelle population associated with habitats around Grove Farm is relevant to the assessment of the amendment. It is located approximately 500m north-west of land required for the amendment. Due to the presence of suitable broad-leaved woodland habitat within the amendment area, it is likely that the soprano pipistrelle population will utilise areas of land within this area for commuting and foraging. This bat population is assessed in the main ES as being of local/parish value.
- 6.4.12 Reptile populations on land within and around Wendover Rifle Range BNS are up to county/metropolitan value as reported in the main ES. Land required for the amendment may contain grassland habitat suitable for reptiles. If present, reptiles on land required for the amendment are likely to be part of the reptile populations on land within and around Wendover Rifle Range BNS.
- 6.4.13 Locations of species records are illustrated in the main ES on Maps EC-01 to EC-12, Volume 5, Ecology Map Book.

## Effects arising during construction

### *Avoidance and mitigation measures*

6.4.14 There are no specific measures included as part of the revised scheme to avoid or reduce impacts to features of ecological value on the land required for the amendment.

6.4.15 The assessment assumes implementation of the draft CoCP.

### *Designated sites*

6.4.16 The amendment will result in no impacts on sites designated for nature conservation or ancient woodland. There will be no change to the effects reported in the main ES.

### *Habitats*

6.4.17 The main ES identified semi-natural broadleaved woodland, shrubs and semi-improved neutral grassland within the land required for the amendment, the loss of which was reported in the main ES as an adverse effect on each receptor at the local/parish level. The extent of additional habitat loss (approximately 0.5ha of arable land on Grove Farm and approximately 0.3ha of grassland with scrub and scattered trees on Road Barn) associated with the construction activities for the amendment is unlikely to result in any change to the level at which these effects are significant.

### *Species*

6.4.18 The main ES concludes that no likely significant effects are expected on the soprano pipistrelle population. The extent of habitat loss associated with the construction activities for the amendment (approximately 0.5ha of arable land on Grove Farm and approximately 0.3ha of grassland with scrub and scattered trees on Road Barn Farm) is unlikely to result in any additional effects that would be significant. Since extensive foraging sites will be retained as part of the revised scheme, the loss of habitat is unlikely to result in an adverse effect on the conservation status of the population and there will be no change to the conclusion of the main ES.

6.4.19 The main ES concludes that the original scheme would result in a permanent adverse effect on reptile populations in the vicinity of the Wendover Rifle Range BNS, significant at up to county/metropolitan level. While the scale of habitat loss will increase by approximately 0.3ha as a result of the amendment, there will be no change to the likely significant effect reported in the main ES.

### *Mitigation and residual effects*

6.4.20 The assessment assumes implementation of the draft CoCP.

### **Other mitigation measures**

6.4.21 No additional or different mitigation is required for the amendment.

### **Residual effects**

6.4.22 The amendment will result in no change in the residual likely significant effects reported in the main ES.



## Effects arising from operation

- 6.4.23 There are no new or different operational effects for ecology as a result of the proposed amendment.

## 6.5 Landscape and visual assessment

### Scope, assumptions and limitations

- 6.5.1 The assessment scope, key assumptions and limitations for the landscape and visual assessment are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

### Environmental baseline

#### *Existing baseline*

- 6.5.2 The amendment is located within Wendover Gap landscape character area (LCA) and the potential direct effects will be limited to this LCA. The baseline resources are as described in the main ES (Volume 2, CFA Report 10, Section 9.3). Indirect effects on the setting of the adjacent LCA are not anticipated since the revised scheme will not introduce construction activities that are substantially different to those assumed for the original scheme. This amendment is also located within the Chilterns Area of Outstanding Natural Beauty (AONB), the baseline resources for which are described in the main ES (Volume 3, Route-wide effects, Section 2).
- 6.5.3 The landscape around the amendment features a number of visual receptors including residential, recreational and transport receptors. Views east from dwellings on Small Dean Lane (Viewpoint 101.2.004, in the main ES Volume 5, Appendix LV-001-010) overlook the revised scheme from a distance of approximately 500m. The existing view from this location is of a valley with arable farmland on the lower slopes and mature deciduous woodland on the escarpment top. The valley floor has views of the A413, residential properties lining the A413 and the Marylebone to Aylesbury Line. In addition, the overhead power lines and pylons are visible across the middle- and background of the view. The full baseline is described in the main ES, Volume 2, CFA Report 10.

### Assessment of temporary impacts and effects

- 6.5.4 The revised scheme will not introduce construction activities that are substantially different to those for the original scheme. The revised scheme will necessitate additional vegetation removal (up to 0.2ha) along the Marylebone to Aylesbury Line and the introduction of scaffolding and netting for a short period. However, this will not alter the major adverse effect reported for the Wendover Gap LCA or the Chilterns AONB in the main ES.
- 6.5.5 Construction activities associated with the amendment, including scaffolding and vegetation removal, will be clearly visible for a short period in the middle ground of views from viewpoint 101.2.004 (main ES, Volume 5, Appendix: LV-001-010), in front of the Marylebone to Aylesbury Line. However, this will represent a barely perceptible increase to the vegetation removal assessed for the original scheme, and will therefore, not alter the major adverse effect reported in the main ES.

