

SMDC Planning Reference –		SMD/22/0444	
Site Name –		Rownall Road Battery Park (Re-submission)	
Summary of proposals -		Electricity Storage Facility	
Consultation Note Subject –		Landscape and Visual Matters	
Planning Case Officer –		Jane Curley	
Landscape Comments Prepared By –		Stuart Ryder of Ryder Landscape Consultants	
Date of site visit —		18/5/22	Date of original response 21/10/22
Revision A	To clarify predicted screen effects, their timeframes and potential cumulative landscape effects	Date of updated response	7/12/22
Recommendation –		Consent – Subject to landscape and visual mitigation measures to address net landscape harm and adverse visual effects	

Dear Jane

Battery Storage Facility, off Rownall Road, Cheddleton – Landscape and Visual Consultation

Thank you for re-appointing us to review the landscape and visual aspects of the re-submitted planning application and I pass a series of comments under the same headings as my previous note but draw out differences between this and the originally submitted proposals for your ease of review;

1. Methodology
2. Site and surrounding's landscape character
3. Proposals for the site
4. Landscape effects
5. Visual effects from surrounding areas
6. Compound effects
7. Potential design considerations
8. Landscape Policy Compliance
9. Suggested Planning Conditions

1. Methodology

Staffordshire Moorlands District Council (SMDC) re-appointed Ryder Landscape Consultants to consider the re-submitted scheme and supporting documents in October 2022. Stuart Ryder an experienced Chartered Landscape Architect had previously attended site on 18 May 2022 as part of the review of the original submission when he walked nearby public footpaths and highway corridors and took site photography. He did not consider it necessary to reattend site this time around but rather reviewed his own site photography to reacquaint himself with the site and its contextual area.

The following documents have been reviewed as part of the second consultation response;

 Acoustic Fence Panel	
 Elevations	 LVA Photos
 Landscape Mitigation Plan	 Plan locating elevations
 LVA Figures	 Plan locating sections
 LVA Photos 1	 Sections A and B
 LVA Photos 2	 Sections A to C
 LVA Photos 3	 Sections D to F
 LVA Photos 4	 Site Layout Plan

2. Site and surrounding's landscape character

The Site character is presumed not to have changed since the May 2022 survey visit and the following points still hold true;

- The site is comprised of three pasture fields put to improved grass.
- There are two larger regular shaped fields to the north and smaller, elongated triangular field to the south
- Access is proposed from the south via a third pasture field with road access for construction.
- Access to the site would be taken directly from Rownall Road with a track proposed near to the north boundary of the fields running parallel to the northern hedgerow and tree line.
- Wardell Armstrong 2008 Landscape Character and Settlement Assessment confirms the site is located in landscape type - Ancient Plateau Farmlands.
- Typical boundaries to the fields are native hedgerows with mature hedgerow trees reinforced in places by timber post and agricultural mesh fences.
- There is also a part tree avenue planting along Footpath 53 that runs to the south side of the site. The tree avenue is comprised of both poplars and horse chestnuts.
- There are a number of public footpaths near to and adjacent to Site. These include CH53 along the southern side of the Site and part of its western boundary where it dog legs past an existing barn. Footpaths 42 and 43 head to the east down into the Churnet Valley
- The Wardell Armstrong 2008 Landscape Character and Settlement Assessment study shows no landscape constraints on the Site or its contextual area.
- The Site lies just outside of the Churnet Valley Boundary that was assessed in the Churnet Valley Landscape Character Assessment, 2011 whose boundary appears to run along Rownall Road at this location.

In landscape character terms there is both connectivity with and influences of the open pastoral landscape to the north, east and south but also marginal influence of the Cellarhead sub-station to the west with the sub-station largely separated by its eastern boundary planting. The existing pylons set to the west of the site also indicate the use of the wider area for power transmission. The overall landscape character is however rural pastoral fields. There are no structures on Site but a barn complex is set just beyond the south west corner emphasising its rural appearance. to the south west of the Site is a small agricultural reservoir.

The wider landscape context is again a pastoral landscape that is reasonably attractive in appearance and conforms to the broader landscape character description of the Ancient Plateau Farmland. With the general lie of the land falling east towards the Churnet Valley this Site appears to be set at the top of the valley.

