

7 January 2026

Elstree and Borehamwood Green Belt Society

**Formal Planning Objection Regarding Application 25/1070/FUL:
Elstree Battery Energy Storage System (BESS)**

For the attention of the case officer: Lisa Page

On behalf of the Elstree and Borehamwood Green Belt Society, I am writing to formally object to planning application 25/1070/FUL, which proposes the construction and operation of a Battery Energy Storage System (BESS) with an electrical capacity of up to 99.9 Megawatts (MW), alongside a 132kV substation, associated infrastructure, and landscaping on Land East of Watling Street, Elstree, Hertfordshire, WD6 3AD (Planning, Design and Access Statement, para 1.2). We believe this proposal represents a significant and harmful industrialisation of protected land that fails the fundamental tests of national and local policy.

The Framework of Objection: National and Local Policy Conflict

Policy Document	Relevant Policy	Core Requirement
National Planning Policy Framework (NPPF) Dec 2024	Paragraph 142	Protecting Green Belt land; preventing urban sprawl.
NPPF Dec 2024	Paragraph 153	Substantial weight must be given to any harm to the Green Belt.
Hertsmere Core Strategy (HCS) 2013	Policy SP1 vii (page 31) Policy CS13 (page 60)	General presumption against inappropriate development in Green Belt.
Hertsmere Site Allocations and Development Management (SADM) 2016	SADM 26 (para 4.97)	Development must harmonise with setting and not harm openness.
NPPF Dec 2024	Paragraph 160	Renewable energy projects often comprise inappropriate development.
NPPF Dec 2024	Paragraph 193	Refusal for loss/deterioration of irreplaceable habitats (Ancient Woodland).

The proposed development is situated entirely within the Metropolitan Green Belt (Planning, Design and Access Statement, para 2.7). Under NPPF Paragraph 153, inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in "very special circumstances" (VSC). Such circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposed development, is clearly outweighed by other considerations. The applicant has failed to meet this high bar of evidence.

Analysis of Harm: Spatial and Visual Openness

Openness is an essential characteristic of the Green Belt (NPPF Dec 2024, para 142). It has both a spatial (physical) and visual dimension. The applicant's submission attempts to characterise the development as having a "limited reduction in perceived openness" due to its single-storey nature and boundary screening (Planning, Design and Access Statement, para 6.9). We believe this assessment is fundamentally flawed and factually incorrect when compared to the physical scale of the equipment proposed.

The project involves the introduction of 44 massive battery containers, each up to 3.9 metres in height and 6 metres wide (Planning, Design and Access Statement, para 3.6)). These containers are to be arranged in a regimented industrial compound on 3.63 hectares of currently open agricultural land. Furthermore, the 132kV substation area at the eastern end of the compound will feature transformers reaching heights of approximately 6.8 metres. This height is comparable to a two-storey residential building, and its industrial, utilitarian form is entirely alien to the Borehamwood Plateau Area 22 character.

Visually, the site is currently an open field used for hay production, providing significant views from the adjacent Byway Ref. Aldenham 079 and Footpath Ref. Aldenham 041 (Planning, Design and Access Statement, page 42, para 6.9). The applicant claims the development will be "visibly well-contained" (Planning, Design and Access Statement, para 6.9). However, the reality of the construction phase and the necessary access improvements will involve significant vegetation removal. To create visibility splays for a 50mph road at the Watling Street junction, the applicant proposes to clear approximately 150 square metres of scrub and young trees at the edge of a designated Ancient Woodland/Local Wildlife Site (Planning, Design and Access Statement, para 6.38). This clearance, combined with the 6.8m height of the transformers, ensures the site will be prominently visible from the public highway and the surrounding elevated landscape, particularly from Elstree and Borehamwood footpaths 3 and 4. Please refer to the table overleaf.

Feature	Dimension/Scale	Impact on Openness
Battery Containers	44 units, 3.9m height	Significant volumetric industrial bulk in open pasture (Planning, Design and Access Statement, para 3.6, para 3.45).
Substation Transformers	6.8m height	Dominant vertical structure visible from elevated viewpoints (Planning, Design and Access Statement, para 3.6, para 3.49).
Site Area	3.63 hectares	Massive conversion of greenfield land to industrial use (Flood Risk Assessment, para 1.1).
Water Storage Tank	240,000 litres	Substantial additional permanent built form (Planning, Design and Access Statement, para 3.6).
Acoustic Fencing	4.0m high	Creates a "tunnelling effect" and adds visual clutter (Noise Impact Assessment, page 51, Table 3).