## Permanent effects arising during operation

- 6.5.6 The additional loss of vegetation caused during construction will represent a barely perceptible change to landscape character and visual receptors during operation, particularly in the context of the wider vegetation loss and effects already reported in the main ES. Therefore, the amendment will not alter the operational effects reported in the main ES which are moderate adverse, Year 15 and minor adverse, year 60.

## Mitigation and residual effects

- 6.5.7 No mitigation is considered necessary for this amendment. The mitigation and residual effects will remain as reported in the main ES.

## 6.6 Summary

- 6.6.1 The use of the additional land for utility works and access to the south of Small Dean Lane does not change the significance of the environmental effects or proposed mitigation as set out in the main ES (Volume 2, CFA Report 10, Dunsmore, Wendover and Halton).

# 7 Additional land required for utility works to the north of Wellwick Farm (Amendment AP1-010-004)

## 7.1 Overview of amendment

- 7.1.1 The Bill provides for the temporary diversion, 70m to the south, of the existing 400kV overhead power lines and pylons west of Wendover, with permanent reinstatement along its existing alignment (refer to main ES map CT-05-039 in main ES Volume 2, CFA10 Map Book). Since submission of the Bill, a requirement has been identified for additional land to erect a temporary pylon south of the A413 Nash Lee Road (see AP map CT-05-039 in AP ES Volume 2, Map Book Part 1). An additional area of approximately 0.3ha of land is required around the pylon as an additional working area. The additional land needed to meet this requirement is not included within the Bill, hence the need for this amendment. The works will require the stripping of vegetation and removal of topsoil. The works are currently planned to start in spring 2018 and are expected to take approximately one year to complete. Topsoil will be temporarily stored adjacent to the working area and will be used to reinstate the area once construction is complete.
- 7.1.2 The temporary use of this additional land is not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: air quality; community; land quality; socio-economics; and traffic and transport. This amendment is located on the western edge of the Chilterns AONB, however a reassessment of effects or proposed mitigation is not considered necessary for landscape and visual effects, since the baseline resources and predicted effects will remain as described in the main ES (Volume 3, Route-wide effects, Section 2). However, there were changes where reassessment was considered to be required in respect of: agriculture, forestry and soils; cultural heritage; ecology; sound, noise and vibration; and water resources and flood risk assessment.

## 7.2 Agriculture, forestry and soils

### Scope, assumptions and limitations

- 7.2.1 The assessment scope, key assumptions and limitations for agriculture, forestry and soils are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. On completion of the works the land required for the amendment will be restored to its former agricultural use.

### Environmental baseline

#### *Existing baseline*

- 7.2.2 The area of land required for the amendment has soil in the Wantage 1 and Block associations, as described in the main ES (Volume 2, CFA Report 10, Section 3). Wantage 1 soils comprise well drained (WC I) silty clay loam soils developed over chalk. Block soils are moderately well drained (WC II) and comprise clay loam and sandy clay loam profiles. The quality of land affected is assessed as Grade 2 to Subgrade 3a.
- 7.2.3 Wellwick Farm (CFA10/12), already affected by the original scheme, will be further affected by this amendment. Wellwick Farm is an 81ha arable and equestrian unit that is considered to be of medium sensitivity to change. The main ES reported a major/moderate adverse effect during construction due to an area of land loss of 25.6ha or 32% of the holding, reducing to a moderate adverse effect once the agricultural land required during construction is restored.

### Effects arising during construction

- 7.2.4 The temporary requirement for a further 0.3ha of agricultural land in Grade 2 or Subgrade 3a does not change the significance of the effect on agricultural land as reported in the main ES (i.e. moderate adverse).
- 7.2.5 For Wellwick Farm, the area of additional land will increase the percentage of the holding required during construction to 33%. This does not, however, alter the major/moderate temporary effect of the original scheme during construction. The permanent impact arising from the loss of land reported in the main ES will not be altered as no land is required permanently for this amendment.

### Effects arising from operation

- 7.2.6 There are no additional impacts to agriculture, forestry and soil receptors during operation of the scheme.

### Mitigation and residual effects

- 7.2.7 The land required temporarily for construction will be restored to its former agricultural use once the works are completed. The soil handling will involve stripping, storing and reinstating topsoils on land required for the temporary works, following best practice guidance for handling soil set out in the draft CoCP. The amendment will result in no change in the residual likely significant effects reported in the main ES.

## 7.3 Cultural heritage

### Scope, assumptions and limitations

- 7.3.1 The assessment scope, key assumptions and limitations for cultural heritage are as set out Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 7.3.2 It is assumed that topsoil will be removed, as a minimum, for construction of the revised scheme and that all archaeological remains and earthworks within the footprint of the amendment will be removed or disturbed.
- 7.3.3 Information on the potential archaeological remains at this location is based on desk based research (sources including the Buckinghamshire historic environment record (HER), historic maps and aerial photographs) and non-intrusive surveys comprising LiDAR and hyperspectral survey.