A clutch of residential properties set off Rownall Road to the east of the Site include Dove Cottage, The Stables, Rownall Hall Farm and Rownall Hall. These properties are largely set behind impressive old red sandstone walls that mark this part of the district.

I do not class the Site as a 'valued landscape' as per NPPF Para 174 a).

3. Revised proposals for the Site

Although there are three fields included in the redline planning application it is still only the most western one that will receive the installation of power storage equipment, the other two play a part in the mitigation of the proposals and location for ancillary features such as access tracks and bunding.

The installation field remains the one furthest west from Rownall Road. The proposals now consist of four double lines of battery cabinets (*previously three*) running broadly north to south with associated transformers and invertors set 3m apart with concrete firewalls between each set. The rows are surrounded by an access route with a substation area set to the north west corner (*as before*) at the end of the truncated western row of battery cabinets. The equipment is now set in an excavated area that is indicated to be 2m below existing field level. The whole excavated area is surrounded by a 4m high acoustic fence which details indicate are of the horizontal timber faced type trapping a core of rockwool sound insulation. Presumably, the acoustic fence acts as the primary security barrier for the site as well.

Surrounding the whole fenced area is a new earth bund presumably suggested as screening to the acoustic fence and to provide visual mitigation. It is further presumed that the bund is constructed from the arisings from the excavated area so these are not taken off site. The landscape proposals show woodland planting on the outer face of the bunds and grass seeding on the inner, site facing side of the bund. This arrangement varies in the mitigation field to the south which has seeding on the lower slope of the bund's outer face.

The surfacing of the main installation field is not defined on the site layout drawings but is presumably unbound stone to minimise landscape maintenance and reduce fire risk from long, dry grass.

The proposals for the other two fields still largely comprise native woodland and hedgerow planting with the larger eastern field still retaining the proposed access track from Rownall Road running along its northern side. The southern, elongated triangle field would cease to be a grazing field with woodland planting indicated across its whole extents.

The larger, rectangular eastern field does also have three new features in this re-submitted scheme;

- Bunding to screen the acoustic fence set at a shallower gradient than the north, south and west bund;
- Attenuation basin presumably to act as an infiltration feature for pluvial water falling on the now excavated battery park – no means of connection is indicated at this stage; and
- A new woodland block 40m wide planted along the eastern boundary of the field presumably to provide further vegetative screening of the proposals from Rownall Road that abuts it.

The end land use of the eastern field is not indicated but there appears to be a central area of grassland that could sustain a low level of grazing (see also fencing note in design comments below).

The bunds as indicated have been positioned to not encroach under existing tree canopies but it is unclear whether they have taken root protection areas into consideration as they have been prepared. Three internal trees within the field margin of the small triangular field are shown as removed to allow creation of the southern bund. The remaining tree lines appear to be able to be retained in entirety

subject to detail design of bunding and definition of construction routes that protect root protection areas.

In addition to the indicated woodland planting new hedgerows, some with hedgerow trees are indicated to the open southern side of the access route and following the route of Footpath CH53 until it reaches the existing tree avenue.

The proposed planting is all native stock with a mix of tree and scrub species proposed to form the new woodland, hedgerows, hedgerow trees and buffer planting. Beech as a tree species is not necessarily native to this part of the UK but its inclusion in the mix is not detrimental to landscape character given the nature of nearby planting associated with larger houses in the area. There would be a net gain in woodland, hedgerow, scrub planting and field margin seeding on the successful establishment of the planting proposals.

4. Landscape effects

The proposals still effectively turn the western green field site into an industrial compound. For this field itself this change can only be classified as a **Major, Adverse and Permanent** effect that is an inevitability of development. The proposals are not considered in keeping with the wider pastoral landscape character of the Ancient Plateau Farmland even though there is the Cellarhead facility nearby.

The ability to create a series of strong planted bunds around the now lowered facility is acknowledged and ultimately the woodland planting belt will likely screen out all views to the acoustic barrier wall other than in the south west corner. The lack of a continuous bund to the south west corner of the battery park, particularly as it is positioned adjacent to CH53 will still allow appreciation of the acoustic barrier.

