PROPOSED BATTERY ENERGY STORAGE SYSTEM, ADJACENT TO THE CULHAM SCIENCE CENTRE

Appeal against the refusal of planning application P24/S1498/FUL

LANDSCAPE PROOF OF EVIDENCE FOR THE APPELLANT

LPoE APPENDIX 2: FIGURES May 2025

Figure 1: Designations

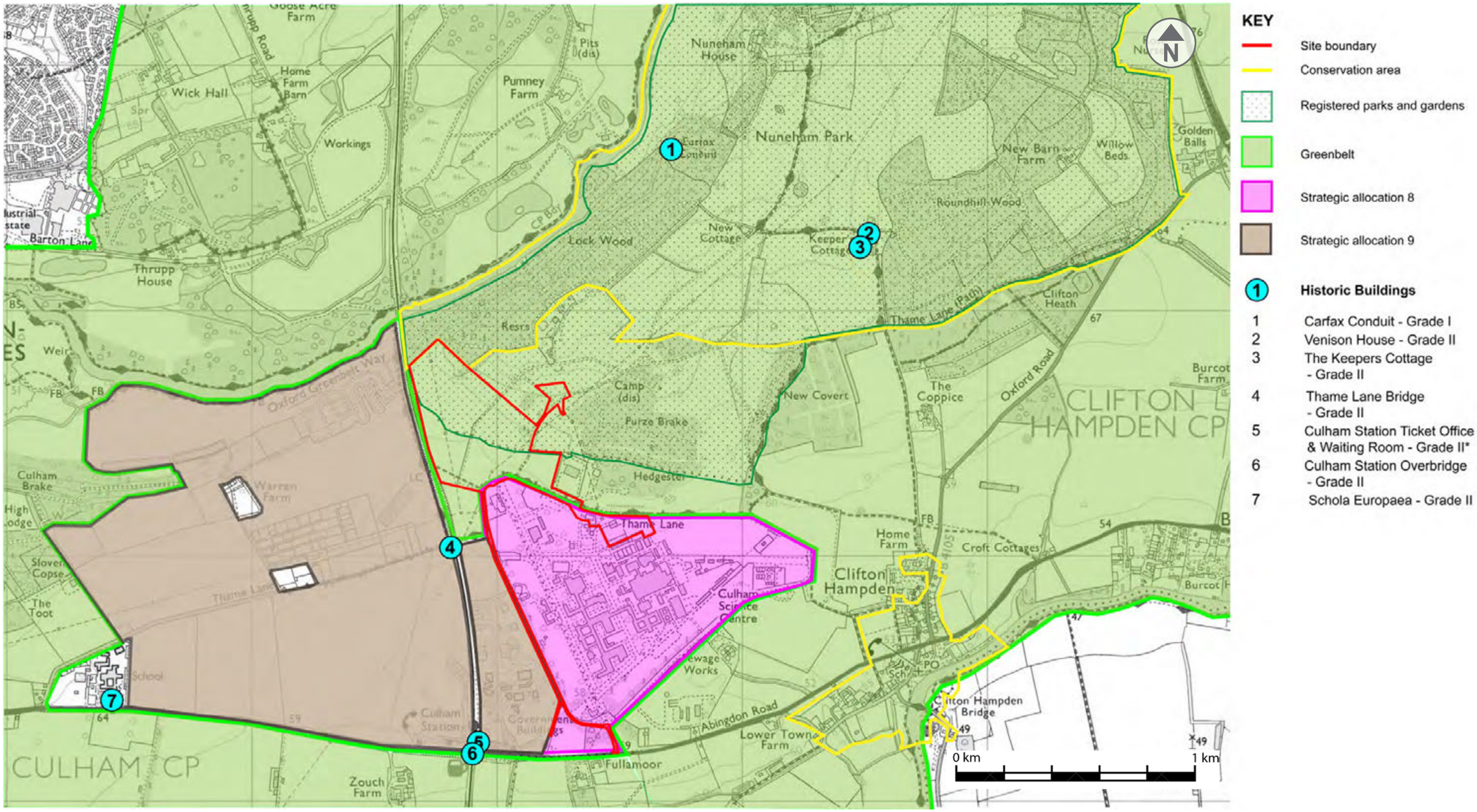

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Figure 2: Topographical plan of the wider area around the Site

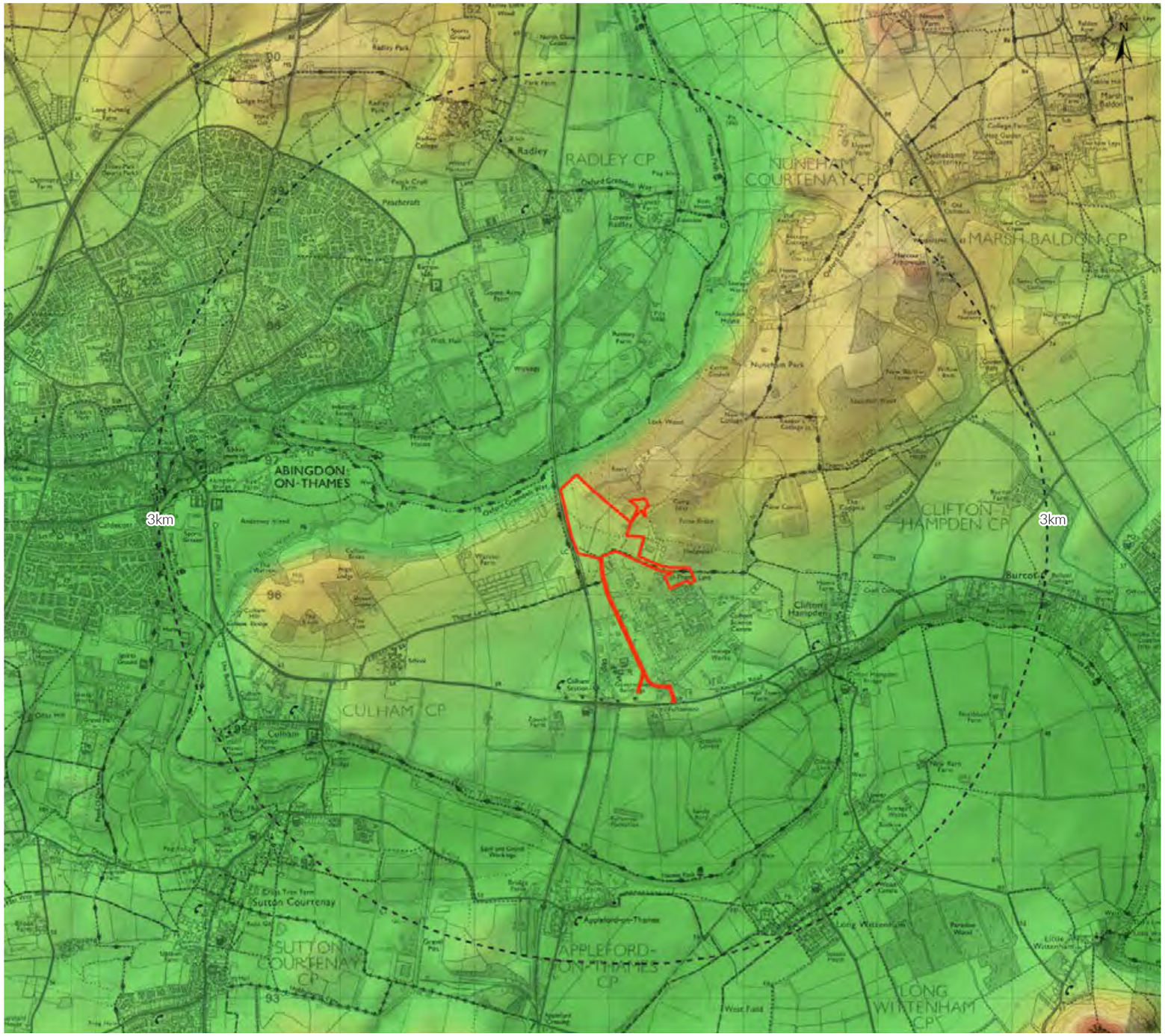


Figure 3: Topographical plan of the Site

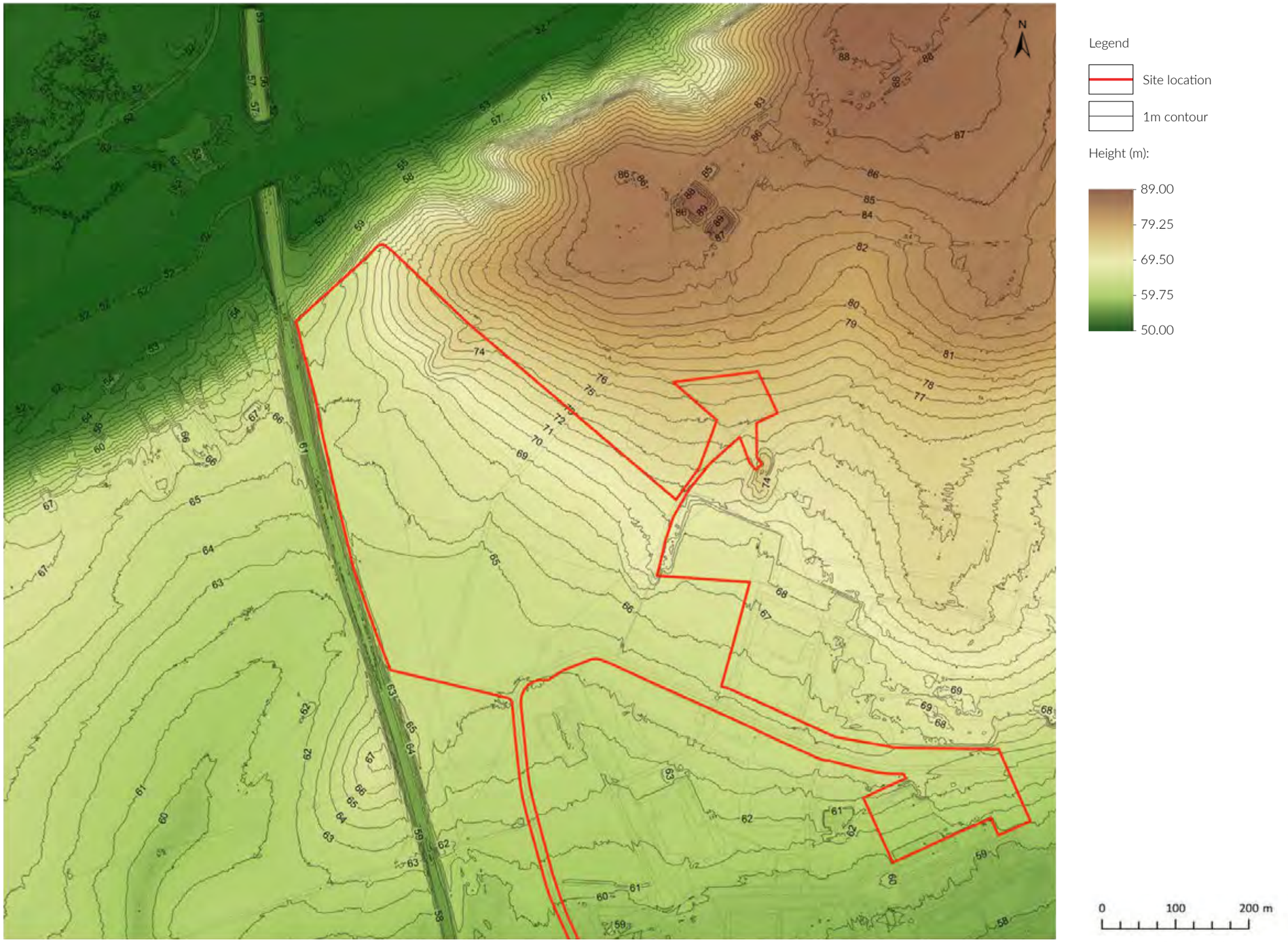
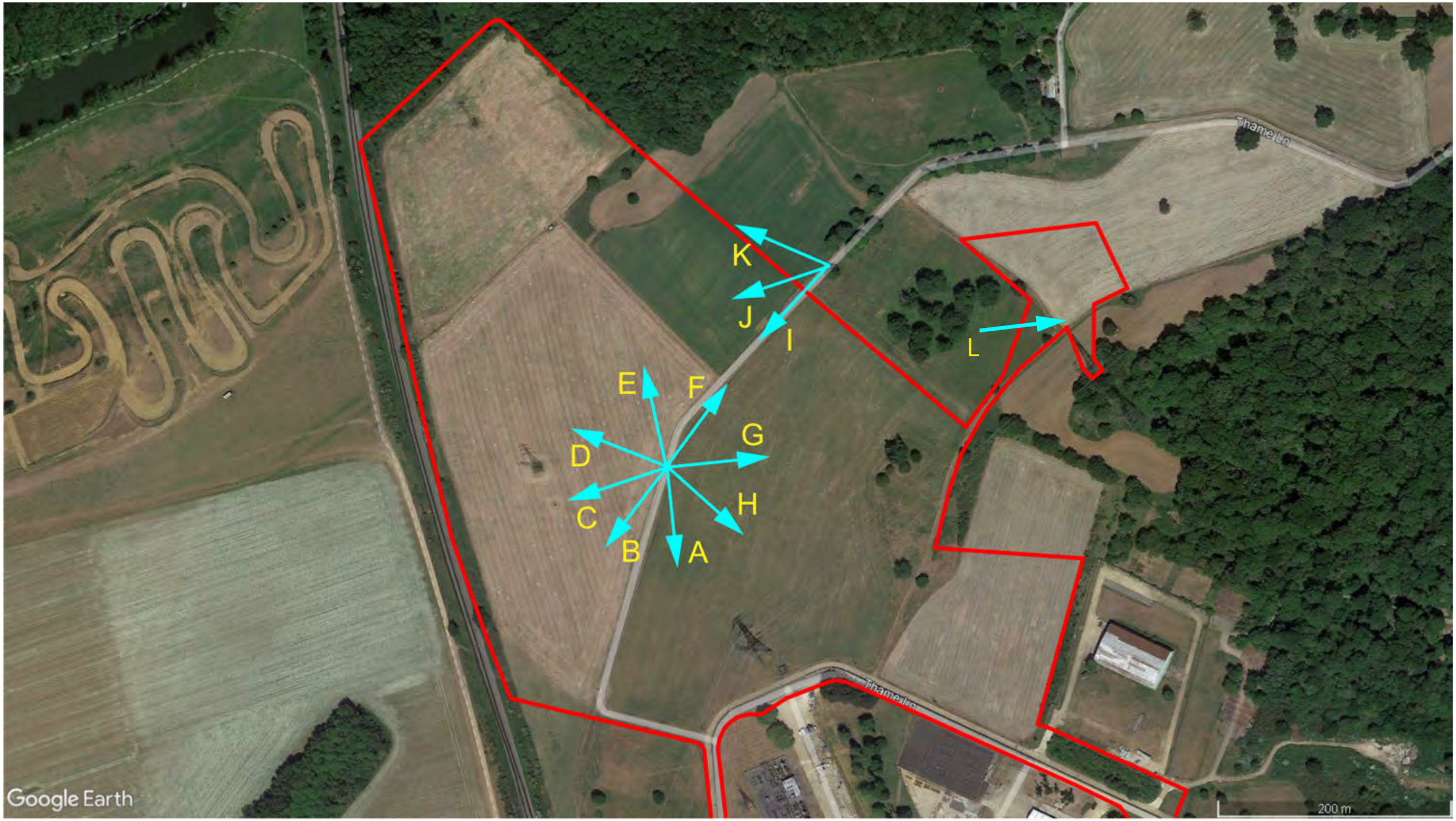
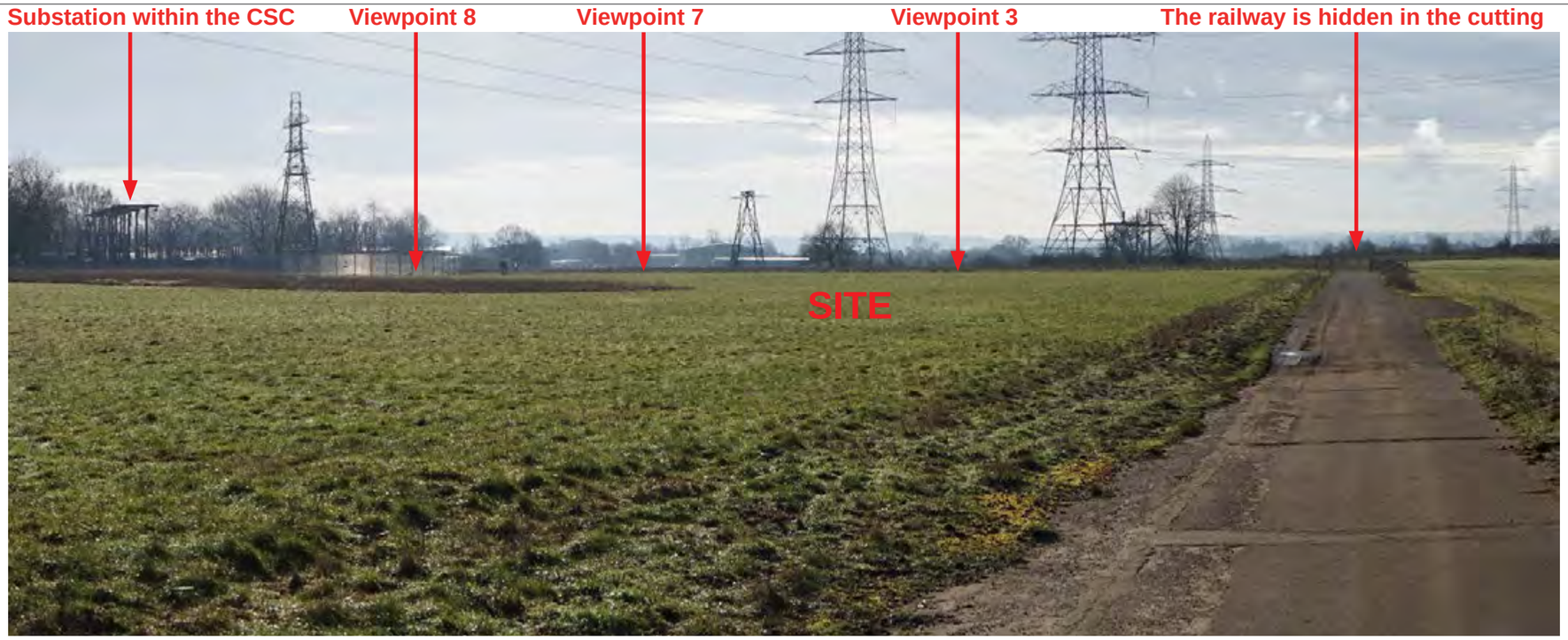