We reject the applicant's reliance on "temporary" status as a mitigation for harm to openness. A proposed operational life of 45 years, amounting to 46 years with decommissioning, cannot be considered "temporary" in any meaningful sense of land-use planning (Planning, Design and Access Statement, para 1.6; para 3.67). For most local residents, this represents the entirety of their adult lives. The permanence of the industrial footprints and the potential for long-term soil contamination from battery components mean the site is unlikely to ever return to its original agricultural state.

Violation of the Five Purposes of the Green Belt

Under NPPF Paragraph 143, the Green Belt serves five specific purposes. The application site plays a critical role in fulfilling three of these purposes, and the proposed development would fundamentally undermine them.

Purpose 1: To check the unrestricted sprawl of large built-up areas

The site lies on the edge of Borehamwood. By introducing a high-capacity industrial installation on greenfield land, the proposal sets a dangerous precedent for the unchecked extension of industrial sprawl along the A5183 corridor. The applicant's argument that the scale of the development is "appropriate" fails to recognise that "inappropriate development" in the Green Belt is, by definition, the very sprawl the policy aims to check.

Purpose 2: To prevent neighbouring towns from merging into one another

The site forms part of the essential and fragile gap between Radlett and Borehamwood. The Aldenham Parish Council highlights that the Arup Green Belt Sub-Area Assessment (Plot SA-53), which is the nearest land to the site, was scored as 5+ for its contribution to the prevention of merging (Aldenham Parish Council Objections, page 2). The proposed site holds locational similarity to SA-53 and serves an identical function in maintaining the visual and spatial separation between these settlements. The applicant's Landscape and Visual Appraisal (LVA) suggests the contribution to this purpose is weak. The Society contends this is a gross misrepresentation. The introduction of 44 containers and a large substation effectively bridges the gap with industrial built form, unacceptably contributing to the merging of Radlett and Borehamwood.

Purpose 3: To assist in safeguarding the countryside from encroachment

The site is currently open pastureland used for agricultural purposes (Planning, Design and Access Statement, para 2.4). The South Hertfordshire Landscape Character Assessment identifies the Borehamwood Plateau Area 22 as being characterised by pasture, woodland belts, and parkland (Planning, Design and Access Statement, para 6.9). The proposed development, with its metallic containers, palisade fencing, 2.4m security gates, and 132kV substation equipment, represents a definitive encroachment of industrial use into the countryside. The applicant admits that "vertical extent" will contribute to "urbanising influences," yet fails to conclude that this constitutes significant harm to Purpose 3.

The Failure of the "Very Special Circumstances" Argument

Since the development is inappropriate by definition, the burden is on the applicant to prove Very Special Circumstances (NPPF Dec 2024, para 153). The applicant's case rests on the perceived urgent national need for energy storage, local climate targets, and a lack of alternative sites. The Society maintains that these benefits do not outweigh the substantial harm to the Green Belt and the specific risks posed by this site.

The Myth of "Urgent Need" at this Specific Site

The applicant presents a "Statement of Need" that argues for 99.9MW of BESS capacity to support "Clean Power 2030" (Statement of Need, para 1.1, para 1.3). While the Society supports renewable energy goals in principle, NPPF Paragraph 160 is explicit: even within the Green Belt, renewable energy projects can be inappropriate. We note three critical contradictions in the applicant's "urgency" claim:

1. **Extended Implementation:** The applicant unusually seeks a 5-year implementation period rather than the standard 3 years (Aldenham Parish Council Objections, page 4; Agent Response, page 2). This suggests the project is not as "ready to go" as claimed.
2. **Connection Delays:** Evidence from the Parish Council suggests the TEC registration with the National Grid, which allows for connection, is not expected until 2037 (Aldenham Parish Council Objections, page 4). Building a massive industrial compound in the Green Belt that may sit idle or wait for a decade for a connection is a wasteful use of land and does not constitute an urgent need.
3. **National Grid Upgrades:** The National Grid has undertaken substantial works to the existing Elstree Substation (<https://www.murphygroup.com/project/elstree-132kv-works/>). Additionally, there is the building of a second adjacent substation known as Letchmore Heath Substation. These upgrades will include modern control systems and ample capacity, potentially negating the balancing requirement the applicant claims this BESS provides (Aldenham Parish Council Objections, page 3). While the Society acknowledges the functional difference between a substation (distribution) and a BESS (storage), the spatial impact on the Green Belt is the same. It may be true that the country needs BESS, but this specific site has not been proven as the only viable location, particularly given the ongoing infrastructure changes nearby.