The construction stage landscape effects of excavating the battery compound and forming the earth bunding would be larger than the previous scheme and this adverse effect would remain until the bunds are grassed over and the planting upon them starts to establish. The bunds even with careful design will appear as artificial features within the rural landscape until their ground form is hidden from sight by the woodland planting set upon them or in front of them. **They would however effectively and immediately screen out the visually more intrusive and uncharacteristic acoustic barrier set around the facility.**

The initial change to the adjacent landscape is considered to be;

- North – Moderate Adverse reducing to Minor Adverse
- East - Moderate Adverse, reducing to Negligible Adverse
- South – Major / Moderate Adverse, reducing to Minor Adverse
- West – Major / Moderate Adverse and reducing to Minor Adverse.

Effects on the landscape character of the contextual area can be amalgamated as **Minor, Adverse and Permanent**.

The woodland planting across the site is acknowledged as a landscape benefit and its long-term management as a diverse broadleaf woodland would still need to be secured through a Landscape Management and Maintenance Plan.

One relationship needs to be given further thought as discussed in the potential design modifications section and that is the relationship of woodland planting to the back of hedgerows. In landscape terms the existing hedgerows have a landscape value as boundaries and contribute to the wider fabric and landscape pattern of the area. Woodland planting to the back of them will lead to them not being

maintained as hedgerows with them growing into each other. It would be better to retain a gap between existing hedges and proposed woodland to allow the hedges to be maintained as hedges (presumably by tractor mounted flail) for the future benefit of landscape character should the battery park be removed.

The matter of landscape restoration of the excavated portion of land also needs to be confirmed on cessation of the battery park usage as per a quarry or mineral extraction site.

5. Visual effects from surrounding rural areas

The main site is effectively visible from public footpaths CH53 set to the south and west of the site and from Rownall Road where existing hedge gaps exist or along the new access track. Of these it is walkers on CH53 that have the longer duration and closer view whilst vehicle users on Rownall Road have shorter kinetic views.

Footpaths CH42 and CH43 fall away to the east and the proposals would not become evident to walkers until they reach Rownall Road.

I cannot testify to visibility from the eastern residential properties but suspect it would be limited to upper west facing rooms given the quantity of planting in gardens and walled boundaries. People do not have a right to a view and residential amenity (sound and visual impact) appears to be the driver to the proposal to set the development within the excavated area and behind a 4m high acoustic fence.

Typically, sensitivity of rural path users to an industrial development is considered to be High and this would be the case for users of CH53 as they walk west towards Cellarhead as they have not yet experienced any power kit within their view. Path user sensitivity is reduced if walking east bound as they would have passed by Cellarhead before reaching the proposed facility.

The enclosing acoustic fence in the original scheme was previously considered artificial in terms of material, scale, regularity and constant height compared to other built form and boundaries in the contextual area. However, with this application it would effectively be set in the ground by the proposed 2m of excavation and the upper 2m screened by the earth bunding. It would only be visible in the south west corner where the bunding is not present, unfortunately this is the side that is closest to the visual receptors on CH37. Visibility in winter months is also anticipated to be greater at this south west corner until the density of growth is such that leaf cover is no longer necessary to form an effective screen.

One effect of such planting and the bund is to change the appreciation of an open landscape to the west and will effectively screen off visual links to the north for users of Footpath CH53. Likewise enclosing the battery park with tree planting in the two other fields will visually separate the site and views across it to the east and the wider Churnet Valley. They will only be re-established when visual receptors reach Rownall Road. On establishment this quantity of woodland edge planting, combined with the existing mature tree lines will make the three fields appear largely wooded in nature instead of pasture fields.

The additional 40m wide woodland block set to the west of Rownall Road will screen views up from Rownall Road to the proposed development which would be the earth bund to the east of the battery park. **It is anticipated that the screening would take 3 to 4 years to start to restrict views and 6 to 8 years to become totally effective at blocking views west from the road in the winter as well as summer.** Other views from Rownall Road exist to the south through roadside boundary breaks but these would be screened by bunding and planting in the triangular field.

The planting and bunding will not appear natural at first and it is anticipated to look raw until a full grass sward has developed and the native tree and scrub stock has knitted together canopy wise. On

establishment and with ongoing management the woodland planting has the ability to appear like small areas and lines of native woodland.