Figure 4: Internal Viewpoint Locations



Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 5.1: Internal viewpoints A & B



Photograph A

This is the first panoramic photograph of a series taken from within the centre of the Site on the boundary between the Registered Park and Garden and the proposed location for the electrical infrastructure. This view is looking south, illustrating the visual influence of the CSC and the overhead transmission lines and towers. Beyond the Site the land falls away and so views back to the Site from this area are very limited. Views will be further constrained as STRAT9 on the south side of the CSC is built out. The railway is not a prominent feature of the landscape since it passes in cutting, which also prevents passengers seeing the Site as they pass. The area of STRAT9 east of the railway starts where Viewpoint 8 is shown and extends south (left) behind the CSC.

Photograph B

Looking southwest towards Warren Farm (the STRAT9 allocation). Views of the Site from further south of the farmland are blocked by Culham Brake and Sloven Copse. Views from the south will be further contained as STRAT9 is built out. The railway is not a prominent feature of the landscape since it passes in cutting, which also prevents passengers seeing the Site as they pass.

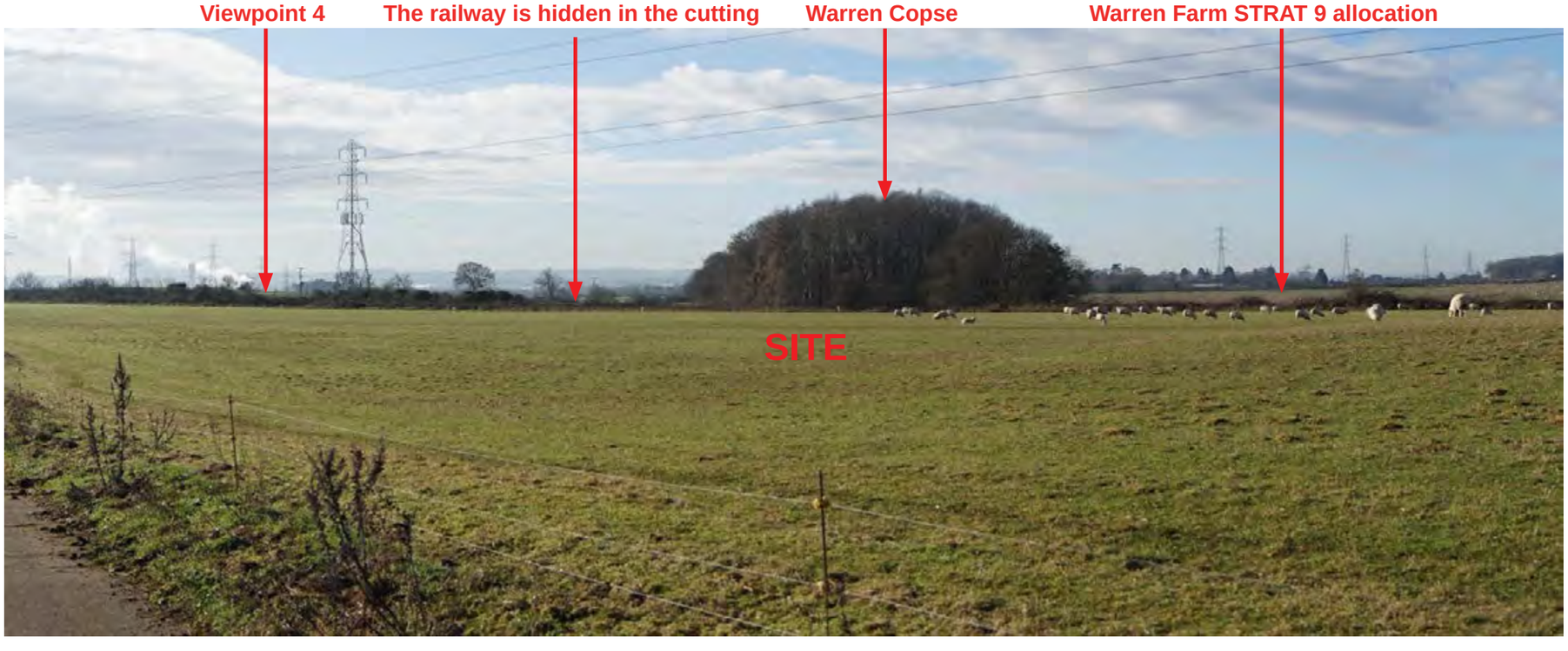
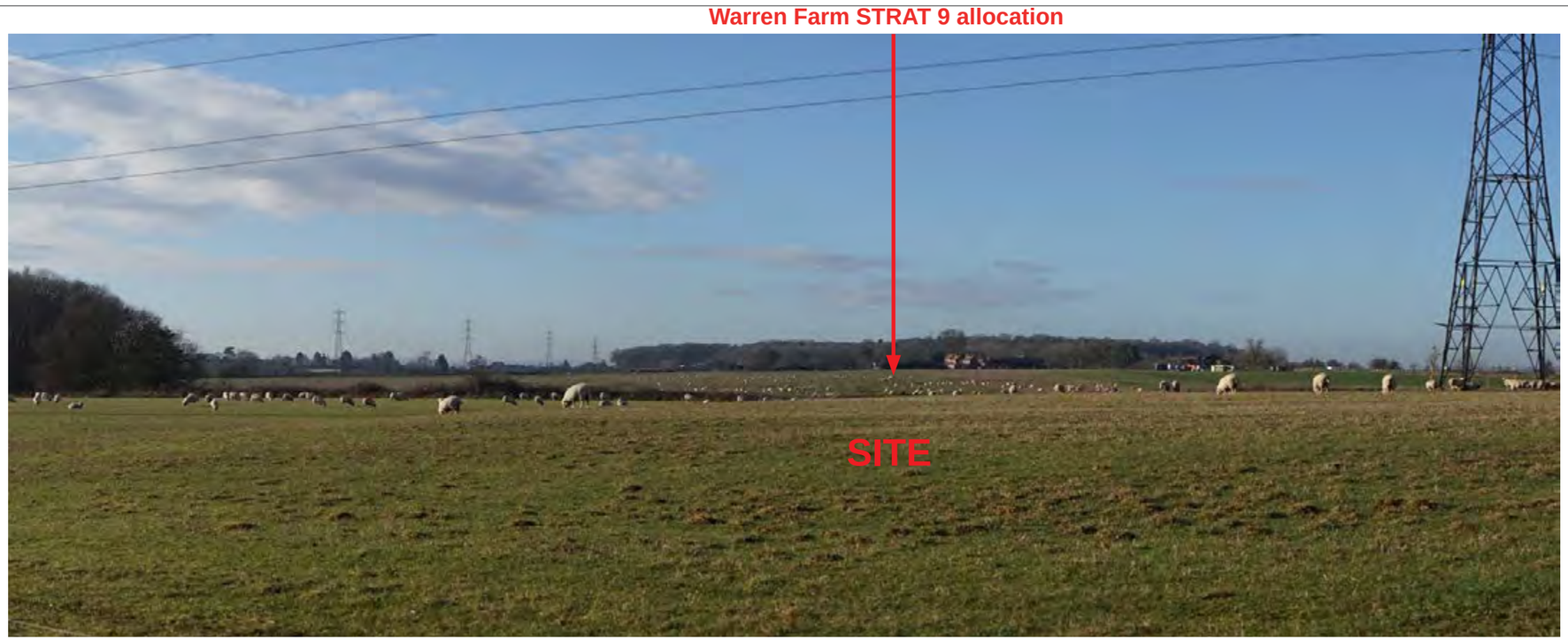


Figure 5.2: Internal viewpoints C & D

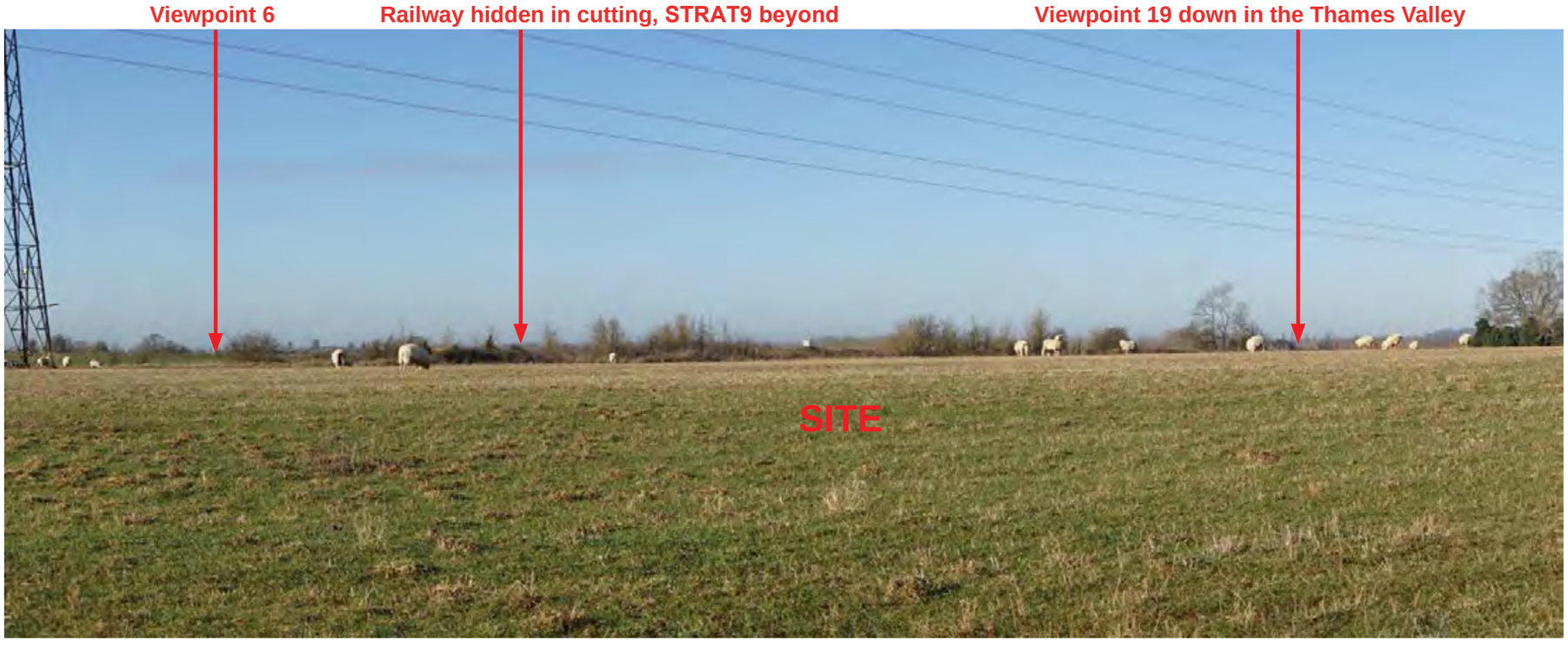


Photograph C

Looking west over Warren Farm, again illustrating how the woodland on the skyline limits the visibility of the Site to Warren Farm. The farmland has been removed from the Green Belt and the land allocated for development (STRAT9). The overhead transmission line is an intrusive element within the view.