### Environmental baseline

#### *Existing baseline*

- 7.3.4 The amendment is located close to potential heritage assets of high significance, dating from the prehistoric, Roman, medieval and post-medieval periods (asset reference DWH111).
- 7.3.5 Fieldwalking and metal-detecting surveys over a number of years across the area to the east of Wellwick Farm and north of Conecroft Farm (to the south of the revised scheme) has yielded artefactual evidence which may indicate a former Romano-British villa site or possible Romano-British trackway. Evidence for Roman period settlement and occupation of this area was strengthened by the discovery and excavation of a human cremation burial of this date within the area. The area to the east of Wellwick Farm has been assigned as an archaeological notification area by Buckinghamshire County Council on this basis.
- 7.3.6 These baseline resources are as described in the main ES (Volume 2, CFA Report 10, Section 6.3) and Maps CH-01-031 and CH-01-0033 (Volume 5, Cultural Heritage Map Book).

### Effects arising during construction

- 7.3.7 The main ES reported that landscaping associated with the original scheme would remove approximately 25% of the area of artefactual evidence (asset reference DWH111) which has been identified as an area of high archaeological significance. This has been assessed as a medium adverse impact, with a major adverse effect.
- 7.3.8 The revised scheme will temporarily require additional land which will further impact this area of archaeological interest. The southern corner of this expanded area of land required lies approximately 35m to the north-west of the Buckinghamshire County Council archaeological notification area.
- 7.3.9 The revised scheme does not change the result of the assessment or mitigation set out in the main ES with respect to cultural heritage as it will not encroach onto any of the heritage assets previously identified or have an effect on their setting.

## Effects arising from operation

- 7.3.10 The temporary nature of the amendment means there will be no operational effects.

## Mitigation and residual effects

- 7.3.11 There will be no change to the mitigation and residual effects reported in Volume 2 of the main ES.

## 7.4 Ecology

### Scope, assumptions and limitations

- 7.4.1 The assessment scope for ecology is as set out in Volume 1 of the AP ES. The key assumptions and limitations, and the methodology for determining significance of effects are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 7.4.2 The land required for the amendment is adjacent to land already within the limits of the Bill and has been subject to desk-based ecological investigations as well as field survey and assessment for flora and fauna.
- 7.4.3 The ecological baseline of the land required for the amendment has therefore been based on field data collated for the main ES on land within the amendment area and adjacent land, aerial photography and relevant existing information gathered from national organisations and from regional and local sources including: Buckinghamshire and Milton Keynes Environmental Records Centre; Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust; Chilterns Conservation Board; North Bucks Bat Group; Berkshire and South Buckinghamshire Bat Group; Buckinghamshire Bird Club; and Buckinghamshire Amphibian and Reptile Group.
- 7.4.4 To address any limitations in data, a precautionary baseline has been considered, according to the guidance reported in the main ES Volume 5: Appendix CT-001-000/2. This constitutes a 'reasonable worst case' basis for the subsequent assessment.
- 7.4.5 The precautionary approach to the assessment that has been adopted identifies the likely significant ecological effects of the amendment.

### Environmental baseline

- 7.4.6 A summary of the baseline information relevant to the assessment of the amendment is provided below. For those receptors described in the main ES, further details are provided in Volume 2, CFA10, Section 7.3 and in Volume 5, including Maps EC-01 to EC-12, Ecology Map Book.

### *Designated sites*

- 7.4.7 There are no statutory or non-statutory designated nature conservation sites or ancient woodland within 500m of the land required for this amendment or otherwise relevant to the assessment. Statutory and non-statutory designated sites in the wider local area are described in the main ES, Volume 2, CFA10, Section 7 and are shown in the main ES on Maps EC-01-019 to EC-01-021a, Volume 5, Ecology Map Book.

### *Habitats*

- 7.4.8 The land required for the amendment comprises arable habitat located north-west of Wellwick Farm and south of the Marylebone to Aylesbury Line. The area is assessed as being of local/parish value in the main ES.
- 7.4.9 Habitats surrounding the land required for the amendment are described in the main ES, Volume 2, CFA10, Section 7 and are shown on Maps EC-03-059b to EC-03-067, Volume 5, Ecology Map Book.

### *Protected and/or notable species*

- 7.4.10 Desk study data on the land required for the amendment and field surveys undertaken on land within the area of the amendment, as reported in the main ES, did not record any protected and/or notable species of flora or fauna.
- 7.4.11 The main ES identified a population of great crested newt with a peak count of 15 individuals (a medium population size class) in one of three ponds surveyed at Wellwick Farm, 400m south-west of the land required for the amendment. Great crested newt were confirmed as absent in two other ponds surveyed at Wellwick Farm within 300m of the land required for the revised scheme. The ponds are isolated from other water bodies but surrounded by grassland and woodland suitable for this species during its terrestrial phase. This population is identified in the main ES as being of county/metropolitan value.
- 7.4.12 The locations of species records are illustrated in the main ES on Maps EC-01 to EC-12, Volume 5, Ecology Map Book.

## **Effects arising during construction**

### *Avoidance and mitigation measures*

- 7.4.13 There are no specific measures included as part of the revised scheme to avoid or reduce impacts to features of ecological value on the land required for the amendment.
- 7.4.14 The assessment assumes implementation of appropriate mitigation measures described within the draft CoCP.

### *Designated sites*

- 7.4.15 The amendment will not result in any additional impacts on statutory designated sites for nature conservation as none are located within 500m of the land required for the amendment.