The visual effects from each direction have been assessed as;

- North – CH19 walking in both directions – Moderate, Adverse at first reducing to Negligible, Adverse and Permanent.
- East – Rownall Road driving in both directions but more so when heading south – Moderate, Adverse reducing to Negligible, Adverse and Permanent when looking upon woodland planting.
- South – CH53 in both directions – Major/ Moderate, Adverse reducing to Minor, Adverse and Permanent when looking at the established woodland screen instead of open ground.
- West – CH53 walking eastbound – Moderate, Adverse reducing to Minor, Adverse and Permanent with open view changed to a close-up one of woodland.

Visual effect has been assessed as **Moderate, Adverse and Temporary** in the first instance until the mitigation planting has established when it will decrease to **Minor, Adverse and Permanent**. It is still classed as Minor, Adverse as views will be to woodland whereas before the views were more open.

The initial effects of forming the acoustic wall that were highly notable in the first proposals will be removed with the part excavation / part bunding solution. The bunds themselves will look out of keeping with the surrounding area until the mitigation seeding and planting establishes and removes sight to their artificial landform.

6. Compounded effects

There is a single compound effects to consider – joint effects with the existing Cellarhead sub-station. The previous scheme also had a potential second compound effect with the battery park application (SMD/22/0047) across fields to the south west of these proposals. This has now been refused.

This proposal will appear as separate from the main part of the Cellarhead sub-station but there is sufficient power infrastructure in the intervening field that the overall visual effect would be to appear to be associated with it, particularly if equipment such as the sub-station, lighting or telemetry masts appear above the acoustic fence and associated planting. This is due to it being experienced in proximity to Cellarhead as people move through this landscape.

However, with the increased tree planting associated with this re-submitted scheme it will likely be impossible to see power supply equipment in the excavated area and at the Cellarhead site in the same ground-level view. There are no nearby views from high level that would allow sight down onto both infrastructure facilities.

It is foreseeable that if this scheme is consented and built-out that it is used as a precedent for re-submittal of a battery park at the SMD/22/0047 site and like all applications it will have to be judged on its own merits. Should the second battery park be consented and built out there would be sequential cumulative effects for walkers passing a series of planted screening bunds and the character of the pastoral landscape in the area would change to one of similar aged woodland plantation. The newer planted bunds, (subject to the planting successfully establishing) would be more effective at screening the power equipment set behind them than the existing planting around the taller Cellarhead sub-station facility. However, given the presence of Cellarhead in the contextual setting to both application sites there will be a perception of a spread of power development on the land between Rownall Road and Cellarhead and a greater perception of landscape change from a rural pastoral landscape to one that is being used for the power industry.

7. Potential design amendments

The following summary of potential design amendments are given as a way of improving the landscape and visual aspect of the proposals. Their adoption should be sought if you are minded to consent the proposals.

- Rounding the south west corner of the battery park to allow the creation of a full bund at this point to limit visual effect on path users and create a more sympathetic shape within the landscape;
- Considering the use of nurse species of quicker growing stock in the woodland planting that can be later removed to establish planting screens quicker;
- Decreasing tree planting spacing from 10m centres to 5m centres in Woodland to create a denser screen more quickly;
- Placing a grass access track for maintenance of existing hedges and newly planted bunding and using this as a way of keeping existing and newly planted hedges as hedgerows for the benefit of the wider landscape;
- Making the site access track off Rownall Road appear like a rural field entrance with minimum signage and width to retain the rural land character of the road;
- Retaining the tree avenue form along CH53 which will likely be lost with solid planting to its north; and
- Not a landscape comment but is there sufficient access space shown around the southern end of the battery sets for vehicles such as fire tenders or cranes?

A separate section is put to the discussion of bunding. As a feature it can be useful for both physically screening items but also giving planting a boost by making it seem higher than it is. However, if designed badly it can appear artificial and alien within a landscape and draw more attention to it than the feature it is trying to screen. The following design comments are raised;