Photograph D

Looking northwest illustrating the lack of sensitive receptors because the land drops away down to the Thames valley and Abingdon. The overhead transmission line is an intrusive element within the view.



Photograph E

Looking north over the Registered Park and Garden, illustrating the visual enclosure afforded by Lock Wood. The land beyond drops down to the floodplain of the Thames.

Photograph F

Looking northeast over the Registered Park and Garden, illustrating the visual enclosure afforded by the trees on the skyline, limiting the potential visual influence of the Proposed Development over the remainder of the parkland. The dwelling by the underground reservoir is screened by evergreen and deciduous tree cover.

Figure 5.4: Internal viewpoints G & H

Photograph G

Looking east, illustrating the visual enclosure provided by Furze Brake and the visually detracting overhead transmission lines and towers.

Photograph H

Looking southeast towards the CSC, which visually encloses the Site from land further east. It is likely that more prominent buildings will be erected within the CSC, such as the 38m high Fusion Demonstration Reactor. The proposed point of connection compound will be built adjacent to the tower on the right side of the photograph.

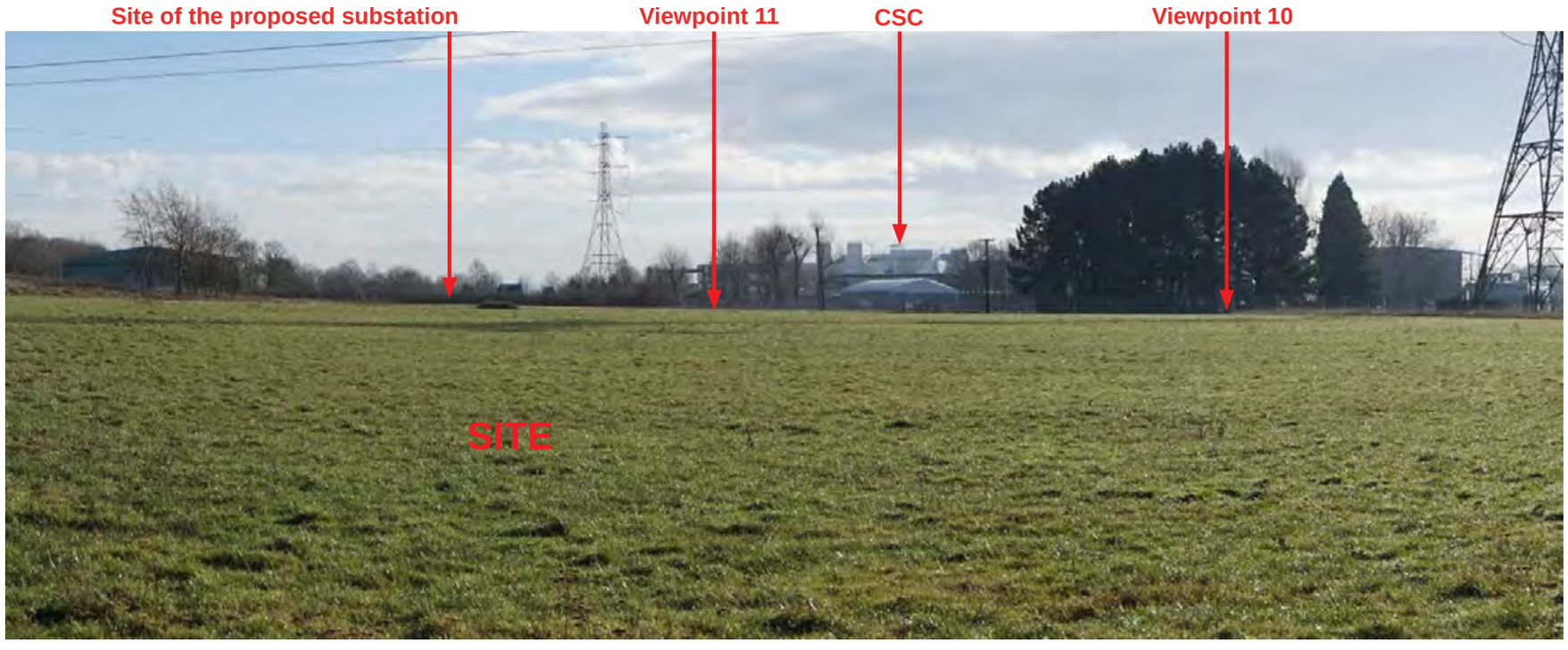
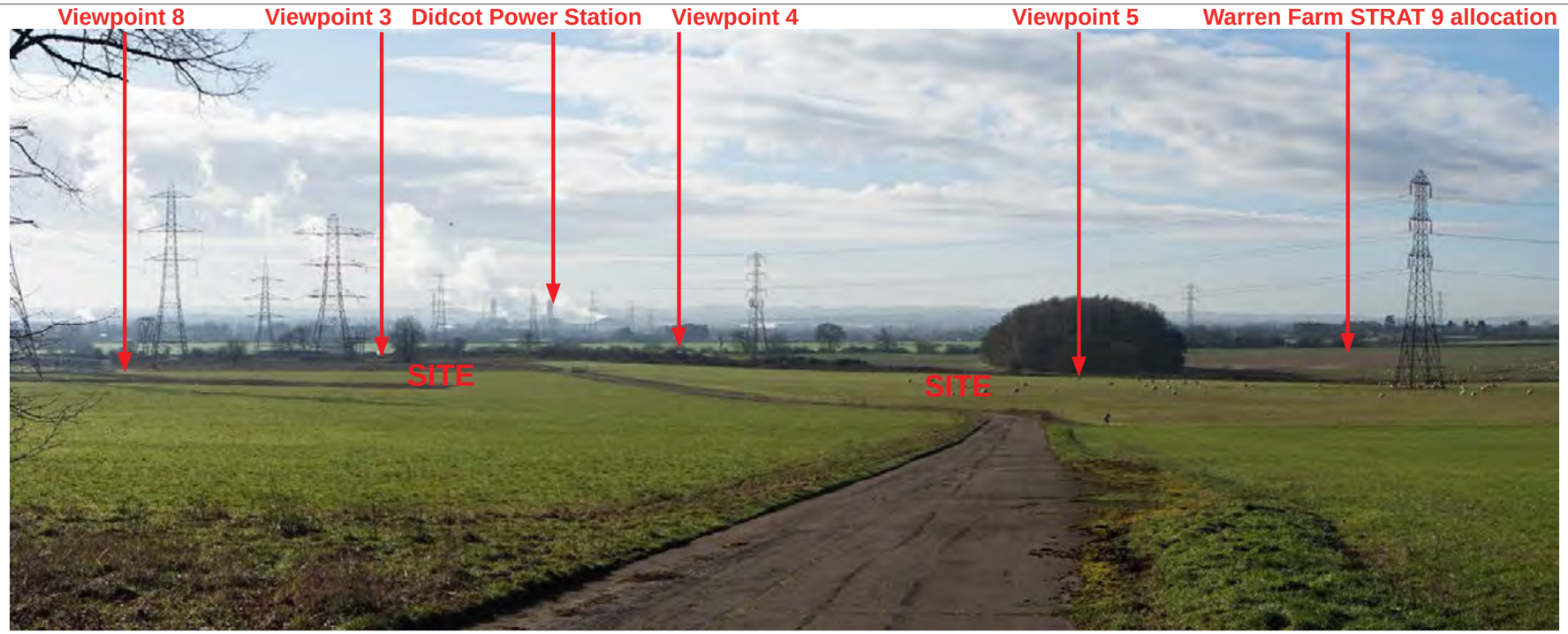


Figure 5.5: Internal viewpoints I & J



Photograph I

This is a view from the northeast edge of the Site looking southeast illustrating how the setting of this part of the parkland is adversely affected by the overhead transmission line and Didcot Power Station. It will be further adversely affected as STRAT9 is built out and while the Proposed Development at the base of the slope will also have a cumulative adverse effect on its setting, it also presents an opportunity to restore the setting of the parkland, screening it from the existing, allocated and proposed developments.

Photograph J

A continuation of Panorama I, looking east over Warren Farm (STRAT9) and the Thames Valley. Without mitigation any development within STRAT9 will be clearly visible.

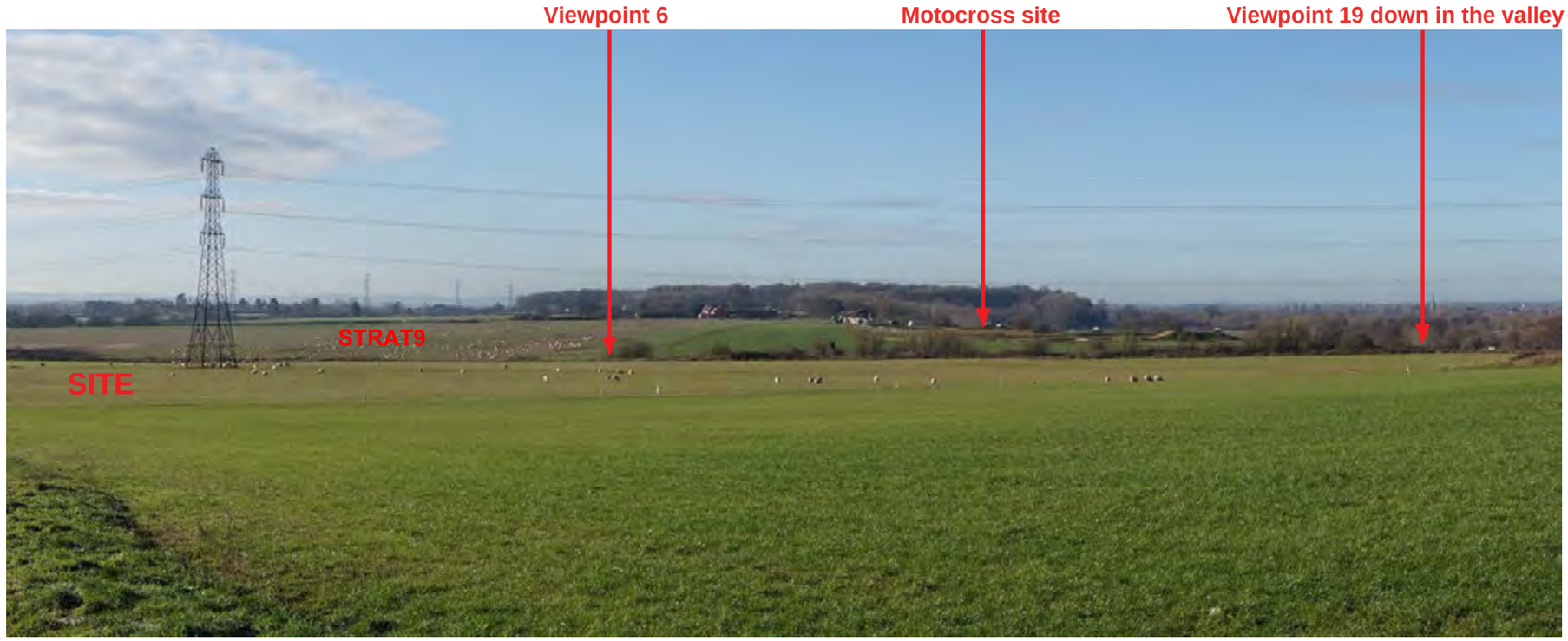


Figure 5.6: Internal viewpoint K & L

Photograph K

A continuation of Panorama J, looking northeast, illustration the enclosure provided by Lock Wood.

Photograph L

Looking northeast to illustrate the greater enclosure and parkland character of the RPG in this area.

Figure 6: Extract from the Culham Campus Framework Masterplan

Long Term (to 2050)

* R&D buildings to respond to future technology programmes are indicative.

