

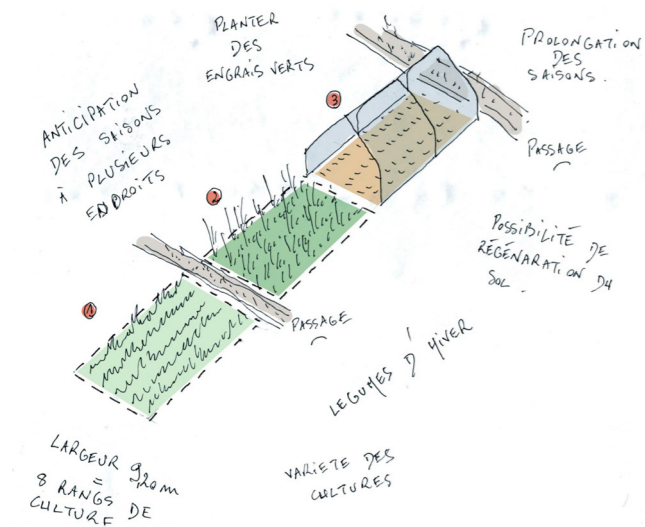
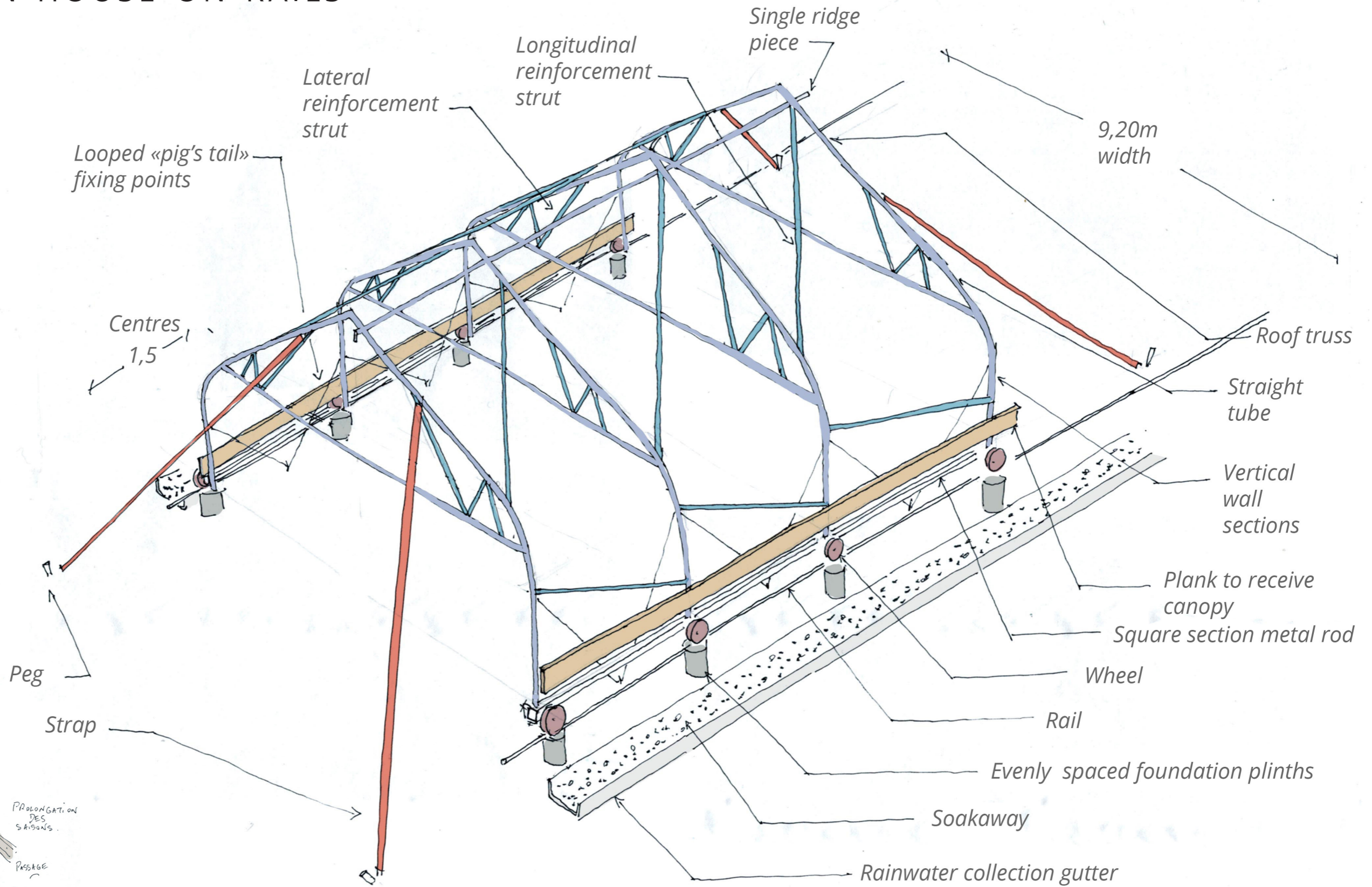
MOBILE GREEN HOUSE ON RAILS

