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# Landscape-Related Construction in Baden-Württemberg

*The landscape picture is increasingly being characterised by uniform designs in the construction of farm buildings. Special characteristics of the location and its environment are hardly considered in planning and construction. In order to save costs, the cooperation of experienced architects and local construction craftsmen is dispensed with. This development does not meet the intentions of society and the legislators. The privilege of agriculture to build in outlying areas requires reorientation among farmers and their advisors.*

**B**aden-Württemberg is not only a densely populated industrial and technological location, but also a holiday country and a recreation area for many people.

The landscape between Lake Constance and the foothills of the Odenwald, the Rhine valley and the Swabian Alb with the variety of its natural areas determines the conditions for agriculture. Areas with special cultures, such as wine cultivation, fruit, or hops alternate with field- and grassland. Poor soils are grazed on by sheep. Typical buildings have shaped this cultivated landscape. Thus, house landscapes were created which give the Black Forest, for example, its unmistakable appearance.

After 1945, agricultural operations were increasingly relocated to outlying areas. Especially development societies designed type plans which were intended to lead to cost reduction in planning and construction. The building types, adapted to the development standard of agricultural machinery, were evenly distributed over the country and increasingly overlaid the historically grown house landscapes. After the development societies had withdrawn from the construction sector, the planning and construction of farm buildings increasingly shifted from local architects and craft businesses to so-called prefabricated construction companies (building contractors with a more or less high degree of prefabrication). The planning and construction of the buildings are determined by the technical possibilities of the suppliers,

which try to produce as cheaply as possible by using multi-purpose construction parts. The special characteristics of a location are hardly considered. The focus is on function and expenses, while the design of buildings and farm facilities becomes secondary. Given these circumstances, conditions imposed by commissioners for nature conservation regarding the choice of material for the building shell or the roof are rather ineffective if the proportions of the building or its integration into the landscape do not match.

Construction in outlying areas is a special privilege of agriculture. However, this privilege also entails the obligation to consult the necessary experts during planning and construction. According to the state construction regulations, the building owner is obliged to choose a suitable plan designer. Agriculture must again become aware of this responsibility and be prepared to hire good architects for the planning of the farm and its buildings. The architects should take this construction task, which poses a great challenge for their abilities, more seriously again.

## The „Galthaus“ in Ebingen

This historic one-roof farm was built in the 18th century. Located on a remote young cattle pasture on the Alb plateau, it was used during the summer months as a shelter for the town shepherd and the young cattle herd he was in charge of. After young cattle graz-

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## Keywords

Landscape related building design, development, examples, subsidy

*Fig. 1: Sheep stable typical for the countryside with half-hip roof and standing dormers*





Fig. 2: New sheep stable building near Ebingen

ing had been given up, the farm was first occupied by a shepherd in 1954. The old stall provides space for approximately 100 sheep and is low and obstructed. The designation of a water protection area and the growing pasture areas in the landscape protection area required the construction of a new stall with a shelter for 450 ewes. The farm is situated at an altitude of about 880 m above sea level with a snow load of 1.6 kN/m<sup>2</sup>. It is located in earthquake zone 4. So far, the town of Albstadt has already built two sheep stalls in a similar form, one of which was awarded a prize in the federal competition „Environmentally Compatible Buildings for Farm Animal Housing under Difficult Locational Conditions“. The building form has developed based on landscape-typical sheep stalls with a half-hip roof and standing dormers for the ceiling-loaded shelter. The design is the result of an invitation to bid according to a performance programme. A self-supporting square timber binder spans the 20 m wide hall. The roof is covered with tiles. In order to avoid condensate, the roof area was boarded with a vapour barrier, counterlathing, and lathing on top. The walls are clad with saw-rough boards. A light band with double web plates and the fresh air openings are situated above. Exhaust ventilation is designed as gravity ventilation through a ventilation ridge. Roof inclination is 25°. The long building is accessed through a cross gate from which the feed belts are loaded on the one side and the storage room for hay and straw is filled on the other side. The cross gate acts like a joint and connects the stall to the storage room which is situated at a lower level and adapted to the terrain. The building was grouped into the landscape such that additional planting is not necessary. The landscape maintenance operation which cultivates more than 135 ha of sloped semi-dry lawn with juniper heaths and pasture beech fields was awarded the cultivated landscape prize of the Swabian Homeland Association.

### Small Building Groups Instead of Large Hall Buildings

The separation of the functional areas and the development of outdoor climate stalls provide the possibility of planning small building groups instead of the mighty hall buildings. Especially in Baden-Württemberg, such stall units are built, which may only have a limited width due to the desired natural ventilation. The ground-level buildings can be adapted to the terrain at a different height level and integrated into the existing building structure. The low building heights have a less disturbing effect on the landscape than hall buildings, which are becoming ever wider and, hence, higher. The terrain can be integrated into the stall facilities without difficulties. Planting is useful for the shading of loose yards, for example. However, they should not impede air conduction in the buildings. The dairy cattle stall of the Bäumler family in Ballendorf-Mehrstetten, which won a prize in the second last federal competition „Future-Oriented Stall Facilities in Outlying Areas“, or the so-called pigport, a stall form for pigs which has already been built several times, illustrate this development. In addition to the special design possibilities, these buildings allow a significant

part of the construction work to be done by the owner due to their low height.

### Further Development of Black Forest Farms

The dissatisfaction of parts of society with the appearance of farm buildings has prompted the Black Forest Association with the support of the state of Baden-Württemberg to hold an architects' competition on „Further Development of Black Forest Farms“. For three typical Black Forest Farms at different altitudes, plans were developed which take the changed conditions in agricultural operations into account and show possible solutions for the design of functional extensions. The best plans were awarded a prize and published in hopes of providing suggestions for the preservation and further development of Black Forest farms.

Baden-Württemberg grants financial support in the amount of 40% of the eligible expenses (up to € 20,000) for unprofitable additional costs caused by construction measures of agricultural operations due to a special, landscape-related design or the choice of location.

### Literatur

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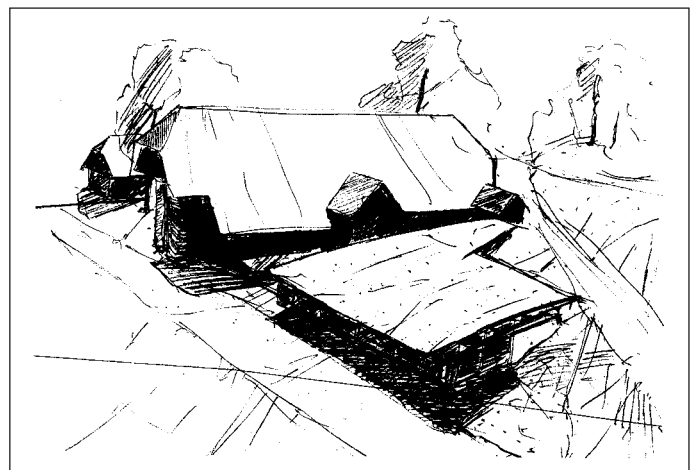


Fig. 3: Sketches of the architect competition „Further Development of Black Forest Farms“