** Decked car parking hubs are shown as car parking and are not shown as being re-purposed for a different use.

Figure 7a: The Appeal Scheme superimposed on the STRAT9 Masterplan (Culham Science Village)

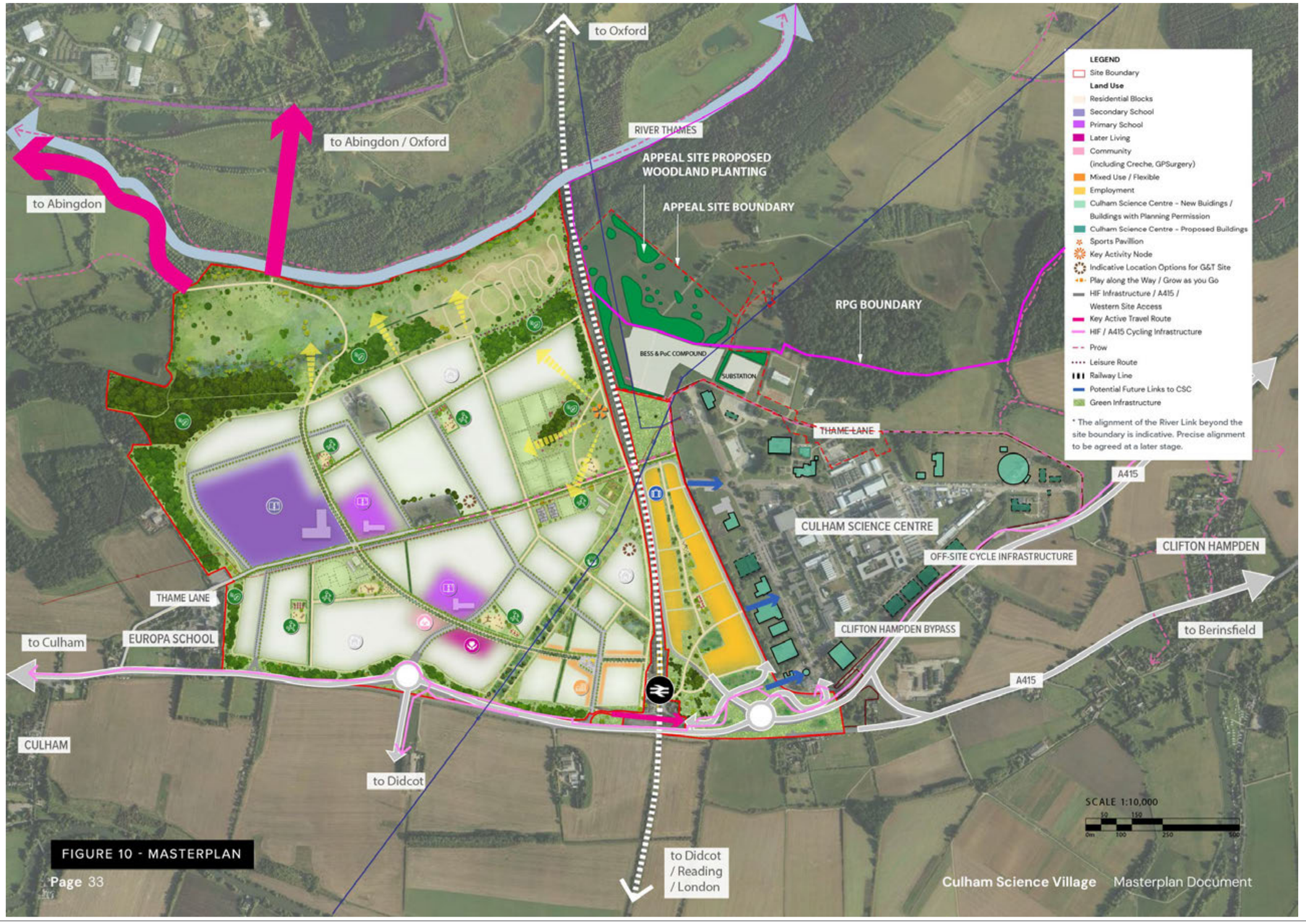


Figure 7b: STRAT9 east of the railway Building Height Parameter Plan (Application yet to be determined)

NOTE:
AOD based on existing ground levels. Allow +/- 1m deviation in height above existing AOD.

Heights exclude AC equipment, flues, points etc. from the maximum heights.'

CULHAM NO.1 SITE BUILDING HEIGHT PARAMETER PLAN

- SITE NO.1 BOUNDARY
- HIF BOUNDARY
- 10.0m UKAEA EXISTING BUILDING HEIGHTS BASED ON RECIEVED INFORMATION
- 10.0m UKAEA FUTURE DEVELOPMENT BUILDING HEIGHTS
- 50.0m EXISTING CONTOURS (AOD)

- UP TO 25M ABOVE EXISTING GROUND LEVELS
- UP TO 21M ABOVE EXISTING GROUND LEVELS
- UP TO 18M ABOVE EXISTING GROUND LEVELS
- LANDSCAPE, ACCESS & DRAINAGE (With ancillary structures up to 3m tall, where neccessary)
- TRANSLOCATED ACID GRASSLAND

nbbj

CEG CULHAM SCIENCE PARK
ISSUE DATE: 02nd May 2024
DRAWING NUMBER:
CUL1-NBBJ-ZZ-00-DR-A-021003

SCALE: 0 25m 50m 100m 1:2500@A1

Figure 8: Landscape Types and Landscape Character

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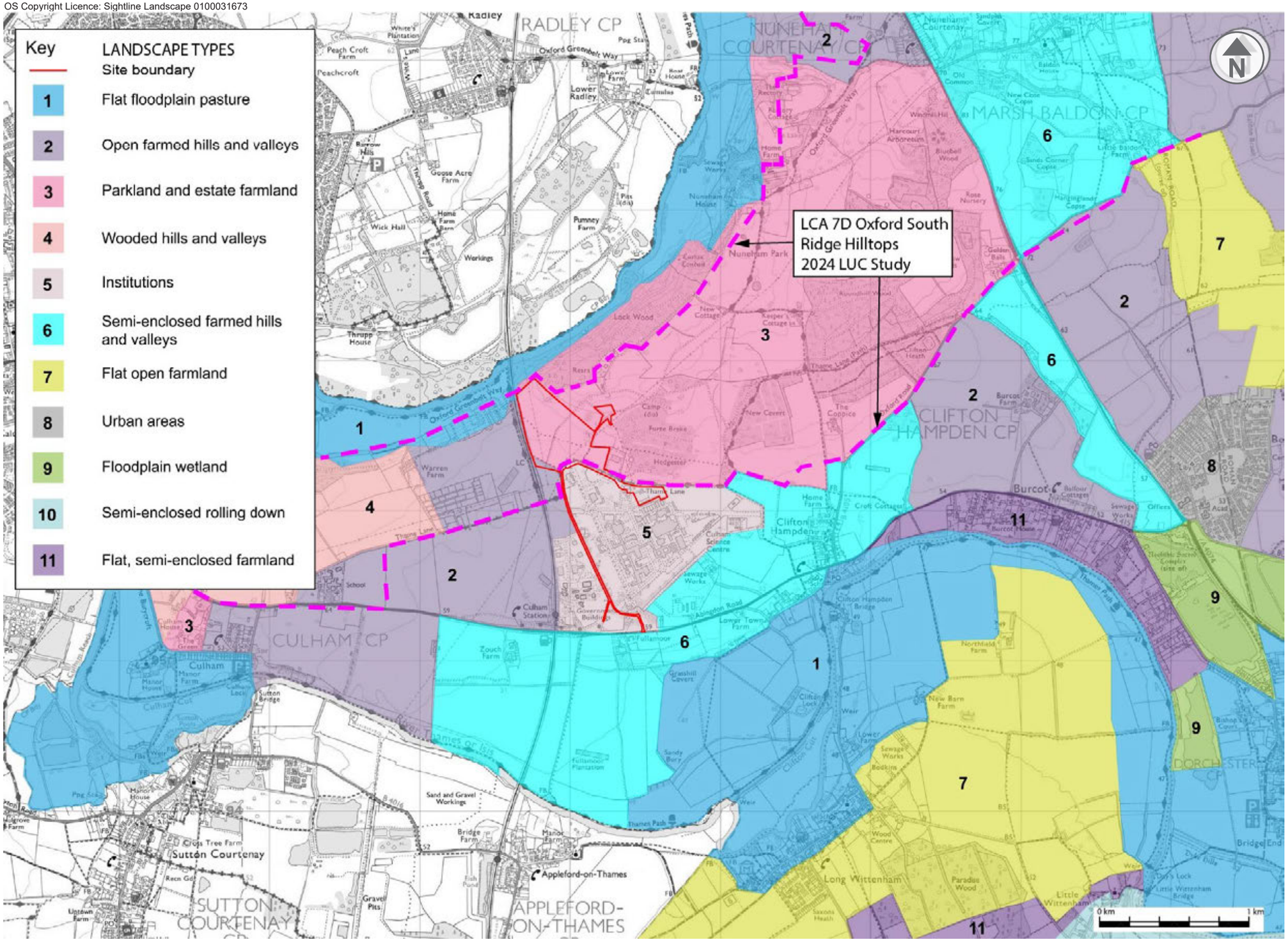
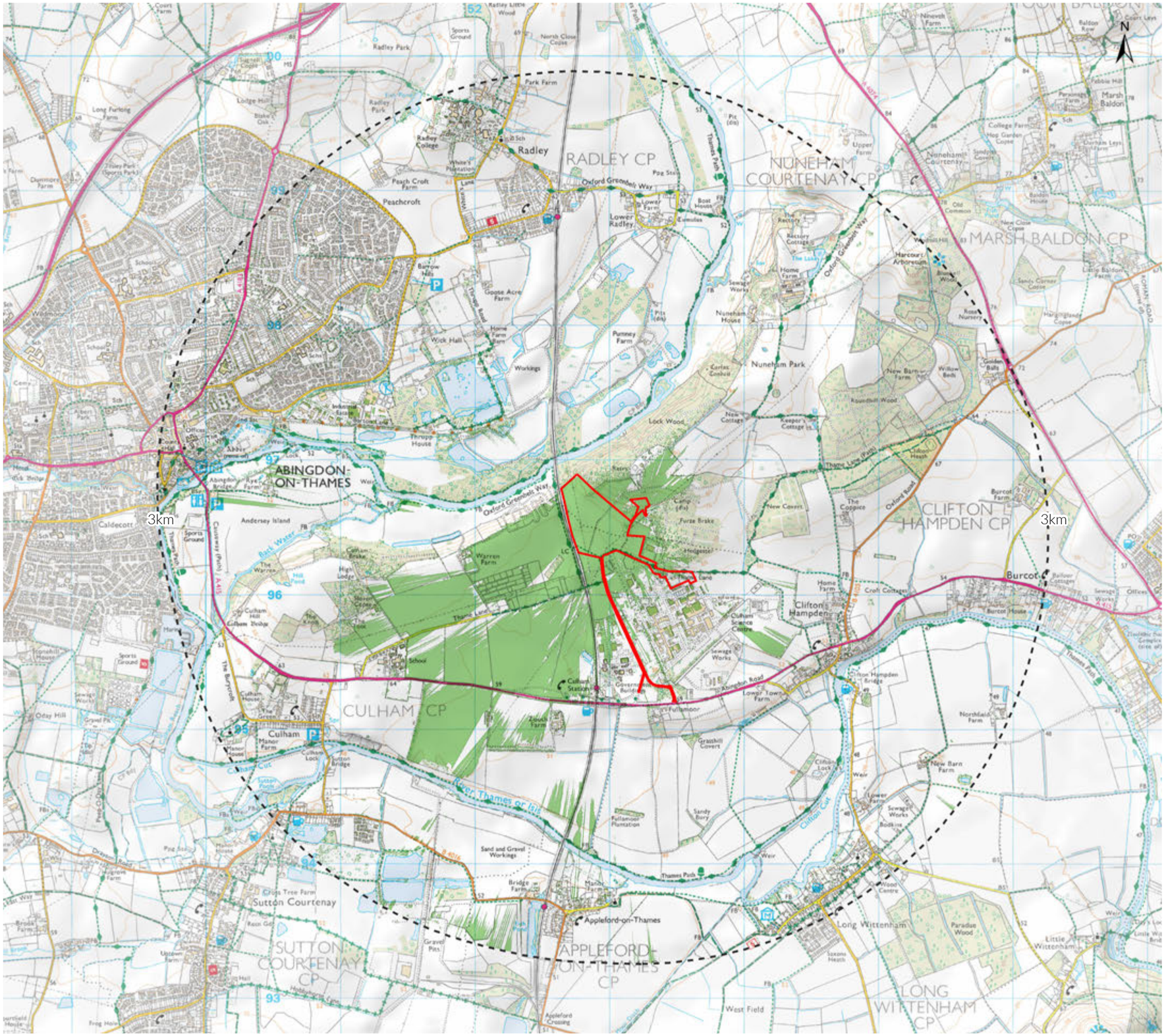


Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 9: 1932 Ordnance Survey map overlain on an extract of the Appeal Scheme Block Plan

Figure 10: Zone of Theoretical Visibility of all proposed electrical compounds and the internal equipment



Legend

- Site location
- 3 km radial extent
- Zone of Theoretical Visibility

The ZTV is generated from a receptor height of 1.6m (average eye level) and a receiver heights of 4m for BESS compound, 12m for customer substation and 15m for cable sealing end compound (maximum development height). Multiple targets were placed within the site to best represent points that may be visible.

This ZTV is based on 1m LiDAR 'First Return' DSM (Digital Surface Model) terrain data which includes intervening features such as existing trees/ vegetation and buildings in the landscape. Some changes within the landscape may have occurred since the DSM data and ZTV was created. Data source; data.gov.uk. This ZTV also includes Earth's curvature