Flaws in the Alternative Site Assessment (ASA)

The applicant's ASA is heavily restricted by an arbitrary 3km search radius around the Elstree Substation (Alternative Site Assessment, page 14, para 4.7). The applicant claims that 3km is the "likely maximum distance" for a viable cable connection. However, this is an economic preference for the developer, not a technical mandate for the National Grid. Balancing services can be provided from any location with a suitable grid connection. The applicant has failed to demonstrate why they could not utilise brownfield land closer to industrial areas in Borehamwood or even further afield where Green Belt gaps are less sensitive.

The ASA rule-out of a site near the M1 because it might be "more sensitive" is unsubstantiated. A site adjacent to the M1 would already be subject to high ambient noise levels, making the operational hum of a BESS less intrusive than in the quiet pastureland of the Borehamwood Plateau.

ASA Finding	Applicant Assertion	Our View
Search Area	3km radius from Elstree Substation.	Arbitrary; ignores potential connections elsewhere in the district.
Brownfield	No sites of sufficient size found.	"Insufficient size" is not defined; modular BESS can fit diverse plots.
Land Use	Site is "marginal" agricultural land.	3.63ha of productive pasture is lost for 46 years.
Grid Connectivity	spare capacity at Elstree identified.	ignores major substation upgrades already underway.

Fire Safety and Risk to Public Health: A Major Gap

The Society is gravely concerned about the safety implications of a massive battery facility located near residential areas and schools. The Outline Battery Safety Management Plan (OBSMP) contains significant gaps and dismissive risk assessments.

Proximity to Schools and Residences

The site is approximately 500 metres from Radlett Preparatory School and Hertsmere Jewish Primary School (Planning, Design and Access Statement, para 2.1). The nearest residential property is just 130

metres from the BESS compound (Planning, Design and Access Statement, para 2.2). LFP batteries are known to suffer from "Thermal Runaway" (TR), which can lead to self-sustaining fires and the release of toxic gases (Outline Battery Safety Management Plan, page 26, FAQ 4).

Toxic Plume: Hydrogen Fluoride (HF) Risks

In the event of a fire, we understand that the batteries would release Hydrogen Fluoride (HF), Carbon Monoxide (CO), and other hazardous substances (Outline Battery Safety Management Plan, page 4, Abbreviations). HF is extremely toxic even at low concentrations. The applicant admits that firefighting with water can react with phosphorus pentafluoride in the batteries to produce gaseous HF.

The applicant has not commissioned a site-specific toxic plume model. Instead, they rely on "Generic Plume Modelling" which suggests that HF concentrations at 50m would be at a "non-fatal" level (Outline Battery Safety Management Plan, page 17, Table 6-1). We think this is unacceptable for such a safety-critical issue. A 99.9MW facility is not "generic." Without modelling that accounts for the specific topography of the site and the prevailing south-west winds, there is no assurance that a toxic cloud would not settle over the primary schools or the housing in Borehamwood.

The Danger of a Single Access Point

The Hertfordshire Fire and Rescue Service (FRS) has formally requested a secondary, opposing site access point (Outline Battery Safety Management Plan, page 17, Table 6-1). We understand that currently the only entry is from Watling Street (Planning, Design and Access Statement, para 4.13). If a fire plume or vapour gas cloud compromises this single point, fire engines may be unable to access the compound safely.

The applicant's response to this is statistically evasive. They claim the propensity for a BESS fire to occur while the wind is blowing from an unfavourable direction (NE or NW) is "once in every 4,246 years" (Outline Battery Safety Management Plan, page 18, Table 6-1). Planning committee members must realise that safety should not be determined by gambling on statistical probabilities. A fire is a catastrophic event whenever it occurs, and a single point of access is a fundamental failure in emergency planning for a hazardous industrial site.

Firefighting Water Supply and Runoff

The applicant proposes a 240,000-litre water tank for firefighting. However, we question if this is sufficient. National Fire Chiefs Council

(NFCC) guidance suggests that substantial volumes of water are required not just to suppress smoke but to cool surrounding areas to prevent thermal runaway spread.

Furthermore, the Flood Risk Assessment (FRA) notes that firewater runoff will be contaminated with heavy metals (Nickel, Manganese, Cobalt, and Lithium) and acids (Flood Risk Assessment, para 4.4.2). The strategy relies on a penstock valve to contain this toxic water in the SuDS detention basin. If the valve fails to close automatically, or if the fire occurs during a major storm when the basin is full, this toxic runoff will discharge into Tykes Water, just 85m away (Planning, Design and Access Statement, para 3.61; Ecological Impact Assessment, para 6.1.2).

Hydrological and Ecological Concerns

Please see the table overleaf on page 9 for a summary of the following points.