### *Habitats*

- 7.4.16 As reported in the main ES, it is considered unlikely that adverse effects on arable land will occur at more than the local/parish level. The loss of an additional area of 0.3ha of arable land as a result of construction activities within the additional land required does not change the level of significance of the effects reported in the main ES.

### *Species*

- 7.4.17 The main ES reports that no likely significant effects are expected on the great crested newt populations at Wellwick Farm. The ponds at Wellwick Farm are isolated from the

amendment area by intervening agricultural land which is considered to be sub-optimal terrestrial habitat for great crested newts. As a result, construction on land required for the amendment will not result in any adverse impacts on these populations and will not change the effects reported in the main ES.

### *Mitigation and residual effects*

#### **Other mitigation measures**

7.4.18 No additional or different mitigation is required for the amendment.

#### **Residual effects**

7.4.19 The amendment will result in no change in the likely residual significant effects reported in the main ES.

### **Effects arising from operation**

7.4.20 There are no new or different operational effects for ecology as a result of the proposed amendment, as compared with the main ES.

## **7.5 Sound, noise and vibration**

### **Scope, assumptions and limitations**

7.5.1 The assessment scope, key assumptions and limitations for sound, noise and vibration are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. The assessment was undertaken for the construction phase only. The temporary diversion of the overhead power lines was not assessed for the main ES. It has been assumed that the construction works will remain unchanged from those reported in the main ES (see Volume 2, CFA Report 10, Section 11) with the exception of the works related to the temporary pylon diversion, which was part of the original scheme, and the additional site area required for the amendment.

### **Environmental baseline**

#### *Existing baseline*

7.5.2 The baseline sound, noise and vibration information for CFA10 will not change as a result of this amendment. The baseline is described in the main ES (Volume 5 Appendix SV-002-010) at Ellesborough Road, Wendover (assessment location 357730).

### **Effects arising during construction**

7.5.3 Site preparation (including site clearance) will be the main noise-generating phase of works for the revised scheme.

7.5.4 The closest sensitive receptors to the works are residential properties, such as Wellwick Farm, located to the south of the work site and are represented by receptors at Ellesborough Road, Wendover (assessment location 357730, refer to main ES Volume 5: Appendix SV-002-010).

7.5.5 The works for the original and revised scheme do not represent a substantial intensification of the works reported in the main ES. Due to this and the lack of

proximity to the nearest noise sensitive receptor, the outcomes of the assessment reported in the main ES remain unchanged.

### Mitigation and residual effects

- 7.5.6 There will be no change to the mitigation and residual effects reported in Volume 2 of the main ES.

## 7.6 Water resources and flood risk assessment

### Scope, assumptions and limitations

- 7.6.1 The assessment scope, key assumptions and limitations for the water resources and flood risk assessment are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. The temporary diversion of the overhead power lines was not assessed for water resources and flood risk assessment in the main ES. Further information has now been provided to enable this temporary diversion to be assessed. The following has been assumed in undertaking the assessment:
- the depths of the piled foundations for the temporary pylons will be determined once ground investigations are complete; for this assessment the pile depth is assumed to be up to 30m; and
  - all but the top 2m of the pile foundations for the temporary pylons will remain after the pylons have been dismantled.

### Environmental baseline

#### *Existing baseline*

- 7.6.2 The baseline water resources and flood risk information for the Dunsmore, Wendover and Halton area is described in the main ES (Volume 2, CFA Report 10, Section 13).
- 7.6.3 There are no surface water bodies within the additional area required for the revised scheme.
- 7.6.4 The sites for the two new temporary pylons (included in the original scheme) are underlain by Cretaceous Chalk, the Zig Zag Chalk Formation and West Melbury Marly Chalk Formation (Grey Chalk Subgroup) comprising blocky chalk with marls, with occasional hard limestone. The formation is classified as Principal Aquifer. The Chiltern Chalk Scarp groundwater body is largely classified as having 'Poor' status<sup>8</sup>. Below the Chalk is the Undifferentiated Cretaceous Gault and Upper Greensand Formation comprising mudstone, siltstone and sandstone and is classified as Unproductive strata.
- 7.6.5 The direction of groundwater flow in the vicinity of the amendment is generally towards the north-west.
- 7.6.6 There are no licensed groundwater abstractions and no reported private, unlicensed groundwater abstractions in this area as set out in main ES Volume 5: Appendix WR-002-010. There is the potential for unlicensed abstractions to exist, as a licence is not required for abstraction volumes below 20m<sup>3</sup> per day.

<sup>8</sup> Environment Agency (2009) River Basin Management Plan, Thames River Basin District



7.6.7 There are no known springs and no known water dependent habitats in the area.

7.6.8 Flood risk is as described in the main ES (Volume 2, CFA Report 10, Section 13).

### **Effects arising during construction**

7.6.9 Piling for the foundations of the pylons in the original scheme has been assessed to be up to 30m in depth and is likely to fully penetrate the thickness of the Chalk into the Undifferentiated Gault/Greensand Formation. Although the piles may disrupt groundwater flow locally, the change in regional flows will be negligible. Any reduction in flow immediately down the hydraulic gradient of the piles is unlikely to impact the springs and surface water features to the north of the Wendover cutting as all groundwater within the zone of influence of the cutting will be intercepted by drainage in the cutting. The additional land required for the amendment does not change this conclusion.