0 0.5 1 km

Scale 1 : 30,000 @ A3

Figure 11: Localised External Viewpoint Locations

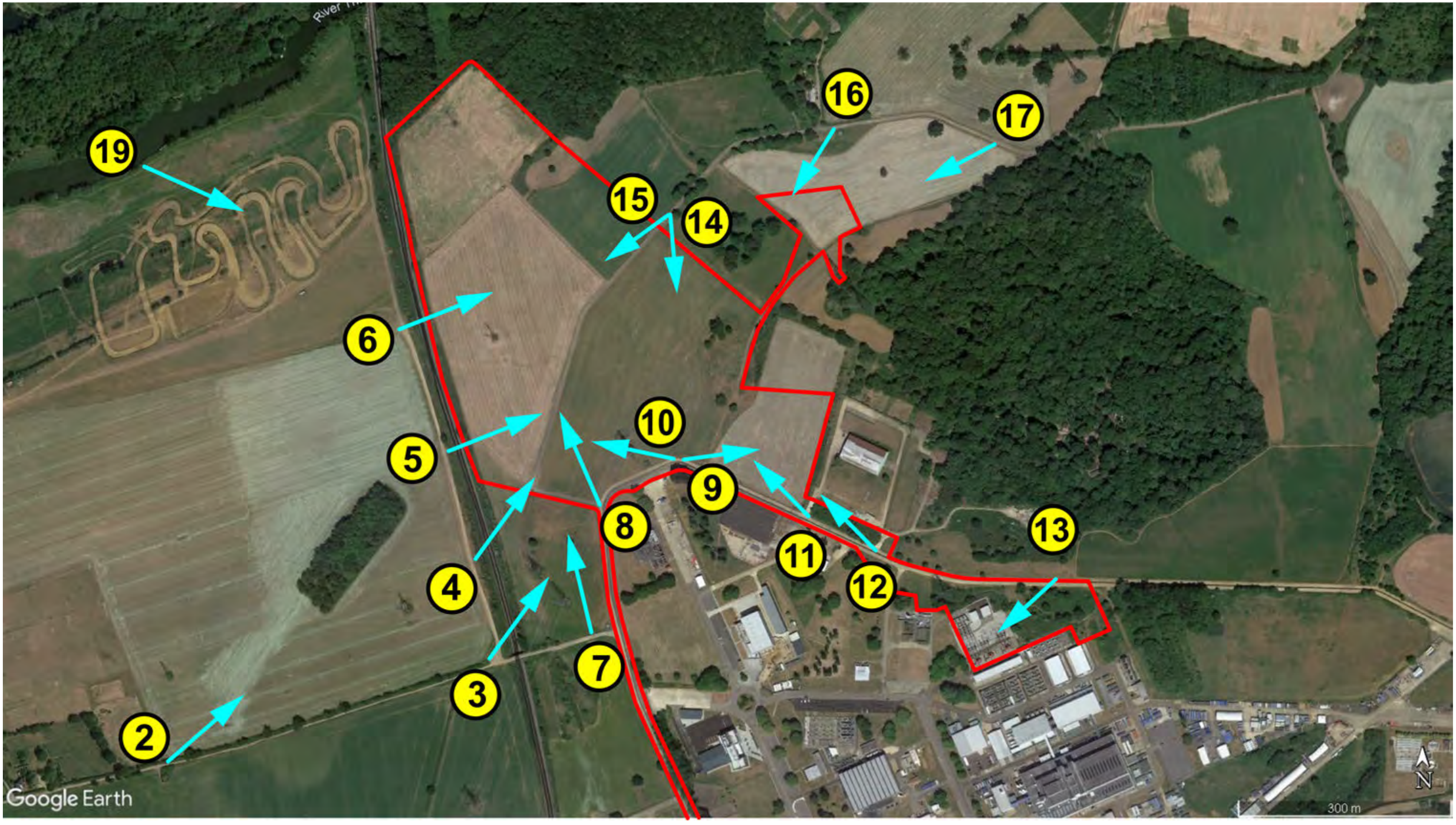
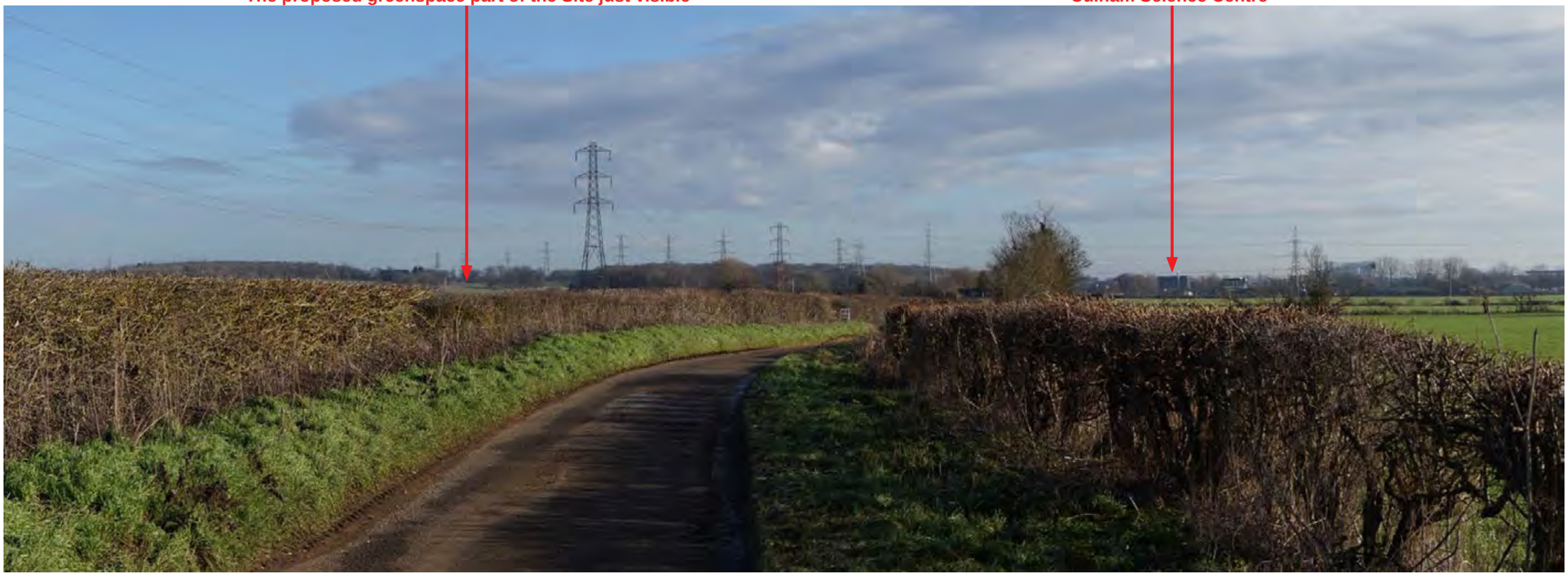


Figure 12.1a: View from Thame Lane, close to the Europa School, as it approaches the site from the west (Panoramic View)



Viewpoint 1

Direction of view: Northeast

Distance to nearest site boundary: 1.3 km

Elevation: 65 m AOD

Grid reference: SU 51573 95706

Date photo was taken: 19.01.2023

The existing view

A hedge runs along the north side of this Restricted Byway, preventing views towards the Site when in leaf and affording only glimpsed views in winter when it has been cut back. The upper part of the Registered Park and Garden is visible, with the woodlands forming the skyline, although the part of the parkland within the Site and proposed as green space lies out of view. The view is adversely affected by the overhead transmission lines.

Predicted change to the view and the visual effect - Year 1

The existing hedge will screen the Proposed Development in summer and it is likely that the electrical elements of the Proposed Development will be lie below the foreground vegetation. A substantial part of the Proposed Development, including the proposed substation and connection gantry will be screened by Warren Copse. Woodland planting between the railway line and the north south transmission line will ensure that the proposed electrical infrastructure will be screened from view.

The sensitivity is Medium and the magnitude of change Negligible , resulting in a Negligible, Not Significant, effect.

Predicted change to the view and the visual effect – Year 10

It will be possible to glimpse the proposed planting on the upper slopes of the parkland through gaps in the hedge, mainly in winter, but the effect on visual amenity is likely to remain Negligible, Not a Significant effect. If the build out of STRAT9 it is likely to flank the lane.

Predicted change to the view and the visual effect – Year 20

The proposed woodland planting along the parish boundary and on the upper slopes will become a feature of the landscape where glimpsed views are possible, resulting in a Minor beneficial, Not a Significant effect.

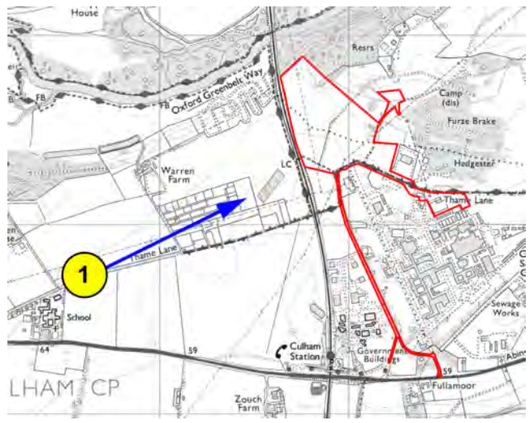


Figure 12.1b: View from Thame Lane, close to the Europa School, as it approaches the site from the west (Single Frame)

Figure 12.2a: View from Thame Lane (PRoW 183/4/20) as it approaches the site from the west, before it crosses the railway (Panoramic View)

Viewpoint 2

Direction of view: Northeast

Distance to nearest site boundary: 320 m

Elevation: 61 m AOD

Grid reference: SU 52350 95903

Date photo was taken: 19.01.2023

The existing view

A hedge runs along the north side of this Restricted Byway, preventing views towards the Site when in leaf and affording only glimpsed views in winter (the Site lies 300m away at its closest). In the glimpsed views the scrub growing along the railway line is visible, as are the upper slopes and wooded skyline of the parkland. Some of the buildings within the Culham Science Park form the focal main view down along the lane, which is also adversely affected by the overhead transmission lines.

Predicted change to the view and the visual effect – Year 1

A substantial part of the Appeal Scheme including the proposed substation will be screened by Warren Copse. Some of the electrical infrastructure will be visible between the copse and the hedge until boundary tree planting establishes. The sensitivity is Medium and the magnitude of change Low , resulting in a Minor adverse effect.

Predicted change to the view and the visual effect – Year 10

It will be possible to glimpse the planting on the upper slopes of the parkland through gaps in the hedge, mainly in winter and this will visually merge with the proposed woodland planting adjacent to the railway, which will screen the acoustic fencing. The effect on visual amenity will be Negligible. If build out of STRAT9 has started it is likely to flank the lane and block views of the Appeal Scheme.

Predicted change to the view and the visual effect – Year 20

The proposed woodland planting along the parish boundary and on the upper slopes will become a feature of the landscape where glimpsed views are possible. No effect since development within STRAT9 will block views of the Appeal Scheme.

Figure 12.2b: View from Thame Lane (PRoW 183 4/20) as it approaches the site from the west, before it crosses the railway (Single Frame)

Figure 12.3a: View from Thame Lane (PRoW 183 4/20) just before it crosses the railway when approaching from the west (also where it meets the Oxford Green Belt Way) (Panoramic View)

Viewpoint 3

Direction of view: Northeast

Distance to nearest site boundary: 185 m

Elevation: 63 m AOD

Grid reference: SU 52790 96046

Date photo was taken: 19.01.2023

The existing view

This is the first reasonably clear view of the Site from Thame Lane when heading east, although views of the majority of the Site are blocked by the foreground vegetation along the railway. Only the slightly elevated grass slopes on the east side of the Site, which are proposed to be green space, are visible. Lock Wood occupies the skyline and the clumps of trees within the parkland are visible, but the view is substantially adversely affected by the transmission lines and towers in the foreground.

Predicted change to the view and the visual effect – Year 1

A 4m high acoustic fence will be erected along the western and southern boundaries of the compound containing the electrical equipment and the attenuation pond with woodland and scrub planting infront of it. The fence will screen all but the upper metre of the inverter houses, but the fence will also be intrusive. The proposed connection gantry will be visible behind the foreground tower, connecting to the second tower. The sensitivity of the viewer is Medium and the magnitude of change is High resulting in a Moderate to Major adverse effect on visual amenity.

Predicted change to the view and the visual effect – Year 10

The scrub, tree and hedge planting will largely screen the acoustic fence and proposed electrical infrastructure from view. The upper part of the connection gantry will remain visible. The magnitude of change will decline to Medium in summer and winter (given the depth of the planting), resulting in a Moderate adverse effect on visual amenity, Not a Significant effect.

Predicted change to the view and the visual effect – Year 20

The proposed woodland planting will have established as an effective screen although it may still be possible to glimpse the gantry but it will be seen in the context of existing towers. Views of the distant parkland will be blocked. The sensitivity will be Medium and the magnitude of change Low resulting in a Minor adverse effect, Not a Significant effect.

Figure 12.3b: View from Thame Lane (PRoW 183 4/20) just before it crosses the railway when approaching from the west (also where it meets the Oxford Green Belt Way) (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.4a: View from the Oxford Green Belt Way (PRoW 183 5/10) which runs along the west side of the railway (Panoramic View)

Viewpoint 4

Direction of view: Northeast

Distance to nearest site boundary: 122 m

Elevation: 66 m AOD

Grid reference: SU 52768 96180

Date photo was taken: 19.01.2023

The existing viewpoint

A short 20m section of the footpath is slightly elevated compared with the Site and affords a view across the railway (which lies in a cutting) into the Site. Lock Wood forms the skyline. This is the best view of the Registered Park and Garden from the west side of the railway, the parkland occupies the mid to upper slopes but is setting is adversely affected by the overhead transmission line which occupies the foreground. There are no landscape features which indicate where the RPG begins.

Predicted change to the view and the visual effect – Year 1

A 4m high wooden acoustic fence will be erected along the western and southern boundaries of the compound containing the electrical equipment and the attenuation pond. The fence (and associated screen planting) will be set 20m back from the railway along the western edge. The acoustic fence will screen all but the upper sections of the electrical infrastructure from view apart from the connection gantry which will be clearly visible connecting to the foreground tower. A native hedge and woodland will be planted in front of the fence to integrate it into the landscape and provide another layer of screening. The view of the parkland will be restricted. Receptor sensitivity is Medium and the magnitude of change High resulting in a Major - Moderate adverse effect on visual amenity, a Significant effect.

Predicted change to the view and the visual effect – Year 10

The scrub, tree and hedge planting will disguise the fence, except where the overhead wires pass over, necessitating the planting of scrub under the wires, which limits its screening height, allowing a view of the upper part of the electrical infrastructure. The upper part of the connection gantry will be visible. The tree and shrub shelters will have been removed and the planting will have established a 100% canopy. The magnitude of change will remain High resulting in a Major - Moderate adverse effect on visual amenity.

Predicted change to the view and the visual effect – Year 20

The electrical infrastructure will largely be screened by the planted woody vegetation apart from the gap under the wires where screening vegetation will have to be kept low. The sensitivity will be Medium and the magnitude of change Medium resulting in a Moderate adverse effect, Not a Significant effect.

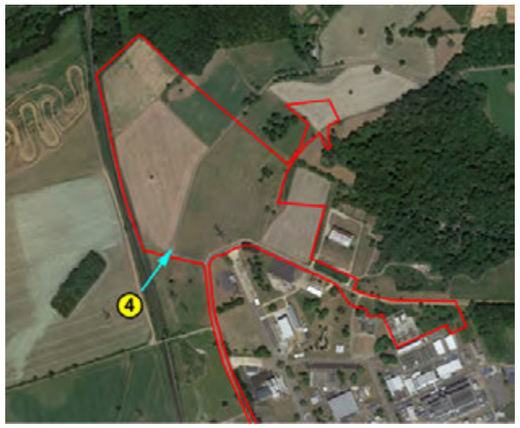


Figure 12.4b: View from the Oxford Green Belt Way (PRoW 183 5/10) which runs along the west side of the railway (Single Frame)

Figure 12.5a: View from the Oxford Green Belt Way 183 1/50 as it passes the site on the west side of the railway where it meets PRoW 183 1/60 which crosses the railway (Panoramic View). This footpath has now been formally stopped up.