INTRODUCTION :

« In Marie-Line's kitchen garden, the plant growing programme aims to maximise the growing potential of the area available for cultivation and to disturb the soil as little as possible by using permanent terraces and minimise weeding by mulching- and all of this without using machinery. To carry out this ambitious programme Nicolas and Marie-Line decided to use mobile green houses.

Today these structures have yielded their fruit through their growing potential (extending the seasons and also getting an early start, crop rotation, the ease with which the green house can be moved and the resting of the land by planting green manures).

From a technical point of view their green houses are mainly self-built. They are mounted on rails (on concrete foundations), they have a choice of three siting positions and each one measures 15m long by 6.5 to 9.2m wide.»



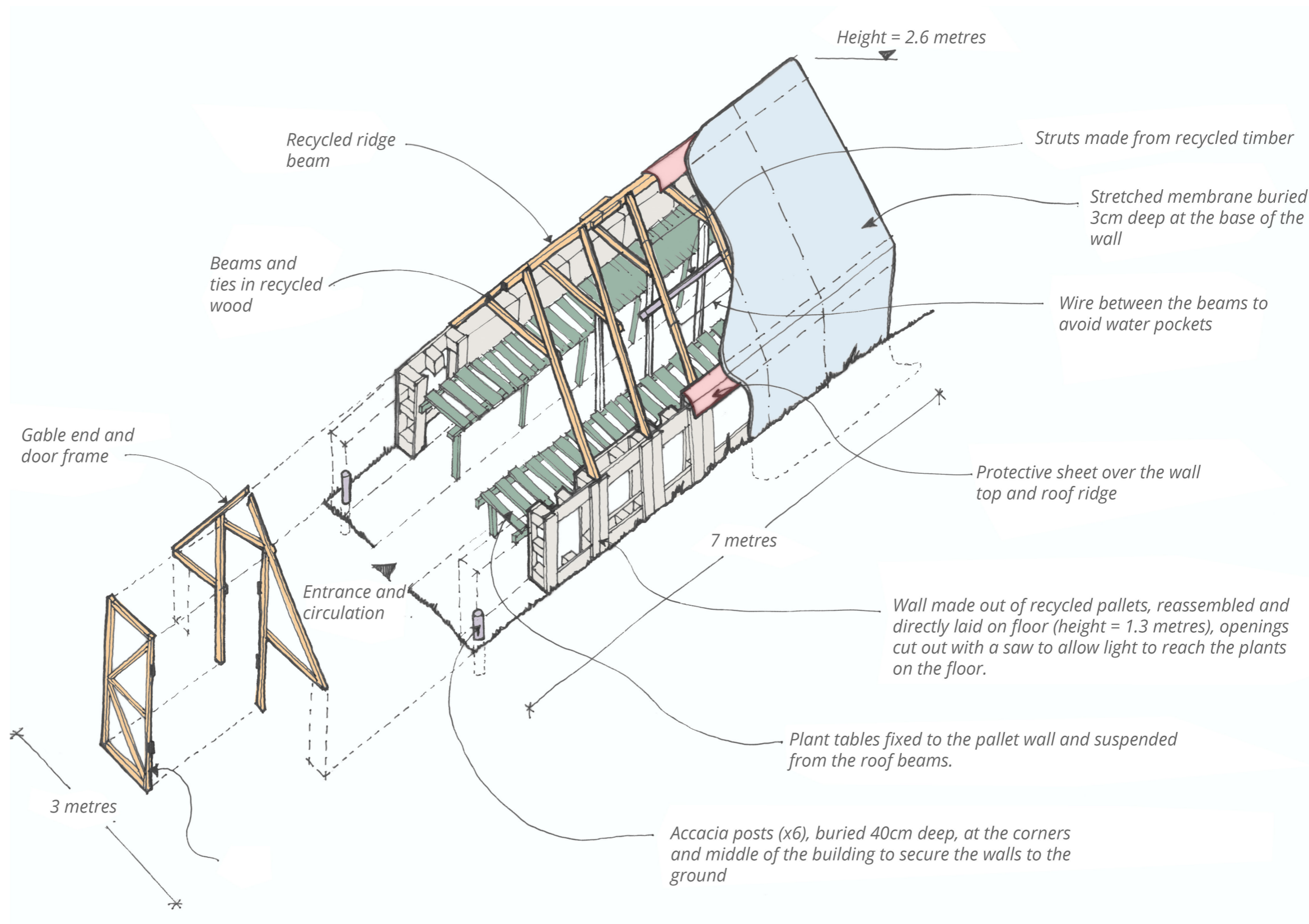
PLANT GREENHOUSE USING RECYCLED PALLETS

INTRODUCTION :

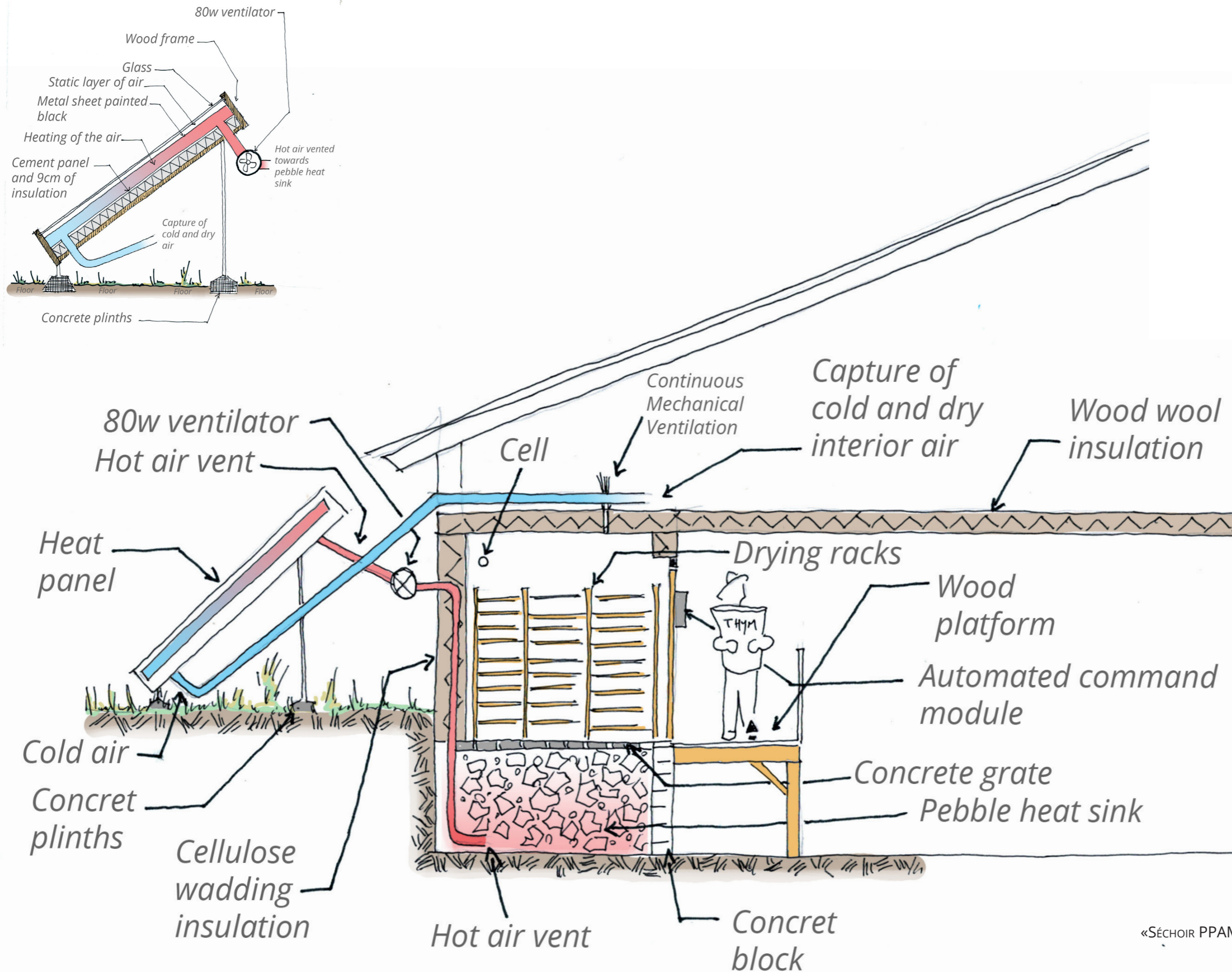
«Recycled materials were used throughout (except the nuts and bolts and the sheeting) for this little green house whose construction design was improvised on-site. Pallets joined together by planks make up the side walls, onto which 8 small trusses are fixed.