7.6.10 The 400kV overhead power line will be reinstated along its original alignment after two years although the lower part of the foundation piles will remain in place. Therefore, there will be no permanent significant effect on any water receptors.

### **Effects arising from operation**

7.6.11 The temporary diversion and amendment do not change the significance of the effects reported in Volume 2 of the main ES.

### **Mitigation and residual effects**

7.6.12 The draft CoCP sets out the measures and standards of work that will be applied to the construction of the original scheme (see the main ES, Volume 5, Appendix CT-003-000). These will provide effective management and control of the impacts during the construction period and therefore there will be no significant residual effects.

### **Volume 5 amendments**

7.6.13 Table 4 sets out the additions to the main ES, Volume 5, Appendix, WR-002-010, Water Resources Assessment.

Table 4: Additions to Volume 5, Appendix: WR-002-010, Water Resources Assessment

Receptor	Receptor value	Design element	Discussion of potential impact to water receptor	Magnitude of potential impact	Avoidance and mitigation measures included in design	Magnitude of remaining impact and effect	Other mitigation measures	Residual effect	Duration of effect
Chalk Principal Aquifer	High	Two temporary pylons on <30m deep piled foundations	Although some localised groundwater flow will be disrupted it is unlikely to significantly impact groundwater flow within the aquifer regionally.	Minor impact Slight effect (Not significant)	With implementation of the draft CoCP (Sections 12 and 16) groundwater quality and flow in the Chalk are unlikely to be significantly impacted by construction in this area.	Negligible impact  Neutral effect  (Not significant)	None	Negligible impact  Neutral effect  (Not significant)	Construction (temporary)

## 7.7 Summary

- 7.7.1 The temporary diversion of the existing 400kV overhead power line and use of the additional land to the north of Wellwick Farm does not change the significance of the environmental effects or proposed mitigation as set out in the main ES (Volume 2, CFA Report 10, Dunsmore, Wendover and Halton).

# 8 Change to land required for reconfiguration of road layout of Nash Lee Lane and HS2 maintenance access (AP1-010-005)

## 8.1 Overview of amendment

- 8.1.1 The Bill provides for the permanent realignment of Nash Lee Lane and its junction with B4009 Nash Lee Road and the provision of a junction for a maintenance access to the original scheme (refer to main ES maps CT-05-039, CT-05-040a and CT-06-039 in Volume 2, CFA10 Map Book). A Stage 1 Road Safety Audit<sup>9</sup> subsequently indicated that the junction for the maintenance access, a crossroads, would be confusing for road users due to the retention of the redundant arm of Nash Lee Lane. A reconfigured road layout – a 'T' junction – is proposed with the major road in the junction being Nash Lee Lane and the minor road being the maintenance access to the original scheme (refer to AP maps CT-05-039, CT-05-040a and CT-06-039 in AP ES Volume 2, Map Book) Part 1 of 6).
- 8.1.2 The Nash Lee Lane access from the B4009 Nash Lee Road has been realigned on a gentler curve and shallower gradient to improve safety. The revised scheme will have a maximum gradient of 5%, compared to a maximum gradient of 8% stated in the main ES. The reconfigured road layout requires an additional land area of approximately 0.3ha and an amendment to the description of the work in the Bill, hence the need for this amendment. In addition, agricultural land has been taken out of the Bill, comprising an area of 100m<sup>2</sup> south-east of Nash Lee Lane, to allow landowner access between fields adjacent to The Hollies. The duration of the revised scheme will be the same as that for the original scheme.
- 8.1.3 The revised road layout is not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: agriculture, forestry and soils; air quality; community; ecology; land quality; socio-economics; sound, noise and vibration; traffic and transport; and water resources and flood risk assessment. However there were changes where reassessment was considered to be required in respect of: cultural heritage and landscape and visual assessment.

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<sup>9</sup> Stage 1 Road Safety Audits are undertaken at the completion of preliminary design stage of a project.

## 8.2 Cultural heritage

### Scope, assumptions and limitations

- 8.2.1 The assessment scope, key assumptions and limitations for cultural heritage are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 8.2.2 It is assumed that topsoil will be removed, as a minimum, for construction of the revised scheme and that all archaeological remains and earthworks within the footprint of the amendment would be removed or disturbed.
- 8.2.3 Information on the potential archaeological remains at this location is based on desk based research (sources including the historic environment record (HER), historic maps and aerial photographs) and non-intrusive surveys comprising LiDAR and hyperspectral survey.

### Environmental baseline

#### *Existing baseline*

- 8.2.4 The revised scheme is located close to potential archaeological deposits of moderate value. This comprises the route of the prehistoric and possibly also Roman period Lower Icknield Way (asset reference DWH129) which is broadly followed by Nash Lee Road. The line of the Lower Icknield Way is uncertain in this area but it is possible that the former routeway runs through the area of additional land required. There is also potential for the remains of Roman roadside settlement or activity associated with the Lower Icknield Way to be present in this location.
- 8.2.5 The amendment is also adjacent to two further heritage assets assessed as being of low value comprising two post-medieval or early field boundaries depicted on Enclosure maps of 1805 (asset reference DWH137-8). DWH137 is aligned with Nash Lee Road and DWH138 is aligned with the trackway that leads north-westwards from the road, along the western side of the property named Bon Accord.
- 8.2.6 The baseline resource is as described in the main ES (see CFA10, section 6 and Volume 5 Appendix CH-001-010).