Viewpoint 5

Direction of view: Northeast

Distance to nearest site boundary: 43 m

Elevation: 62 m AOD

Grid reference: SU 52721 96345

Date photo was taken: 19.01.2023

The existing view

This view illustrates how PRoW 183 1/50 drops down to run level with the top of the cutting and vegetation within the cutting prevents views over the Site. It also illustrates how views over the Site from the Oxford Green Belt Way are reduced as the path runs at a slightly lower level than the railway. The footpath which crossed the railway at grade has now been formally stopped up.

Predicted change to the view and the visual effect – Year 1

The majority of the Proposed Development will be screened from view behind a 4m high wooden attenuation fence which will run between the proposed attenuation pond and the main BESS compound. The fence will also run along the southern edge of the BESS compound, screening the infrastructure from view, apart from the connection gantry which will be seen connecting to the foreground tower. Trees and native shrubs will also be planted in front of the acoustic fence along the southern boundary to soften its visual impact. The fencing and new landscaping with shelters and stakes will initially appear intrusive. The sensitivity of the viewer is Medium and the magnitude of change Medium resulting in a Moderate adverse, effect.

Predicted change to the view and the visual effect – Year 10

The scrub, tree and hedge planting will screen the acoustic fence and the proposed electrical infrastructure from view. The tree and shrub shelters will have been removed and the planting will have established a 100% canopy. The planting will block views of the connection tower. The magnitude of change will decline to Medium in summer and winter resulting in a Moderate adverse effect on visual amenity, Not a Significant effect.

Predicted change to the view and the visual effect – Year 20

The proposed woodland planting will screen the BESS from view but the upper section of the gantry may be visible. The sensitivity will be Medium and the magnitude of change Low resulting in a Minor adverse effect, Not a Significant effect.

Figure 12.5b: View from the Oxford Green Belt Way 183 1/50 as it passes the site on the west side of the railway where it meets PRoW 183 1/60 which crosses the railway (Single Frame)

Figure 12.6a: View from the Oxford Green Belt Way (183 5/10) as it passes west of the Site (Panoramic View)

Viewpoint 6

Direction of view: East

Distance to nearest site boundary: 50 m

Elevation: 64 m AOD

Grid reference: SU 52662 96512

Date photo was taken: 19.01.2023

The existing view

This view illustrates how views over the Site from the Oxford Green Belt Way are reduced as the path runs at a slightly lower level than the railway. The Site is visible, almost at eye level but the view, including that of the parkland, is marred by the overhead transmission line and the buildings within the CSC.

Predicted change to the view and the visual effect – Year 1

A 4m high wooden acoustic fence will be erected along the western boundary of the Site which will screen the electrical infrastructure from view, apart from a group of containers on the north west boundary where there is no fence, but they will be seen behind the foreground tower. The upper part of the connection gantry will be visible, seen side on and so more prominent. It is proposed to establish native woodland in front of the fence and northern boundary to screen it, but initially the fence and containers will be intrusive. The sensitivity of the viewer is Medium and the magnitude of change High potentially resulting in a Moderate - Major adverse effect on visual amenity.

Predicted change to the view and the visual effect – Year 10

The woodland and hedge planting will disguise the fence and proposed electrical infrastructure from view and reduce the visibility of the CSC and existing electrical infrastructure. The upper part of the connection tower will be just visible. The magnitude of change will be High, but of woodland largely screening existing and proposed infrastructure, resulting in a Minor adverse effect on visual amenity, Not a Significant effect.

Predicted change to the view and the visual effect – Year 20

The planting will have established to create a woodland edge along the east side of the railway, beneficially reducing the visibility of the existing electrical infrastructure and CSC, creating a better setting to STRAT9. The magnitude of change will remain high but the view will be of woodland which beneficially screens the transmission lines and CSC. The effect on visual amenity will be Moderately beneficial.

Figure 12.6b: View from the Oxford Green Belt Way (183 5/10) as it passes west of the Site (Single Frame)

Figure 12.7b: View from the Oxford Green Belt Way (183 4/40) as it passes south of the Site after crossing the railway (Panoramic View)

Viewpoint 7

Direction of view: North

Distance to nearest site boundary: 200 m

Elevation: 62 m AOD

Grid reference: SU 52940 96092

Date photo was taken: 19.01.2023

The existing view

This is the first open view towards the Registered Park and Garden but its setting is adversely affected by the overhead transmission line in the foreground. The setting is also adversely affected by the CSC which lies to the right of the view.

Predicted change to the view and the visual effect – Year 1

The proposed electrical infrastructure compound will be screened a 4m high wooden acoustic fence along the west and southern boundaries. It is proposed to establish native trees and scrub in front of the acoustic fence on the southern boundary. Initially the visible parts of the acoustic fencing and new landscaping will appear intrusive. The sensitivity of the viewer is Medium and the magnitude of change High in summer and winter, resulting in a Moderate – Major adverse, a Significant effect on visual amenity.

Predicted change to the view and the visual effect – Year 10

The scrub, tree and hedge planting along the southern boundary will screen the proposed acoustic fence and electrical infrastructure from view, apart from where low scrub under the wires will allow a glimpsed view through to the fence. The magnitude of change will be High in summer and winter but the woody vegetation will largely screen the intrusive elements from view and reduce the prominence of the existing towers resulting in a Moderate adverse effect on visual amenity, Not a Significant effect.

Predicted change to the view and the visual effect – Year 20

The scrub, tree and hedge planting will have gained greater stature screening the acoustic fence and BESS and reducing the prominence of the existing electrical infrastructure. The magnitude of change will be High in summer and winter but the increased cover of woody vegetation is considered beneficial resulting in a Minor adverse effect on visual amenity, Not a Significant effect.

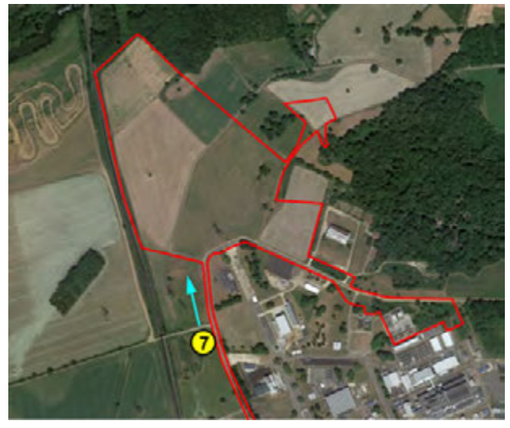
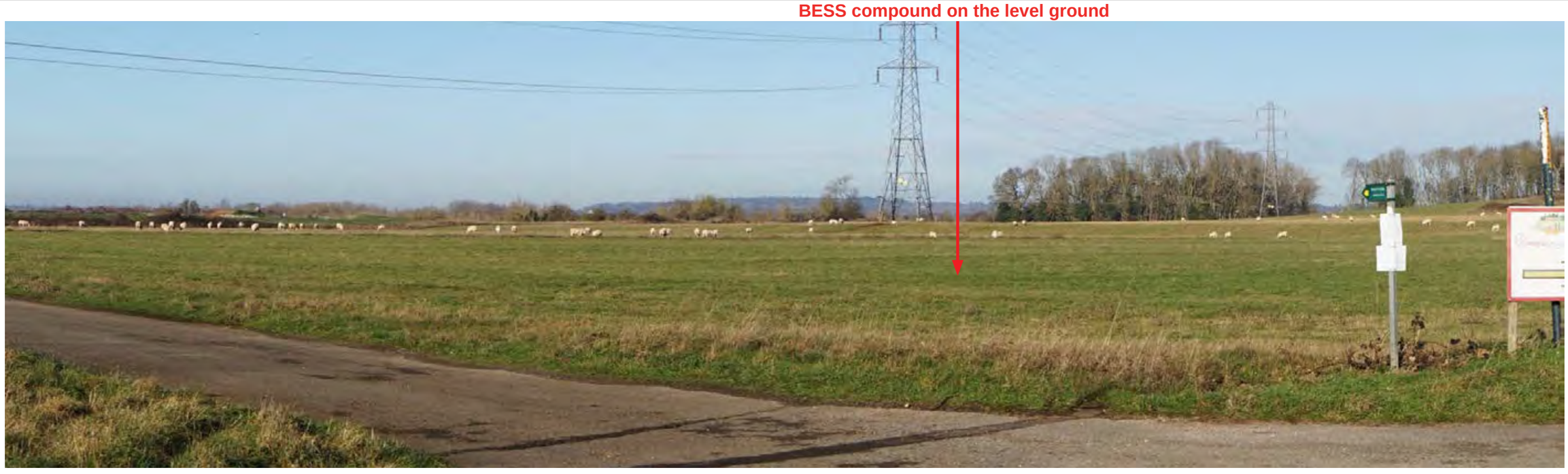


Figure 12.7b: View from the Oxford Green Belt Way (183 4/40) as it passes south of the Site after crossing the railway (Single Frame)

Figure 12.8a: View from the Oxford Green Belt Way (183 4/40) as it skirts the Culham Science Centre, south of the Site at its junction with footpath 183 1/60 (Panoramic View)



Viewpoint 8

Direction of view: North

Distance to nearest site boundary: 0 m

Elevation: 64 m AOD

Grid reference: SU 52941 96269

Date photo was taken: 19.01.2023

The existing view

This section of the Restricted Byway affords a clear view across the Site, but also of the Culham Science Centre, around which it runs. To the northwest the view extends across to the Thames Valley and to the northeast the farmland gradually rises to Lock Wood which occupies the skyline. The vista is framed by the two transmission lines which cut through the farmland.

Predicted change to the view and the visual effect – Year 1

The proposed BESS compound will occupy the foreground but the electrical equipment will be largely screened from view by a 4m high solid wood panel acoustic fence, which will also block views of the countryside beyond. Electrical equipment including the point of connection compound and gantry will be visible through the weld mesh fence further to the right, where there will be no acoustic fence. Native trees and shrubs will be planted in front of the acoustic fence to soften its visual impact. The view of the wider countryside (and any future development within STRAT9) will be blocked for this short section of the footpath. The sensitivity of the viewer is Medium and the magnitude of change High in summer and High in winter, resulting in a Moderate - Major adverse effect in summer and winter, a Significant effect.

Predicted change to the view and the visual effect – Year 10

The proposed planting will have achieved 100% canopy and the stakes and shelters will have been removed. The planting in front of the acoustic fence will largely screen the acoustic fence electrical infrastructure from view in summer , but it will be possible to glimpse these features in winter. The point of connection compound and gantries will be visible to the right of the image. The magnitude of change will remain High but the infrastructure element will be largely softened by woody vegetation, resulting in a Moderate adverse effect on visual amenity. The view of the wider countryside and any future development within STRAT9 will remain blocked for this short section of the footpath.

Predicted change to the view and the visual effect – Year 20

The planting in front of the acoustic fence will have gained greater stature, screening the BESS but the point of connection compound and gantries will be visible to the right of the image. The magnitude of change will remain High but the infrastructure element will be largely softened by woody vegetation, resulting in a Moderate adverse effect on visual amenity. The view of the wider countryside will remain blocked for this short section of the footpath.

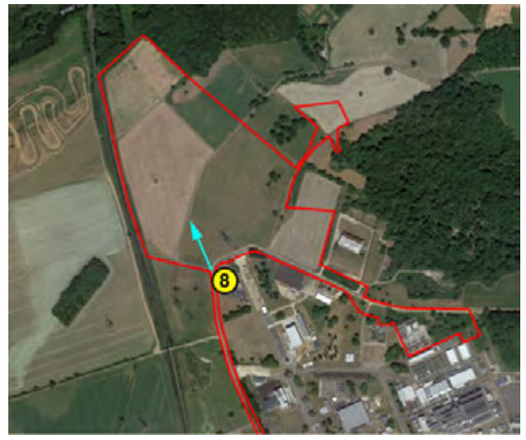


Figure 12.8b: View from the Oxford Green Belt Way (183 4/40) as it skirts the Culham Science Centre, south of the Site at its junction with footpath 183 1/60 (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.9a: View from the Oxford Green Belt Way as it skirts the CSC approaching the site of the proposed substation (Panoramic View)

Viewpoint 9

Direction of view: East

Distance to nearest site boundary: 0 m

Elevation: 65 m AOD

Grid reference: SU 53033 96336

Date photo was taken: 19.01.2023

The existing view

The existing Restricted Byway follows the broad concrete perimeter track which runs around the outside of the perimeter security fence to the CSC. As a result the visual amenity of walkers is adversely affected by the fence, buildings and activities within the science centre. The view is also marred by an industrial shed and electrical infrastructure along the byway. Woodland forms a screening backdrop to the view. It is proposed to locate the electrical substation on the grass field in the foreground.

Predicted change to the view and the visual effect – Year 1

The Proposed Substation will occupy the southern portion of the sunlit field visible in the foreground. It wil be clearly visible, seen against the existing backdrop of the warehouse. Walkers will have to pass between the palisade fence to the substation and the security fence around the CSC. A hedging and trees will be planted around the substation. The sensitivity of the receptor is Medium and the magnitude of change is High, resulting in a Moderate adverse, Not Significant effect, on the visual amenity of walkers.

Predicted change to the view and the visual effect – Year 10

The hedge with trees will have gained stature and in summer will screen the majority of the substation from view but the entrance gates will be visible as walkers pass them. The planting will allow glimpsed views in winter. The magnitude of change will remain Medium in summer and winter and the effect will be Moderate adverse, a Not a Significant effect.

Predicted change to the view and the visual effect – Year 20

No significant change in the view since Year 10 as the hedge will be managed at a similar height. The residual effect will be Moderate adverse Not a Significant effect.

Figure 12.9b: View from the Oxford Green Belt Way as it skirts the CSC approaching the site of the proposed substation (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.10a: View from the Oxford Green Belt Way (183 4/40) as it skirts the Culham Science Centre (Panoramic View)

Viewpoint 10

Direction of view: Northwest

Distance to nearest site boundary: 0 m

Elevation: 65 m AOD

Grid reference: SU 53033 96336

Date photo was taken: 19.01.2023

The existing view

This view illustrates how the CSC, water pumping station and overhead transmission line adversely affects the setting of the route of this section of the Oxford Green Belt Way. The Site occupies the land behind the transmission tower up to the railway, which passes in cutting and can only be discerned by the line of scrub within the cutting. Warren Copse and the STRAT9 land is visible.