- 90° corners such as the north west one are hard to form and will appear non-natural;
- Curving changes of direction work best and this would be form at the south west corner if a number of the battery cabinets are removed;
- A symmetrical bund form again appears artificial as per the 1:3 front and back face as shown on the proposal sections, asymmetrical gradients appear more appropriate in the landscape;
- Shallower and more varied gradients than 1:3 are recommended, again to make the bunding appear more natural, this looks like it is being proposed in the eastern field;
- 1:3 has been shown as a typical 'safe' angle of repose – has any geo-technical testing been undertaken to confirm this is achievable.
- 1:3 is also usually suggested as this is typically the steepest that can be safely mown, if grass is to be grown on the back face of the bunds a regular maintenance operation could be prevented by putting this to scrub planting.
- The sections show a narrow crest, again this appears as an artificial land form and a more rounded, wider crest is more appropriate.
- If any grass on site (including eastern field) is to be managed by grazing of farm stock then fencing arrangements will need to be confirmed to keep livestock safe and the new planting protected.
- Materials Management Planning (MMP) is critical to the success of such excavation operations with proposed stripping, stockpiling and spreading of topsoil the key to subsequent vegetation success. More subsoil than topsoil will likely be generated with excavations to 2m and a plan for the deposition of sub-soil and its treatment needs to be included in MMP material.

- Excavations of this depth will destroy archaeological assets if present on Site and a heritage assessment needs to be undertaken to understand the risk to known and unknown assets including consideration of secondary excavation areas such as the attenuation basin and the excavated key to any bund feature.
- Flagged here is the difficulty of establishing vegetation on a bund that is effectively perched above surrounding water table. The establishment and aftercare of planting and seeding on bunds needs to be fully explained, including replacement of failed stock, in a Landscape and Environmental Management Plan.

Finally, the earthworks and their ongoing management should be a matter of detail design including consideration of restoration at the end of the battery park's life cycle.

8. Landscape Policy Compliance

The SMDC landscape planning policies that need to be considered are;

SS11 – Churnet Valley Strategy – should SS11 be considered applicable as Site is just outwith of Churnet Valley Area

A multi-layered policy that places significant weight on the conservation and ideally improvement to landscape character. The telling part of the policy wording is the third bullet point. The proposal does not protect or enhance landscape character of the valley. The Site is within the setting of the Churnet Valley and its presence would not improve the adjacent landscape character of the valley until mitigation planting establishes. However the setting of the main works in the excavation, bunding and additional planting when established would lead to no net harm to the landscape character of the valley.

It is considered that there compliance with the third bullet of this policy if it is deemed applicable as the landscape character of the adjacent part of the Churnet Valley is protected.

DC3 – Landscape and Settlement Setting

This is the main landscape focussed policy of the Local Plan that seeks to protect and where possible enhance local landscape. The five parts to its policy box are set below and considered in turn;

1. Resisting development which would lead to prominent intrusion into the countryside or have a significant adverse impact on the character or the setting of a settlement or important views into and out of the settlement as identified in the Landscape and Settlement Character evidence.

There would be a landscape effect with intrusion arising from the new facility changing pastoral fields to an 'industrial' character. However, the increased mitigation proposals which removes sight to the acoustic fence and improved mitigation planting will help to assimilate the proposals into the rural landscape in an anticipated 3 to 4 years which is shorter than the previous schemes 6 to 8 years.

Temporary conflict with Part 1 of the policy has been found that will be mitigated by the proposed bunding and planting.

2. Supporting development which respects and enhances local landscape character and which reinforces and enhances the setting of the settlement as identified in the Landscape and Settlement Character evidence.

The existing fields do form the context to residential properties to the east but not their immediate setting so that part of the policy is only partly applicable. The proposals cannot be classed as leading to a net improvement in local landscape character which is an open, pastoral landscape. They do however

add woodland and hedgerow characteristics to the area which can be argued as features of the local landscape.

Overall technical conflict with Part 2 of the policy but established mitigation will present woodland which is an acceptable form of rural land use and an existing characteristic of the contextual landscape.

3. Supporting developments which conserve or enhance the biodiversity qualities of any natural or man-made features within the landscape, such as trees, woodlands, hedgerows, walls, watercourses or ponds.

The proposed field margin seeding, hedgerow planting, woodland belt creation and attenuation pond (depending on water management) would all comply with this part of the policy. Its long-term establishment and ecological contribution will need to be delivered through an appropriate landscape management and maintenance plan and suitably monitored to demonstrate long-term BNG.

Compliance with Part 3.

4. Supporting opportunities to positively manage the landscape and use sustainable building techniques and materials which are sympathetic to the landscape.