### Effects arising during construction

- 8.2.7 The land required for the amendment includes part of the modern road itself, as well as a small amount of land on the northern side and a larger area of land on the southern side. The revised scheme will remove a small portion of the Lower Icknield Way (asset reference DWH129) and associated archaeological deposits if they survive in this location. The overall impact on this asset of moderate value is minor adverse as only a small part of the routeway would be removed by the revised scheme. This would constitute a minor adverse effect which is not significant.
- 8.2.8 The reconfigured road layout does not change the result of the assessment or proposed mitigation set out in the main ES with respect to assets DWH137 and DWH138 as it does not encroach onto either of these heritage assets identified or have an effect on their setting.

## Effects arising from operation

- 8.2.9 Operational effects were previously assessed as having a neutral effect on these heritage assets. There will be no change to the operational effects as a result of this amendment.

## Mitigation and residual effects

- 8.2.10 There will be no change to the mitigation and residual effects reported in Volume 2 of the main ES.

## 8.3 Landscape and visual assessment

### Scope, assumptions and limitations

- 8.3.1 The assessment scope, key assumptions and limitations for the landscape and visual assessment are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

### Environmental baseline

#### *Existing baseline*

- 8.3.2 The amendment is located within the Southern Vale LCA and Longwick Vale LCA. Any potential direct/indirect impacts associated with this amendment will be limited to these two LCAs. The baseline for these receptors is as described in the main ES (Volume 2, CFA Report 10, Section 9.3).
- 8.3.3 The amendment will be visible within views from residential receptors on Nash Lee Lane, Wendover (Viewpoint 108.2.001, Volume 5: Appendix LV-001-010). The visual baseline description for this receptor is as described in the main ES.

### Assessment of temporary impacts and effects

- 8.3.4 The amendment will not introduce construction activities that are substantially different to those for the original scheme. The moderate adverse effects will therefore be as reported for Southern Vale LCA, Longwick Vale LCA and Viewpoint 108.2.001 in the main ES.

### Permanent effects arising during operation

- 8.3.5 The revised scheme will involve a slight change in design from a crossroad to a T-junction and will therefore not result in a change to the operational effects reported for the original scheme for Southern Vale LCA and Longwick Vale LCA in the main ES.
- 8.3.6 The revised junction will be clearly visible within the foreground of the view from Viewpoint 108.2.001. This will be visible in place of the crossroad junction presented in the original scheme. Additional vegetation loss in the foreground will be clearly visible and will open up views to the B4009 Nash Lee Road overbridge in the middle ground. This will represent a worsening of visual effects from viewpoint 108.2.001, however, as the effects reported in the main ES were major adverse, the amendment will not alter the level of significance of effect reported in the main ES). The view of the revised scheme from this location during the winter of year 1 of operation is illustrated on the photomontage shown in Figure LV-01-058 (AP ES, Volume 2, CFA10 Map Book Part 1).

## Mitigation and residual effects

8.3.7 The mitigation and residual effects will be as described in the main ES.

## 8.4 Summary

8.4.1 The change to land required for the reconfiguration of the road layout of Nash Lee Lane and the HS2 maintenance access does not change the significance of the environmental effects or mitigation as set out in the main ES (Volume 2, CFA Report 10).

# 9 Additional land to erect temporary scaffolding over B4009 Nash Lee Road (AP1-010-006)

## 9.1 Overview of amendment

- 9.1.1 The Bill provides for the temporary diversion, 70m to the south, of the existing 400kV overhead power lines and pylons west of Wendover for a period of approximately two years, with permanent reinstatement along its existing alignment (refer to Section 7 and to main ES map CT-05-040a in main ES Volume 2, CFA10 Map Book). Since submission of the Bill, a requirement has been identified for additional land temporarily for a working area to erect scaffolding to support netting over the B4009 Nash Lee Road. The temporary scaffolding and netting is required to allow reconductoring (i.e. restringing of the lines) work to be undertaken safely at a pylon located south of and adjacent to the B4009 Nash Lee Road (refer to AP map CT05-040a in AP ES Volume 2 Map Book Part 1 of 6). A total of approximately 0.5ha of additional land is required outside the land required within the Bill for these works. The total standard working area around pylons of 1ha has been reduced in this instance to ensure it does not encroach on the private access to Flint Cottage. The additional land was not included within the Bill, hence the need for this amendment. The private access and the road will remain open, with temporary measures used to control traffic on the B4009 Nash Lee Road during the scaffolding works. The works are anticipated to start in autumn 2017 and are expected to take one year to complete.
- 9.1.2 The ground will be prepared before the scaffolding is erected, vegetation will be cleared where necessary, topsoil stripped within the working area and temporarily stored adjacent to the working area for later re-use. The scaffolding will take approximately one to two months to erect. The working area will be restored to its former use once construction is complete.
- 9.1.3 The revised additional land is not considered to make changes that require a reassessment of the environmental effects or mitigation as set out in the main ES with respect to: agriculture, forestry and soils; air quality; community; land quality; landscape and visual assessment; socio-economics; traffic and transport. However, there were changes where reassessment was considered to be required in respect of: cultural heritage; ecology; sound, noise and vibration; and water resources and flood risk assessment.