Predicted change to the view and the visual effect – Year 1

The electrical equipment will be clearly visible, set behind the tower and seen through the proposed weld mesh compound fence. The point of connection compound and gantry will be clearly visible, set behind and linking into the foreground tower. The sensitivity of the receptor is Medium and the magnitude of change High resulting in a Moderate - Major adverse effect.

Predicted change to the view and the visual effect – Year 10

Due to various constraints it will not be possible to provide mitigation in the form of trees or hedges between the track and and the BESS and point of connection compound . The magnitude of change will remain High and the effect will be Moderate - Major adverse effect.

Predicted change to the view and the visual effect – Year 20

No change, the magnitude of change will remain Medium and the effect will be Moderate adverse, not a Significant effect.

Figure 12.10b: View from the Oxford Green Belt Way (183 4/40) as it skirts the Culham Science Centre (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.11a: View from the Oxford Green Belt Way (171 16/70)as it approaches the site of the proposed substation from the south (Panoramic View)

Site of the proposed BESS compound

Site of the proposed substation

Viewpoint 11

Direction of view: Northwest

Distance to nearest site boundary: 0 m

Elevation: 65 m AOD

Grid reference: SU 53227 96251

Date photo was taken: 19.01.2023

The existing view

The existing Restricted Byway follows the broad concrete perimeter track which runs around the outside of the perimeter security fence to the CSC. As a result the visual amenity of walkers is adversely affected by the fence, buildings and activities within the CSC. The view is also marred by the overhead electricity lines. Shrub cover along the railway and Lock Wood form the skyline.

Predicted change to the view and the visual effect – Year 1

The Proposed Substation will occupy most of the green field visible in the foreground. Walkers will have to pass between the palisade fence to the substation and the security fence around the CSC. A native hedge will be planted between the substation and the byway. The sensitivity of the receptor is Medium and the magnitude of change is High, resulting in a Moderate - Major adverse effect on the visual amenity of users of the Byway. The view of the parkland will be blocked, although the Proposed Development will enable people to visit the parkland, enjoy a high quality view over the Thames Valley and walk through the parkland to link with the wider PRoW network to the north.

Predicted change to the view and the visual effect – Year 10

The hedge will have gained a height of 3m and in summer will screen the lower part of the substation from view but the entrance gates will be visible as walkers pass them. Sensitivity is Medium and the magnitude of change High resulting in a Moderate - Major adverse, effect.

Predicted change to the view and the visual effect – Year 20

No significant change in the view since the hedge will be managed at a similar height. The residual effect will be Moderate - Major adverse.

Figure 12.11b: View from the Oxford Green Belt Way (171 16/70) as it approaches the site of the proposed substation from the south (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.12a: View from the Oxford Green Belt Way (171 16/70) as it approaches the site of the proposed substation from further south (Panoramic View)

Viewpoint 12

Direction of view: Northeast

Distance to nearest site boundary: 122 m

Elevation: 66 m AOD

Grid reference: SU 53330 96209

Date photo was taken: 19.01.2023

The existing view

The existing Restricted Byway follows the broad concrete perimeter track which runs around the outside of the perimeter security fence to the CSC. As a result, the visual amenity of walkers is adversely affected by the fence, buildings and activities within the CSC. The view is also marred by the overhead electricity lines. The north side of the Byway is enclosed by woodland.

Predicted change to the view and visual effect Year 1

It will just be possible to glimpse the entrance to the substation and native hedge between the byway and the substation. The majority of the substation will be screened by the intervening woodland. The sensitivity of the receptor is Medium and the magnitude of change Low resulting in a Minor adverse effect on visual amenity, Not a Significant effect.

Predicted change to the view and the visual effect – Year 10

The hedge will have gained a height of 3m and in summer and the substation will be set back behind the existing planting. The magnitude of change will remain Low and the effect will be Minor adverse, Not a Significant effect.

Predicted change to the view and the visual effect – Year 20

No significant change in the view since the hedge will be managed at a similar height. The residual effect will be Minor adverse Not a Significant effect.

Figure 12.12b: View from the Oxford Green Belt Way (171 16/70) as it approaches the site of the proposed substation from further south (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.13a: View from the Oxford Green Belt Way (171 16/70) as it passes the proposed extension to the Culham Science Centre substation (Panoramic View)

Viewpoint 13

Direction of view: Southwest

Distance to nearest site boundary: 0 m

Elevation: 65 m AOD

Grid reference: SU 53569 96172

Date photo was taken: 19.01.2023

The existing view

The existing Restricted Byway follows the broad concrete perimeter track which runs around the outside of the perimeter security fence to the CSC. Views of the CSC and the existing substation are through the security fence. In summer the substation is screened by trees, but in winter it is possible to glimpse its structure through the leafless trees, but seen in the context of other structures within the CSC.

Predicted change to the view and visual effect Year 1

The proposed extension will result in the loss of trees close to the substation. The proposed extension will be clearly visible beyond the inner access track but will be seen through the mesh of the existing security fence. The magnitude of change will be Medium summer and winter and the sensitivity of the viewer is Medum resulting in a Moderate adverse effect on visual amenity.

Predicted change to the view and visual effect Year 10

Mitigation is not practical. The residual effect on visual amenity will remain as Moderate adverse.

Predicted change to the view and visual effect Year 20

Mitigation is not practical. The residual effect on visual amenity will remain as Moderate adverse.

Figure 12.13b: View from the Oxford Green Belt Way (171/ 6/70) as it passes the proposed extension to the Culham Science Centre substation (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.14a: View from the northeast boundary of the Site within the Registered Park and Garden looking southeast (not currently a publicly accessible viewpoint) (Panoramic View)

Viewpoint 14

Direction of view: South

Distance to nearest site boundary: 130 m

Elevation: 74 m AOD

Grid reference: SU 53033 96678

Date photo was taken: 19.01.2023

The existing view

This elevated position affords a panoramic view over the Site and across to the allocated urban expansion area to the right and the CSC to the left. The view is substantially marred by the overhead transmission lines which radiate out from Didcot Power Station, which is also visible.

Predicted change to the view and visual effect Year 1

The proposed electrical infrastructure compound will lie at the base of the slope, seen in the context of the cluster of existing transmission lines. The majority of the compound will be screened by the gentle land forming along the northeast boundary. The proposed electrical substation will be partially visible, seen in the context of the CSC. The earth bunds along the western boundary will screen reduce the visibility of the railway. Native woodland and scrub will be planted on the new landform across the northeast edge, largely following the parish boundary and re-establishing the historical line of woodland. Scrub and woodland will also be planted on the created landforms along the western boundary. A block of woodland will also be planted northwest of the proposed substation. The intervening grassland will be converted to a species rich wildflower meadow and parkland trees planted within it. Public access will be permitted to this area for the operational lifetime of the facility.

Although there is currently no public access to this area, sensitivity is considered to be Medium (given the adverse influence of the transmission lines). The magnitude of change is High, resulting in a Moderate - Major adverse, Significant effect.

Predicted change to the view and visual effect Year 10

After 10 years the proposed landscaping will screen the proposed electrical infrastructure and the CSC and will reduce the adverse visual impact of the Didcot transmission lines and any development within STRAT9. The magnitude of change will reduce to Medium, resulting in a Moderate adverse effect, although this is offset by the benefit of reducing the visibility of existing development, and so a Minor adverse effect is predicted, Not a Significant effect.

Predicted change to the view and visual effect Year 20

The woodland planting along the parish boundary and tree planting within the parkland will visually isolate the park and garden from the urban fringe landscape to the southwest, resulting in a Minor beneficial effect in summer and winter.

Figure 12.14b: View from the northeast boundary of the Site within the Registered Park and Garden looking southeast (not currently a publicly accessible viewpoint) (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.15a: A continuation from Viewpoint 14 within the Registered Park and Garden but looking southwest (not currently a public viewpoint) (Panoramic View)

Viewpoint 15

Direction of view: Southwest

Distance to nearest site boundary: 130 m

(to haul road access)

Elevation: 74 m AOD

Grid reference: SU 53035 96679

Date photo was taken: 19.01.2023

The existing view

The parkland affords an extensive view, through the transmission wires, over the allocated urban expansion area, as far as Culham Brake and Sloven Copse. The buildings of Warren Farm are visible. Further to the right the view extends across the Thames Valley, which has a high tree cover. The only building that can easily be made out in the valley is the spire of St Helen's Church, Abingdon.

Predicted changes to the view and effect on visual amenity – Year 1

The view will be over the area of the Site which will become enhanced parkland with permissive access. Native woodland will be planted to restore the historical boundary (as far as possible given the constraints of the power lines|) and across the northeast edge of proposed electrical compound (which is out of view to the left, see View 14). The intervening grassland will be converted to a species rich wildflower meadow with parkland trees planted within it. Public access will be permitted to this area for the operational lifetime of the facility. Woodland planting has been omitted from the northern part of the greenspace to preserve this attractive view over the Thames Valley and it is anticipated that the northern part of the parkland will become a well used viewing spot once permissive access is granted, both by passing walkers, employees within the CSC and future residents of STRAT9.

The sensitivity of the viewer is High and the magnitude of change will be Medium but the effect is considered to be Neutral in that tree planting is a feature of parkland restoration.

Predicted changes to the view and effect on visual amenity Year 10

After 10 years the proposed landscaping will have established sufficiently to allow the historical setting of the southwest boundary of the RPG to be understood and it will start to beneficially screen any development within STRAT9. This will have a Minor beneficial effect on visual amenity.

Predicted change to the view and visual effect Year 20

The woodland planting along the parish boundary and tree planting within the parkland will visually isolate the park and garden from the urban fringe landscape to the west, resulting in a Minor beneficial effect but Moderate beneficial if STRAT9 is built out.

Figure 12.15b: A continuation from Viewpoint 14 within the Registered Park and Garden but looking southwest (not currently a public viewpoint) (Single Frame)

Figure 12.16a: View from deeper within the Registered Park and Garden (further northeast, not currently a publicly accessible viewpoint) (Panoramic View)

Viewpoint 16

Direction of view: Southwest

Distance to nearest site boundary: 375 m

Elevation: 82 m AOD

Grid reference: SU 53258 96785

Date photo was taken: 19.01.2023

The existing view

This view illustrates how the visibility of the BESS Site quickly decreases on heading northeast towards the core parkland area. Only glimpsed views of the BESS Site are visible through the parkland trees. The transmission lines detract from the view. The allocated urban expansion area is also clearly visible in the distance. The transmission lines have an adverse effect on landscape character and visual amenity.

Predicted changes to the view and effect on visual amenity – Year 1

Native woodland and scrub will be planted across the northeast edge of proposed BESS compound, largely following the parish boundary and re-establishing the historical line of woodland. A block of woodland will also be planted northwest of the proposed substation. It will be possible to glimpse part of the battery compound at the base of the slope, seen through the trees. Sensitivity is High and the magnitude of change in relation to the BESS only, is Low in summer and winter, resulting in a Moderate adverse effect.

Predicted changes to the view and effect on visual amenity – Year 10

Once the trees and shrubs gain stature they will beneficially screen the Customer Substation, BESS compound and CSC, and will reduce the adverse visual impact of the Didcot transmission lines. The effect of the Appeal Scheme will be Minor adverse in winter and summer.

Predicted change to the view and visual effect Year 20

The woodland planting along the parish boundary and tree planting within the parkland will visually isolate the park and garden from the urban fringe landscape to the west, resulting in a Minor beneficial effect in summer and winter, Moderate beneficial if STRAT9 is built out..

Figure 12.16b: View from deeper within the Registered Park and Garden (further northeast, not currently a publicly accessible viewpoint) (Single Frame)

Figure 12.17a: Private view from within the Registered Park and Garden looking southwest (Panoramic View)

Viewpoint 17

Direction of view: Southwest

Distance to nearest site boundary: 450 m to haul road access

Elevation: 81 m AOD

Grid reference: SU 53490 96767

Date photo was taken: 19.01.2023

The existing view

This view illustrates how views of the Site are still possible, but further reduced on moving deeper into the parkland, away from the edge of the slope. The allocated urban expansion area is visible in the distance.

Predicted changes to the view and effect on visual amenity – Year 1

The proposed electrical infrastructure compound will lie at the base of the slope, seen in the context of the cluster of existing transmission lines, but the majority of it will be screened by the lip of the slope and the intervening trees. It will be a glimpsed view with limited visibility in summer. Native woodland and scrub will be planted across the northeast edge of proposed electrical compound, largely following the parish boundary and re-establishing the historical line of woodland. A block of woodland will also be planted northwest of the proposed substation. Sensitivity is High and the magnitude of change associated with the Appeal Proposal is Low, resulting in a Moderate adverse, Not Significant effect.

Predicted changes to the view and effect on visual amenity – Year 10

Once the trees and shrubs gain stature they will beneficially screen the clearly visible STRAT9 area and will reduce the adverse visual impact of the Didcot transmission lines. The effect of the Appeal Scheme on visual amenity will be Negligible.

Predicted change to the view and visual effect Year 20

The woodland planting along the parish boundary and tree planting within the parkland will visually isolate the park and garden from STRAT9 to the west, resulting in a Moderate beneficial effect in summer and winter.

Figure 12.17b: View from within the Registered Park and Garden looking southwest (Single Frame)

Viewpoint 18

Direction of view: Southwest

Distance to nearest site boundary: 1.2 km

Elevation: 86 m AOD

Grid reference: SU 54147 97321

Date photo was taken: 19.01.2023

The existing view

This view illustrates how the Site is screened by topography and tree cover to people within land further northwest of the Site.

Predicted changes to the view and the effect on visual amenity – Year 1

The Proposed BESS will lie beyond the screening trees, below the brow of the hill and will have no effect on the visual amenity of residents or those using the track.

Predicted changes to the view and the effect on visual amenity -Year 10

No effect.

Predicted changes to the view and the effect on visual amenity Year 20.

No effect.