The sustainable building techniques could be applied to the demountability of the scheme and ease of removal should the proposals become defunct or superfluous to the power grid. The materials and building form, particularly of the acoustic fence, battery cabinets and sub-station are clearly not sympathetic to the landscape when compared to traditional materials used in the area. They are however generally hidden from view.

Conflict with Part 4 even though this part of the policy does not appear to be strongly applicable to the proposals.

5. Ensuring that development does not adversely affect the wider setting of the Peak District National Park.

This part of the policy is not applicable to these proposals as the site is sufficiently remote from the PDNP.

Not applicable.

NE2 – Tree, Woodland and Hedgerows

This three-part policy is aimed to 'protect existing trees, woodlands and hedgerows, in particular, ancient woodland, veteran trees and ancient or species-rich hedgerows from loss or deterioration.'

The first part that seeks the integration of trees, woodlands and hedgerows on site unless their removal clearly outweighs their loss is complied with by the retention of boundary hedgerow and trees other than the small break in the hedgerow off Rownall Road to form the site access and felling of three trees to form the bunding to the east of the battery park.

Part 1 - Compliance.

The second part seeks new tree planting associated with development that this scheme demonstrates in all three fields that comprise the wider Site. The proposed species, size at planting and planting densities appear appropriate apart from the highlighted tree planting at 10m centres which is recommended to be 5m centres for woodland planting.

Part 2 - Compliance.

The third and final part of the policy addresses the retention of ancient woodland, veteran trees and ancient or species rich hedgerows. The hedgerow trees, particularly the horse chestnuts to the western field boundary appear as the oldest stock around the Site and these are retained albeit their context will change from hedgerow standards to being backed by shrubs and other trees.

Confirmation of root protection areas and avoidance of excavations that could affect the tree roots is recommended if not already submitted.

Part 3 – Compliance.

9. Suggested planning conditions

There is long term Minor landscape and visual harm to be put in the planning balance but should you be minded to grant planning consent and notwithstanding the already submitted landscape proposals the following planning conditions are suggested;

- A. That a detailed hard and soft landscape mitigation scheme is submitted for consideration on drawings of a reasonable scale. *Reason – to ensure that the proposals maintain the boundary character and respect the neighbouring landscape.*
- B. The soft landscape proposals should be implemented in the first growing season after construction has commenced and replacement of dead, diseased or dying stock should be undertaken in accordance with a Landscape Maintenance and Management Plan. *Reason – to ensure the quality of the landscape mitigation measures.*
- C. That no tree felling is undertaken on, or excavation within root protection areas, without the express written agreement of SMDC's Arboricultural Officer and after consideration of tree sensitive construction processes – *Reason to protect the remaining mature tree stock that contributes to the local landscape.*
- D. That a Landscape Maintenance and Management Plan (LMMP) is prepared for implementation by the site owners for the full operational life of the facility and that an arrangement for continuation of the LMMP by future owners is entered into – *Reason – to reflect the importance of the soft landscape mitigation proposals for the local landscape character.*
- E. Low light level scheme – *Reason – to reduce the intrusive nature of lighting in the hours of darkness.*
- F. That details of the acoustic barrier including elevation treatment is submitted for agreement with SMDC – *Reason to protect local landscape character until mitigation planting has established.*
- G. A Materials Management Plan (MMP) is prepared that defines the excavation and bund formation processes and provides detail drawings of the proposed raised earthworks – *To ensure the earthworks assimilate as far as possible with local landscape character.*
- H. That a schedule of works activities in the form of a site restoration plan is produced to explain the removal of equipment and full restoration of the main site back to a pasture field is submitted for agreement with SMDC prior to the Site becoming operational – *Reason to protect local landscape character and rural amenity on the cessation of use as a power storage park.*

I recognise that the suggested conditions could possibly be combined with others that have been suggested and may require re-wording to be enforceable but wished to explain the reasoning behind them. I have not included reference to an Archaeological focussed condition presuming your Conservation Officer or the County Archaeologist has raised such matters with you. Nor have I included a suggested Condition that would restrict future land use of any de-commissioned battery park as a

brownfield site but arguably given the site's location in a rural area many potential brownfield uses are not appropriate.

I trust you find these comments useful as you consider the determination of this re-submitted application and as before I can forward photography from my site visit for your report. Should you have any queries about these comments please do not hesitate to contact me.

Stuart Ryder

7/12/22