The pallets were cut out with a saw on the outside to allow light to reach plants placed on the ground surface.

In all, 4 days work was all it took to put the structure together (2 to 6 people working on the site), from the initial idea about the way to build the tables to completion (excluding the time it took to source the building materials).»



PERFUMED AND AROMATIC PLANT DRIER

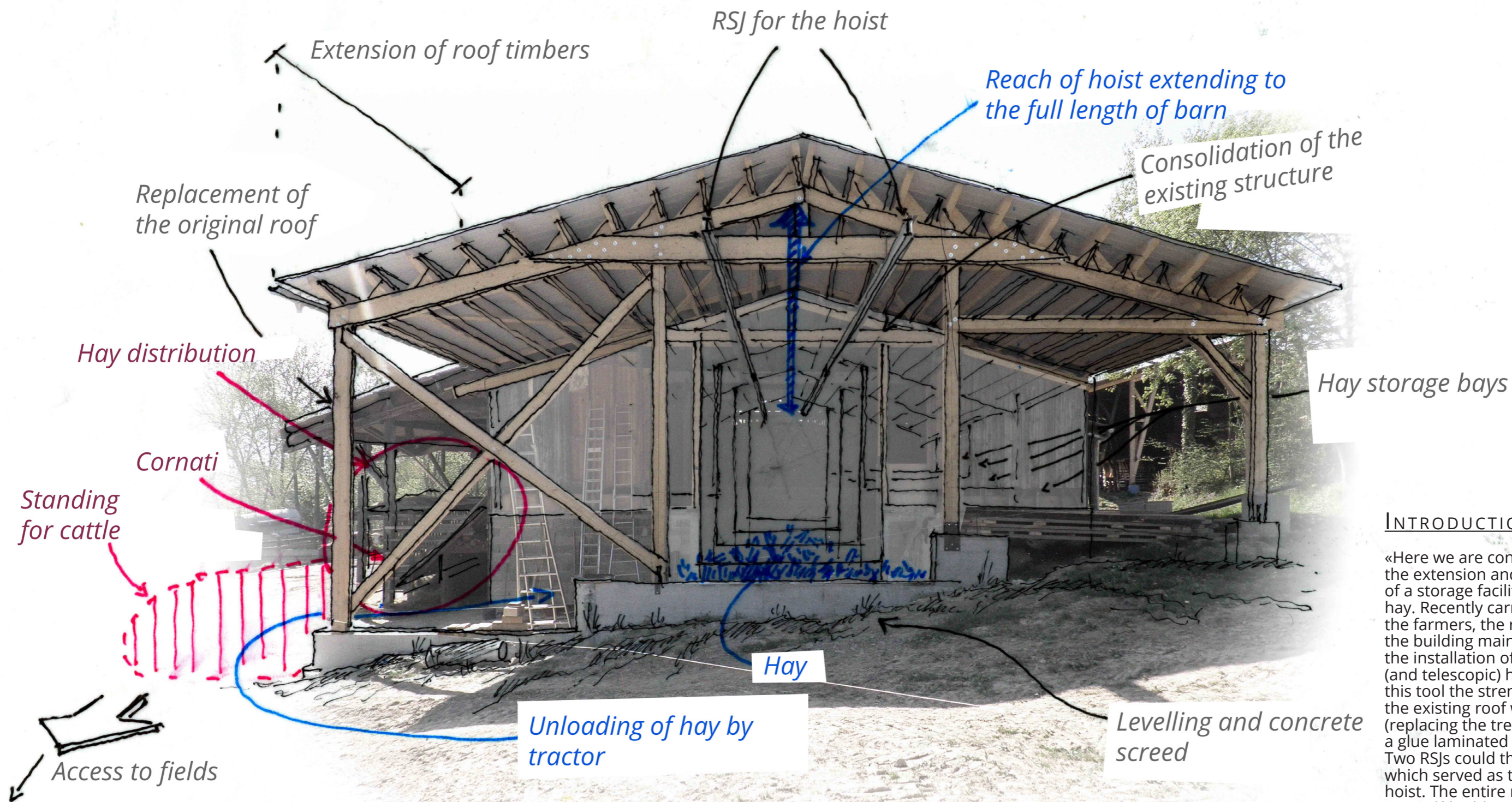


INTRODUCTION :

«When it comes to self-built driers, here is an efficient and well thought out example ; not surprising given the 5 years of work to gradually improve the concept and a huge amount of preliminary research.