## 9.2 Cultural heritage

### Scope, assumptions and limitations

- 9.2.1 The assessment scope, key assumptions and limitations for cultural heritage are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 9.2.2 It is assumed that topsoil will be removed, as a minimum, for construction of the revised scheme and stockpiled for subsequent re-use and that all archaeological remains and earthworks within the footprint of the amendment would be removed or disturbed.
- 9.2.3 Information on the potential archaeological remains at this location is based on desk based research (sources including the historic environment record (HER), historic maps and aerial photographs) and non-intrusive surveys comprising LiDAR and hyperspectral survey.

### Environmental baseline

- 9.2.4 The revised scheme is located close to but outside of an area of potential archaeological deposits of moderate significance. This comprises the probable former location of the medieval settlement of Nash Lee Green, which has been identified from the remains of a moated site on the southern side of the road, as well as a concentration of medieval artefact recovery in the area (asset reference DWH132). Pottery and worked flints of prehistoric date have also been retrieved from this location. The northern edge of the amendment ends approximately 14m to the south of this heritage asset.
- 9.2.5 The baseline resource is as described in the main ES (see CFA Report 10, Section 6 and Volume 5 Appendix CH-001-010).

### Effects arising during construction

- 9.2.6 As noted above, the revised scheme does not extend into the area of the heritage asset DWH132 and as such there is no further impact on it. Therefore the revised scheme does not change the result of the assessment or mitigation as set out in the main ES with respect to cultural heritage.

### Effects arising from operation

- 9.2.7 The temporary nature of the additional land required during the works to the pylon close to Flint Cottage means there will be no operational effects.

### Mitigation and residual effects

- 9.2.8 There will be no change to the mitigation and residual effects reported in Volume 2 of the main ES.

## 9.3 Ecology

### Scope, assumptions and limitations

- 9.3.1 The assessment scope for ecology is as set out in Volume 1 of the AP ES. The key assumptions and limitations, and the methodology for determining significance of

effects are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

- 9.3.2 The additional land for the amendment is adjacent to land already within the limits of the Bill which has been subject to desk-based ecological investigations as well as field survey and assessment for flora and fauna.
- 9.3.3 The ecological baseline of the land for the amendment has therefore been based on field data collated for the main ES on land within the amendment area and adjacent land, aerial photography and relevant existing information gathered from national organisations and from regional and local sources including: the Environment Agency; Buckinghamshire and Milton Keynes Environmental Records Centre; Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust; Chilterns Conservation Board; North Bucks Bat Group; Berkshire and South Buckinghamshire Bat Group; Buckinghamshire Bird Club; and Buckinghamshire Amphibian and Reptile Group.
- 9.3.4 To address any limitations in data, a precautionary baseline has been considered, according to the guidance reported in the main ES Volume 5: Appendix CT-001-000/2. This constitutes a 'reasonable worst case' basis for the subsequent assessment.
- 9.3.5 The precautionary approach to the assessment that has been adopted identifies the likely significant ecological effects of the amendment.

### **Environmental baseline**

- 9.3.6 A summary of the baseline information relevant to the assessment of the amendment is provided below. For those receptors described in the main ES, further details are provided in Volume 2, CFA10, Section 7.3 and in Volume 5, including Maps EC-01 to EC-12, Ecology Map Book.

### *Designated sites*

- 9.3.7 There are no statutory or non-statutory designated nature conservation sites or ancient woodland within 500m of the land required for this amendment or otherwise relevant to the assessment. Statutory and non-statutory designated sites are described in the main ES, Volume 2, CFA10, Section 7.3 and are shown on main ES Maps EC-01-019 to EC-01-021a, Volume 5, Ecology Map Book.

### *Habitats*

- 9.3.8 The habitat south of Nash Lee Road is predominantly arable land with scattered trees and shrubs; the area north of Nash Lee Road is amenity grassland. These areas are part of the wider resource of arable land and amenity grassland which are each identified as being of local/parish value in the main ES.

### *Protected and/or notable species*

- 9.3.9 As reported in the main ES, a number of bat species use the wider landscape for foraging and commuting. The bat populations relevant to this assessment are the noctule bat population at the orchard north of Nash Lee Road and the common pipistrelle population surveyed west of Wendover, both of which are assessed in the main ES as being of district/borough value. The land required for the amendment is located within a wider area, identified in the main ES, as suitable commuting and foraging habitat for these populations.



- 9.3.10 The main ES identified a population of great crested newt (medium size class) in a pond located at Wellwick Farm, 500m south-east of land required for the amendment. This population is assessed in the main ES as being of county/metropolitan value. This breeding pond is isolated by intervening agricultural land and the existing highway network.
- 9.3.11 Locations of species records are illustrated in the main ES on Maps EC-01 to EC-12, Volume 5, Ecology Map Book.

### **Effects arising during construction**

#### *Avoidance and mitigation measures*

- 9.3.12 There are no specific measures included as part of the amendment to avoid or reduce impacts to features of ecological value on the land for the amendment.
- 9.3.13 The assessment assumes implementation of appropriate mitigation measures described within the draft CoCP.