The Sensitivity of Tykes Water

Tykes Water is a main river and a tributary of the River Colne (Flood Risk Assessment, para 1.1). It passes through the grounds of Haberdashers' Aske's School and the Aldenham Reservoir system. Rivers in this part of Hertfordshire are often chalk-fed and represent globally rare habitats. The risk of 228m³ of contaminated firewater entering this ecosystem is an unacceptable environmental threat.

Destruction of Ancient Woodland Habitat

The "Woodland strip opposite Medburn House" is a designated Local Wildlife Site (LWS) and is classified as Ancient Woodland within its designation (Ecological Impact Assessment, para 6.1.1). NPPF Paragraph 193 states that development resulting in the loss or deterioration of irreplaceable habitats such as ancient woodland should be refused unless there are "wholly exceptional reasons".

The applicant admits that the access widening will require cutting back the woodland edge by 5 metres, removing 150m² of vegetation (Ecological Impact Assessment, page 38, para 6.1.2; page 29 Table 5-1). They dismiss this as "immaterial" and "inconsequential". We strongly disagree. In the context of Ancient Woodland, there is no such thing as "inconsequential" loss. The woodland is a continuous feature dating back at least 200-250 years. The "bespoke compensation" of 1,500m² of new planting proposed by the applicant does not replace the complex soil and biodiversity structure of ancient

woodland. This loss alone is grounds for refusal under Paragraph 193 of the NPPF.

Ecological Receptor	Designation	Predicted Impact
Woodland Strip	LWS / Ancient Woodland	Irreplaceable loss of 150m ² of habitat for access splays.
Tykes Water	Main River	Risk of toxic firewater discharge and chronic chemical contamination.
Mature Oaks	Rural Individual Trees (T1-T3)	T3 has a potential roost feature (PRF) for bats; noise may displace roosts.
Protected Species	Bats, Badgers, Birds	Construction disturbance and 45 years of industrial noise/light.

Noise Impact and Receptor Sensitivity

We object to the lack of technical detail in the noise assessment. BESS facilities are not silent; they require high-powered cooling fans and inverters that run 24/7.

1. **Missing Equipment Specifications:** The Planning, Design and Access Statement explicitly states that the "final design is yet to be confirmed," including the "vendor and model of plant" (PDAS, para 3.11). Also, while the Noise Impact Assessment speaks of selecting "noise-reduced" units (NIA, para 4.1.1), we cannot find any reference to a named manufacturer or model in the documentation. Consequently, we assume that the assessment is based on theoretical models and "representative items of plant" provided by a manufacturer rather than measured data from the actual units intended for installation (NIA, para 2.4.1). The NIA admits that actual noise output is only "expected to be lower" than proxy specifications, using a "noise-reduced version" of a generic unit for its assumptions (NIA, para 2.1.3; page 30, Appendix A3.1).
2. **Night-time Intrusiveness:** The nearest resident is 130m away (Planning, Design and Access Statement, para 2.2). In the quiet semi-rural environment of Elstree, the constant hum of 44 battery units will be a significant nuisance, particularly at night when background noise is low.

3. Impact on Schools: There is no assessment of how noise levels will affect the learning environments at Radlett Preparatory School and Hertsmere Jewish Primary School during the daytime.

Cumulative Impact: The Industrialisation of Elstree

We are gravely concerned by the cumulative industrialisation of the Borough's Green Belt. Hertsmere Borough Council recently granted outline planning permission for the "DC01UK" project in South Mimms, which is set to be Europe's largest cloud and AI data centre (<https://www.hertsmere.gov.uk/news/data-centre-in-hertsmere-given-outline-permission-by-planning-committee>). The Society notes that DC01UK is situated on 85 acres of Green Belt land (<https://dc01uk.com/proposals/>). While located at South Mimms, this project draws a massive 400MVA power reservation from the Elstree (Letchmore Heath) substation complex.

We would reject any argument that the power requirements of the data centre provide a justification for the proposed BESS. The DC01UK project's energy needs are already the primary driver for the multi-million-pound National Grid upgrades and the construction of the Letchmore Heath Substation, which will provide ample capacity and resilience at the grid level. Consequently, the applicant's claim of a "balancing need" is already being addressed by more efficient, permanent infrastructure, making the addition of a BESS on this sensitive greenfield site unnecessary.

Furthermore, there is another pending BESS application at Hilfield Lane (Reference 25/0153/FUL). This effectively replaces a withdrawn application, 23/1508/OUT. We refer to this application not to endorse it, but as evidence of the uncoordinated and piecemeal industrial pressure on the landscape. While we acknowledge the functional difference between a substation (distribution) and a BESS (storage), the spatial impact on the Green Belt is the same. The concentration of Europe's largest data centre at South Mimms alongside multiple BESS applications within the same administrative area and grid corridor all contribute to the industrialisation of this Green Belt sector. Specifically, for the gap between Borehamwood and Radlett, the presence of the proposed development will effectively eradicate the openness of the landscape and contribute to the physical merging of these towns.

