Design and Access Statement for Proposed Portal Frame Building Over Silage Clamp

at Upper Park Eyton Farm, Eyton, Wrexham LL13 0YF

For E & WM Massey and Sons

Design and Access Statement for Proposed Portal frame Building to Cover existing Silage Clamp and associated works.

Clients – **E & WM Massey and Sons**

Policies taken into consideration:-
EC3 & GDP1
Planning Policy Wales 5
Technical Advice Note 12: Design, 2002
Technical Advise Note 6 Planning for Sustainable Rural Communities
Technical Advice Note 12 ”Design” (2009)

Existing Farm

Upper Park Eyton Farm is a lowland Beef farm located near the village of Eyton. The farm enterprise runs to 80 acres of owner-occupied land at Pentre Isaf Farm. In addition, 850 acres rented from Eyton Estates, which includes Upper Park Eyton Farm. The farm is within a NVZ and outside the Flood Zone

Approximately 400 beef and dairy cows are bread and housed in the existing buildings. Both Silage clamp and Slurry Lagoon exist on site, the silage clamp is uncovered.

Proposed Building Location

This location is within the existing farm complex and covers the existing silage clamp. No grazing land is being lost due to the development.

Proposed Cover Building

The proposed building measures 67 x 21.2 m in plan and takes the form of a single portal framed building, with eaves height of 7.0m.

The proposed building form is established by its required function and follows an established building design for agricultural farm buildings. The existing buildings have simple detailing with no refinements. This approach is extended to the proposed building design.

The building envelope comprises of concrete panels and space boarding to walls and corrugated sheet cladding to the roof.

The design and all works will be carried out to standards required in BS5502 Buildings and structures for agriculture.

New frame is to be designed by a structural engineer;
site specific calculations taking into account orientation, cladding materials, use etc. will be required.

Design to be strictly in accordance with BS5502 for class 2 EXC1 buildings and all structural steelwork to be CE marked to the following standards :

Steel sections and plates BS EN 10025-1
Hollow Sections Hot finished BS EN 10210-1 Cold Formed Welded BS EN 10219-1
No site alterations will be permitted to any structural steelwork unless carried out by CE approved contractor.

The standard also recommends, warning and safety signs along with safety measures to be incorporated in the design, also **HSE INFORMATION**.

Effluent tank below ground

The new effluent tank is to collect silage and contaminated rainwater from the yard. The effluent tank capacity will be 8000 g, dimensions 3w x 2.55d x 6 m long taking the form of a concrete underground tank, see drawing (size to be confirmed by farm advisor. A new concrete channel is to be formed to collect Silage effluent discharged at the open perimeter.

It is understood no part of a slurry storage system (tanks, effluent tanks, channels, or reception pits) are located within 50m of any borehole, well or spring.

Flood Risk

The building is not in a flood risk zone and will not increase the risk of flooding elsewhere. Roof water will be directed into two soakaway chambers 3.0 deep and 1.2m dia, these chamber will store water during periods of heavy rain.

Scale, Landscape and Appearance

The design is to be sympathetic with the surrounding landscape. The proposal will involve the use of appropriate materials, similar to that of the surrounding stock buildings. These materials will complement and enhance the character of the area. There are no views of the building from the highway. The building is subservient to the existing building.

As part of the development, it is proposed to carry out hedge planting and provision of bat and bird boxes.

Trees will be planted as ecology mitigation and screening as indicated on drawing.

New Tree Planting Specification,

The fruiting trees will comprise of one crab apple (Malus sylvestris), one wild pear (Pyrus pyraster), one wild cherry (Prunus avium) and one wild plum (Prunus domestica). They will be selected from local-provenance stock and will be planted within the first planting season post-completion of the development works (December to March, inclusive). The grassed area will have a wild seed mix grass.

Methods of tree protection
• Stock-proof fencing: essential if animals are to graze nearby. Fencing must be at least two metres from any new planting.
• Rabbit-proof fencing: around plantations where there is a problem – but ensure the rabbits are not fenced inside.
• Shelters for individual trees: it is important to find out which animals are likely to threaten the survival of newly planted trees and then use shelters and stakes of the appropriate height.

See The Tree Council: Tree Planting Guide

Ecology

Protected Species

No Ecological Appraisal surveys for protected species have been provided with this application. There is not a reasonable likelihood of protected species being present, due to the continuous agricultural use of the sites.

BIRDS - As an enhancement prescription it is recommended that two bird nesting boxes Schwegler 1B are installed upon mature trees within the vicinity of the site, fixed on trees with straps at least 5m above ground in a southerly direction. Indicated thus $

Within the Loose stock building that two Schwegler Swallow Nest Box Bowls. They should be fixed at eaves level in an easterly direction. Indicated thus @

BATS - As an enhancement prescription it is recommended that one Vivara Pro Seville WoodStone Bat Box is to be erected upon the northeast elevation of the agricultural unit. It should be fixed at least 5m above ground. Indicated thus #

There will be no flood lighting on the Silage Clamp, this ensures current dark sky standards are maintained.

Green Infrastructure Statement

The site comprises of an area of hard-core bare ground and concrete for the silage shed roof and concrete apron, both are within a working farm. The proposed development will result in the loss of this bare ground. As this is a habitat of negligible ecological value, its loss is expected to have an ecological impact of negligible significance.

However, to ensure that the proposed development results in an overall improvement of the site's biodiversity resource, it is proposed that

(i) 4 new native fruiting trees are to be planted beside the hedge line immediately to the east of the silo site, and some 34 m of new hedge row

(ii) a Vivara Pro Seville Woodstone Bat Box is to be erected upon the northeast elevation of the agricultural unit immediately to the west of the site

(iii) that two Schwegler Swallow Nest Box Bowls with the building

(iv) that two bird nesting boxes Schwegler 1B are installed upon mature trees

Reasonable avoidance measures are to be adopted to mitigate any risks to wild birds, badgers, common herpetofauna or other priority wildlife.
As such, subject to the delivery of the above, the proposed development is considered likely to result in a clear biodiversity net gain/a net gain in local green infrastructure.

The 'stepwise approach' should be adopted throughout the design stage of all new developments in Wales. This means that the loss of existing green infrastructure should be avoided whenever possible, and when it is not possible to avoid the loss of or damage to the existing green infrastructure entirely, the extent of the loss or damage should be minimised to the greatest extent possible. When a proposed development poses a risk of harm to green infrastructure, protected habitats or habitats of principal importance, or protected species or species of principle importance, suitable mitigation should be incorporated into the proposed scheme of works to safeguard that green infrastructure/those habitats and species to the greatest extent possible. Finally, if the loss of green infrastructure cannot be avoided, minimised or mitigated for, suitable on-site compensation should be incorporated into the design of the development.

Access

The proposed building will be accessed as the current silage clamp, by a concrete track from the unclassified highway, there will be sufficient space for turning vehicles in all areas.

Waste

There will be no increase in waste water or slurry due to the building.

Community Safety

There will be natural surveillance from nearby dwellings, there is a Public footpaths within 116m and open areas in the vicinity. Safety signs will be erected to warn of Fragile Roof materials.

Economic

All materials and labour will be sourced locally (where possible and viable financially).

Social

The Social impact of this development has been considered with regards to design and location. By placing the development within close proximity of existing buildings it will not have a negative impact on the local people or people visiting the area.

Conclusion

It is considered that the development integrates into the landscape with views which will not detract from the current context.
The new roofed building will reduce the dirty water emitted into the Slurry Lagoon and thus increase its capacity.

Building has sufficient separation from the nearest habitable dwellings, as not to affect them with unacceptable odours.

Appendix 1 – Photos

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