#### *Designated sites*

- 9.3.14 The revised scheme will not result in any additional impacts on statutory designated sites for nature conservation as none are located within 500m of land required for the amendment.

#### *Habitats*

- 9.3.15 The main ES reports that the loss of arable land, scattered trees and shrub associated with the original scheme will result in effects on conservation status at up to local/parish level. The loss of a further 0.5ha of arable habitat associated with the construction activities for the amendment does not change the level of significance reported in the main ES.

#### *Species*

- 9.3.16 The main ES reports that no likely significant adverse effects are expected on the noctule population at the orchard north of Nash Lee Road or the common pipistrelle population west of Wendover. The extent of vegetation clearance within the land required for the amendment (0.5ha of arable land) is unlikely to impact commuting and foraging habitat of bat populations in the wider area. The amendment will therefore not result in any effect on the conservation status of these bat populations and will not change the effects reported in the main ES.
- 9.3.17 The main ES reports that no likely significant effects are expected on the great crested newt populations at Wellwick Farm. The ponds at Wellwick Farm are isolated from the amendment area by intervening agricultural land which is considered to be sub-optimal terrestrial habitat for great crested newts. Therefore, construction on land required for the amendment will not have any effect on the conservation status of these populations and will not change the effects reported in the main ES.

#### *Mitigation and residual effects*

##### **Other mitigation measures**

- 9.3.18 No additional or different mitigation is required for the amendment.

## Residual effects

- 9.3.19 The amendment will result in no change in the residual likely significant effects reported in the main ES.

## Effects arising from operation

- 9.3.20 There are no new or different operational effects for ecology as a result of the proposed amendment.

## 9.4 Sound, noise and vibration

### Scope, assumptions and limitations

- 9.4.1 The assessment scope, key assumptions and limitations for sound, noise and vibration are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. The assessment was undertaken for the construction phase only as the amendment does not affect operational noise. It has been assumed that the construction works will remain unchanged from those reported in the main ES, with the exception of the works related to the diversion and additional site area.

### Environmental baseline

#### *Existing baseline*

- 9.4.2 The baseline sound, noise and vibration information for CFA10 will not change as a result of this amendment. The baseline is described in the main ES (Volume 5: Appendix SV-002-010).

### Effects arising during construction

- 9.4.3 Site preparation (including site clearance) will be the main noise-generating phase of works for the revised scheme.
- 9.4.4 The closest sensitive receptors to the works are residential properties located to the south of the work site and are represented by assessment location 314625 (refer to main ES map SV-03-020 in main ES Volume 5, Sound, Noise and Vibration Map Book - Country South).
- 9.4.5 The works for the revised scheme do not represent a significant intensification of the works reported in the main ES, given the short duration and the size of the area of the works. Therefore, the outcome of the assessment reported in the main ES remains unchanged.

### Mitigation and residual effects

- 9.4.6 There will be no change to the mitigation and residual effects reported in Volume 2 of the main ES.

## 9.5 Water resources and flood risk assessment

### Scope, assumptions and limitations

- 9.5.1 The assessment scope, key assumptions and limitations for the water resources and flood risk assessment are as set out in Volume 1, the SMR (Volume 5: Appendix CT-

001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. It has been assumed that no diversion of the Chalkshire Stream is required.

## **Environmental baseline**

### *Existing baseline*

- 9.5.2 The baseline water resources and flood risk information for the Dunsmore, Wendover and Halton area is described in the main ES (Volume 2, CFA Report 10, Section 13).
- 9.5.3 The Chalkshire Stream, a tributary of the Stoke Brook, is crossed by the land required for the revised scheme. The Chalkshire Stream is a Main River. Its current overall status<sup>10</sup> under the Water Framework Directive (WFD) is assumed to be Moderate, while the objective for 2027 is Good Potential/Status. The site is underlain by the Undifferentiated Cretaceous Gault and Upper Greensand Formation comprising mudstone, siltstone and sandstone and classified as Unproductive strata. The direction of groundwater flow in the vicinity of the amendment is generally towards the north-west.

### **Effects arising during construction**

- 9.5.4 The land to be used for this amendment does not involve any additional below ground works that will penetrate the natural strata. The assessment confirms the conclusion in Volume 2 of the main ES that there will be no likely significant temporary adverse effects on water resources or flood risk.
- 9.5.5 The 400kV overhead power line will be reinstated along its original alignment after two years. Therefore, there will be no permanent significant effect on any water receptors.

### **Effects arising from operation**

- 9.5.6 The amendment does not change the assessment reported in Volume 2 of the main ES.

### **Mitigation and residual effects**

- 9.5.7 The draft CoCP sets out the measures and standards of work that will be applied to the construction of the original scheme (see the main ES, Volume 5, Appendix CT-003-000). These will provide effective management and control of the impacts during the construction period. There will be no change to the mitigation and residual effects as reported in the main ES.

## **9.6 Summary**

The additional land to erect temporary scaffolding to support netting over the B4009 Nash Lee Road does not change the significance of the environmental effects or mitigation as set out in the main ES (Volume 2, CFA Report 10).

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<sup>10</sup> Environment Agency (2009) River Basin Management Plan, Thames River Basin District