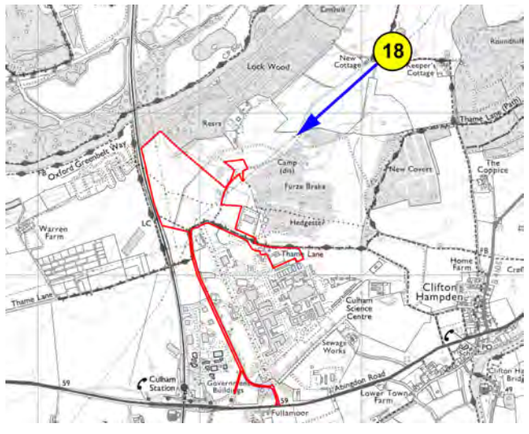


Figure 12.18b: View from track adjacent to New Cottage within the Registered Park and Garden (also PRoW 317 2/50) (Single Frame)

Figure 12.19a: View from PRoW 183 1/40 along the south bank of the Thames, northwest of the Site (Panoramic View)

Viewpoint 19

Direction of view: East

Distance to nearest site boundary: 490 m

Elevation: 52 m AOD

Grid reference: SU 52281 96748

Date photo was taken: 19.01.2023

The existing view

This view illustrates how users of the riverside footpath are too low in the landscape to afford a view of the Site. The valley slope is currently a Motocross circuit

Predicted changes to the view and the effect on visual amenity – Year 1

The Proposed Development will have no effect on the visual amenity of walkers or those using the future possible green space.

Predicted changes to the view and the effect on visual amenity – Year 10

No effect.

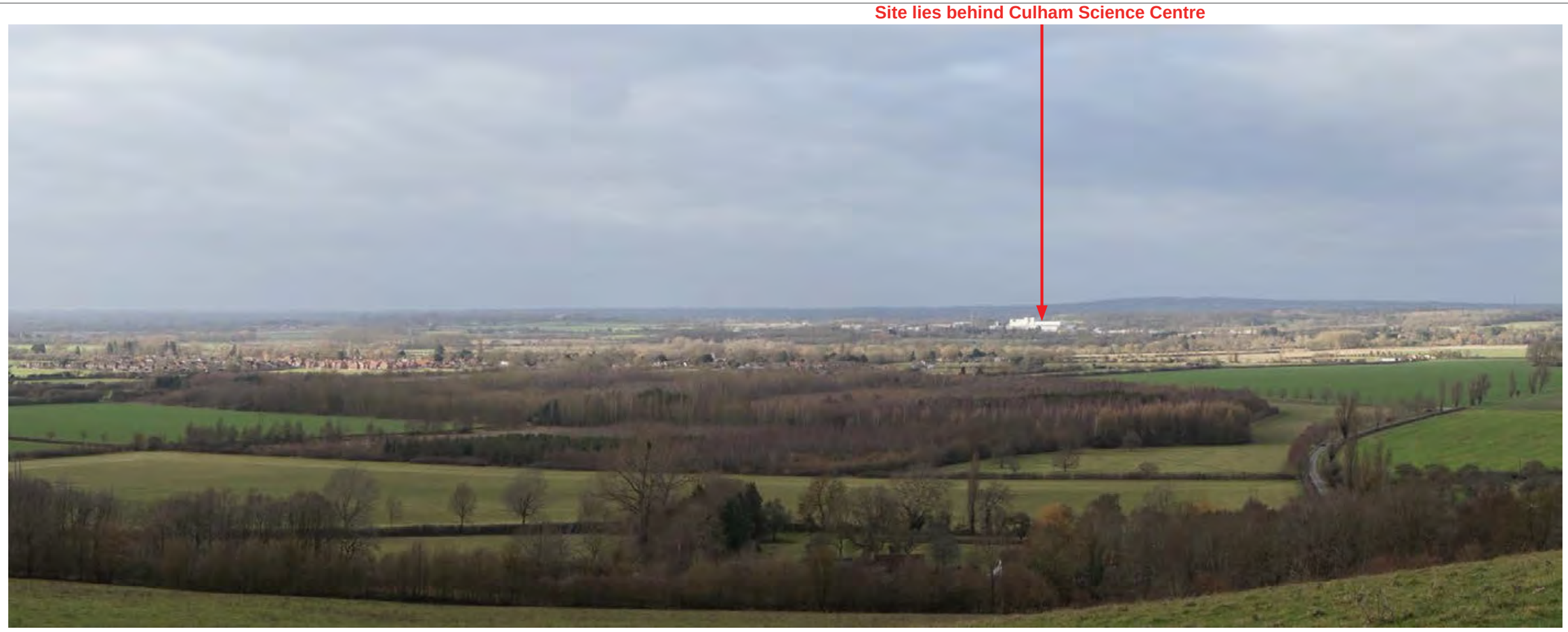
Predicted changes to the view and the effect on visual amenity Year 20

No effect.

Figure 12.19b: View from PRoW 183 1/40 along the south bank of the Thames, northwest of the Site (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.20a: View from the top of Wittenden Clumps within the Site North Wessex Downs AONB (Panoramic View)



Viewpoint 20

Direction of view: North

Distance to nearest site boundary: 5 km

Elevation: 118 m AOD

Grid reference: SU 56623 92835

Date photo was taken: 19.01.2023

The existing view

This is a popular viewpoint affording panoramic views over Oxfordshire, including towards the Site. The Site is, however, screened by the buildings of the CSC, which form a prominent landmark cluster.

Predicted change to the view and visual effect Year 1

The Proposed Development will have no effect on the visual amenity of visitors to the Clumps.

Predicted changes to the view and the effect on visual amenity – Year 10

There will be no effect on the visual amenity of visitors to The Clumps.

Predicted changes to the view and the effect on visual amenity Year 20

There will be no effect on the visual amenity of visitors to The Clumps.

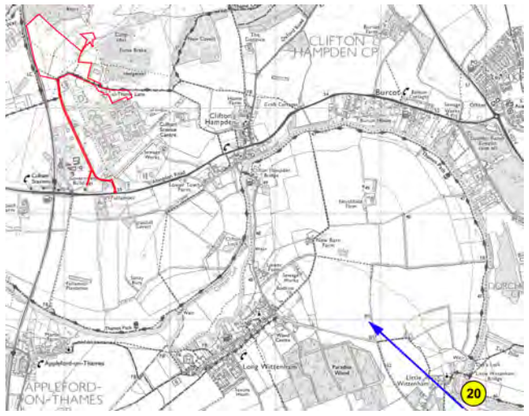


Figure 12.20b: View from the top of Wittenden Clumps within the Site North Wessex Downs AONB (Single Frame)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 12.20c: View from the top of Wittenden Clumps within the Site North Wessex Downs AONB (Zoomed Image)

Proposed Battery Energy Storage System, adjacent to the Culham Science Centre

Figure 13: Existing Public Rights of Way

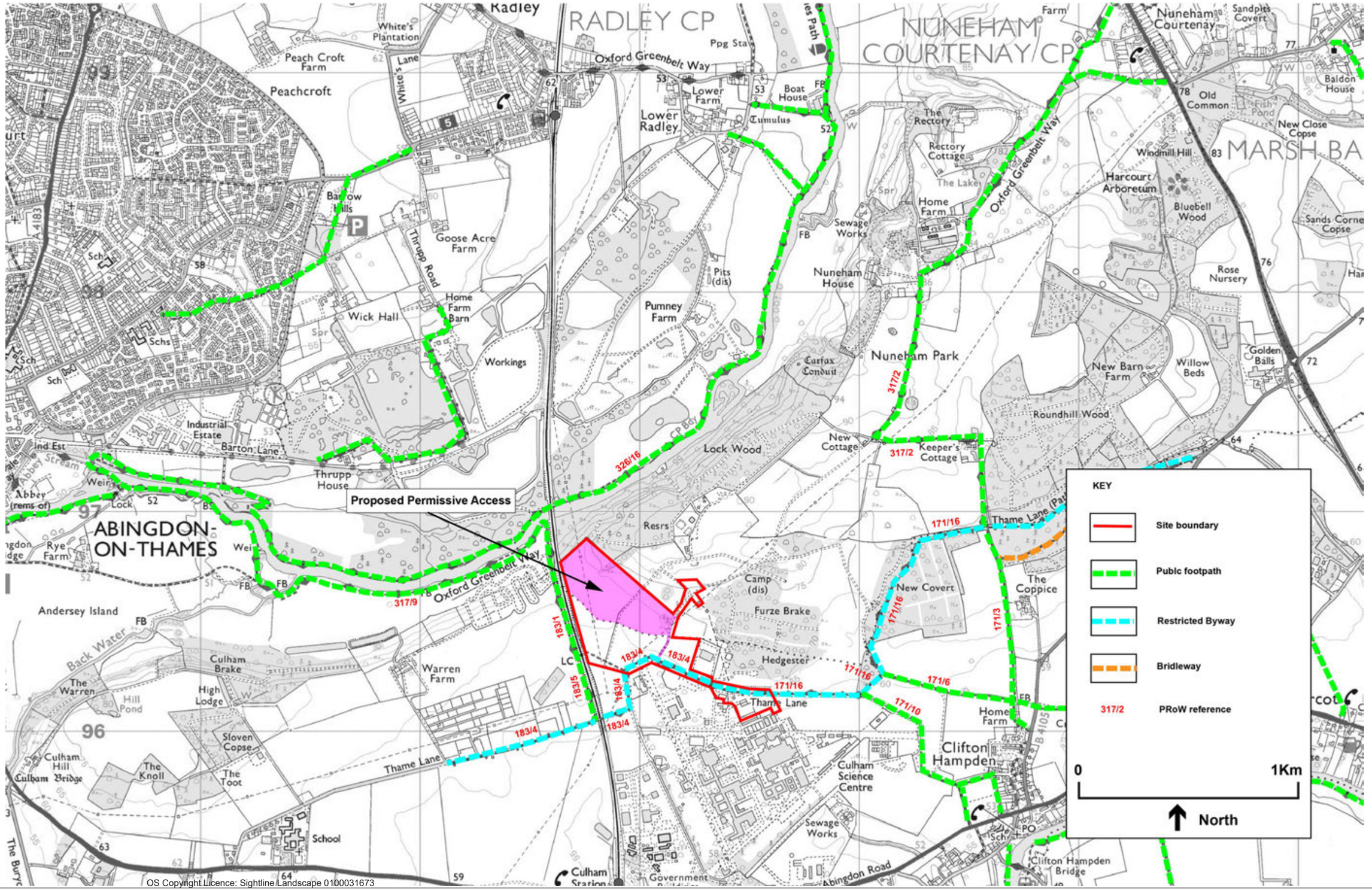
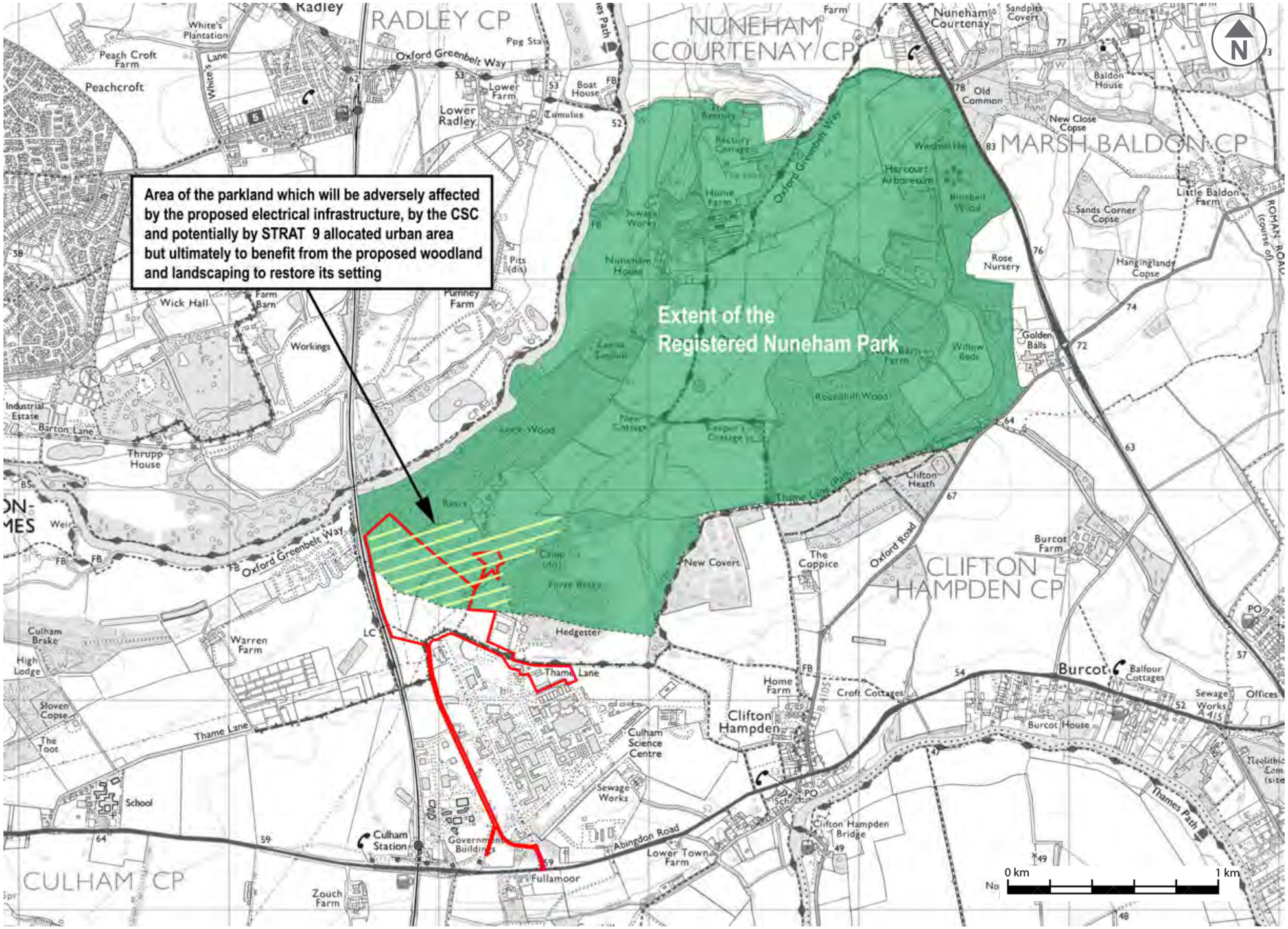


Figure 14: Effect on the setting of Nuneham Park



Proposed Battery Energy Storage System, adjacent to the Culham Science Centre