Highlighted Gaps in the Submission

We have identified the following critical gaps in the application that should contribute to its refusal:

1. **Lack of Site-Specific Fire Gas Plume Modelling:** This is a major public safety failure given the proximity to schools.
2. **Missing Cumulative Impact Assessment:** No consideration of the DC01UK data centre or the other BESS application (25/0153/FUL near Hilfield Lane).
3. **Incomplete Noise Data:** The assessment is based on non-specified equipment and ignores tonality.
4. **No Clear Connection Timeline:** The disconnect between the 5-year commencement request and the 2037 Grid connection date remains unresolved.
5. **Failure to address FRS Access Requirements:** The application persists with a single point of entry despite formal FRS concerns.

Conclusion: A Clear Case for Refusal

We conclude that planning application 25/1070/FUL represents a fundamental and harmful conflict with the National Planning Policy Framework December 2024 and the Hertsmere Local Plan.

The proposal constitutes inappropriate development that causes substantial and permanent harm to the openness and purposes of the Metropolitan Green Belt. The applicant has failed to demonstrate 'Very Special Circumstances' because the "need" for the project is speculative and delayed, alternative sites have not been robustly explored, and the risks to public safety, ancient woodland, and Tykes Water are severe and unmitigated.

We formally request that Hertsmere Borough Council refuses this application, to protect the integrity of the Green Belt and the safety of the local community.

Appendix: Analysis Under Draft December 2025 Guidance

While the 2024 NPPF is the primary framework, we provide this analysis of the application against the Draft NPPF (December 2025) and its accompanying Planning Practice Guidance (PPG). The applicant has attempted to leverage the concepts of "grey belt" and "Golden Rules" from this draft guidance to justify their proposal. Our analysis demonstrates that the site fails even these more flexible proposed tests.

Failure to Meet the "grey belt" Definition

The December 2025 draft defines 'grey belt' as land in the Green Belt comprising previously developed land (PDL) and/or any other land that does not strongly contribute to Green Belt purposes (a), (b), or (d).

1. **Not Previously Developed:** The site is a greenfield pasture with no history of development other than a single pylon (Planning Statement, para 2.4).
2. **Strong Contribution to Purpose (b) (Preventing Merging):** This site is a critical component of the gap between the town of Radlett and the town of Borehamwood. Arup's assessment of the immediate locality (SA-53) confirms a score of 5+ (highest contribution) to this purpose (Aldenham Parish Council Objections, para 1.1).
3. **Strong Contribution to Purpose (a) (Preventing Sprawl):** The 2025 draft guidance states that assessments should identify whether development would result in an "incongruous finger" of development into the Green Belt. A 3.63ha industrial compound in this isolated pasture location represents exactly such an incongruous pattern of sprawl.

Consequently, the site is not "grey belt" and cannot benefit from the more lenient "not inappropriate" status proposed in Policy GB7 of the draft.

Non-Compliance with the "Golden Rules"

Draft Policy GB8 sets out "Golden Rules" for development in the Green Belt, requiring contributions to affordable housing, infrastructure, and green space (Draft NPPF December 2025, Chapter 13).

- **Golden Rule (b): Improvements to infrastructure:** The project provides no benefits to the local community in Borehamwood or Elstree. It serves national grid traders and the applicant's profit.
- **Golden Rule (c): New Green Space:** The proposal identifies no new public access to green space. Instead, it industrialises land adjacent to an existing Byway, reducing the amenity value of the current Green Belt for local residents.

Weight Given to Sustainable Development and Energy

Policy W3 of the 2025 draft states that "substantial weight" should be given to the benefits of renewable energy and moving to a net zero future. However, this is balanced against Policy GB6, which maintains that "substantial weight" must also be given to any harm to the Green Belt.

The Society notes that Policy W3(2) states that applicants "should not be required to demonstrate the need" for renewable energy. However, Policy GB7(g)(ii) specifies that for grey belt development to be acceptable, there must be an "evidenced unmet need" for the type of development proposed. Given the massive National Grid upgrades at the Elstree and Letchmore Heath substations, the applicant has failed to prove that this specific site is required to meet grid stability goals.

In summary, the application is fundamentally inconsistent with both the current December 2024 NPPF and the proposed December 2025 draft criteria. The "Very Special Circumstances" remain unproven, and the harm to the Green Belt gap between Radlett and Borehamwood is definitive.