The whole system depends on the optimal control of vented hot air passing through heating elements and distributed throughout the five driers. In this way solar drying and thermal inertia work together thanks to a heat store of stones placed beneath each drier. Furthermore, the icing on the cake is the fact that in hot weather the heating circuit never exceeds a temperature of 25 degrees C.»

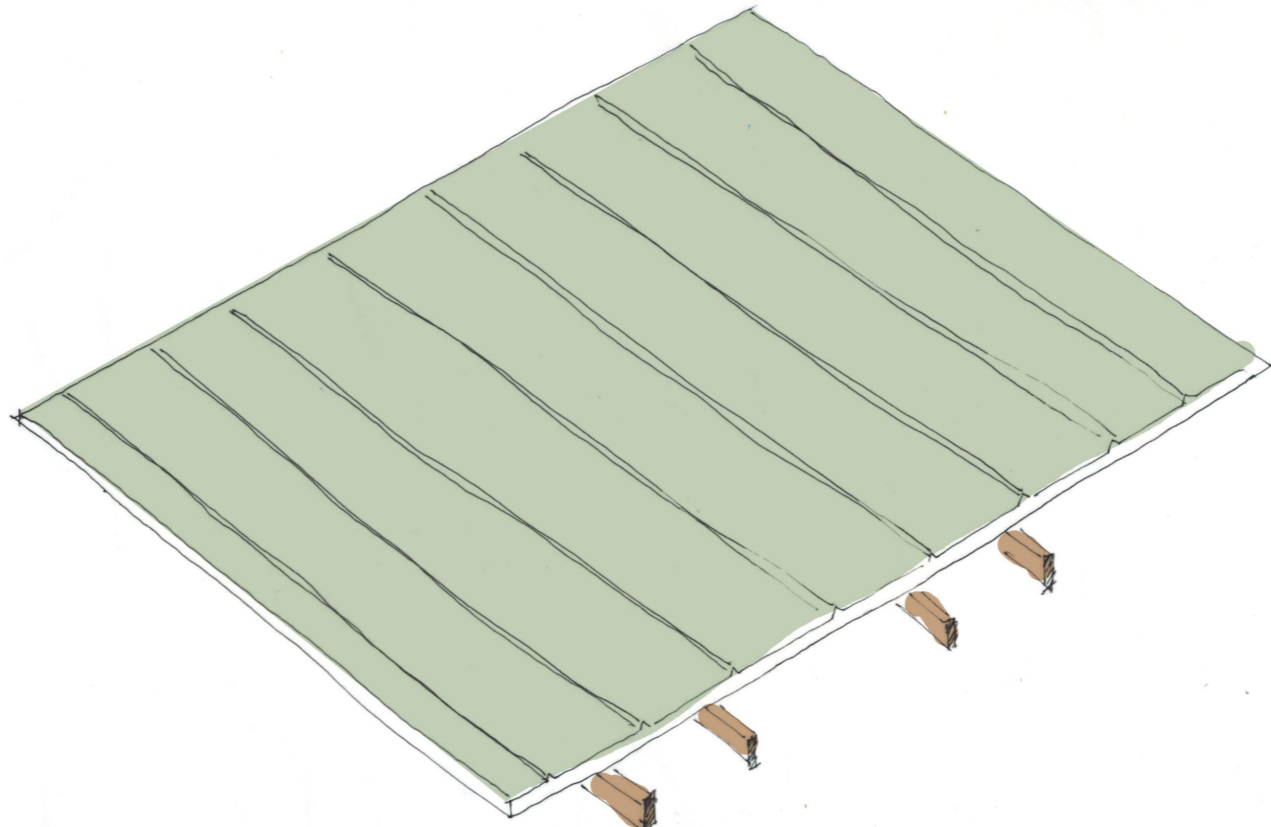
RENOVATION AND ADDITION OF POWERED HOIST



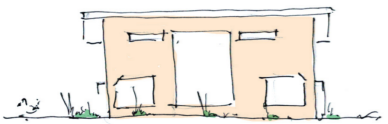
INTRODUCTION :

«Here we are concerned with the extension and renovation of a storage facility for loose hay. Recently carried out for the farmers, the renovation of the building mainly consisted in the installation of a mechanical (and telescopic) hoist. To install this tool the strengthening of the existing roof was necessary (replacing the trellis truss with a glue laminated collar beam). Two RSJs could then be installed, which served as the rails for the hoist. The entire refurbishment was self-build.»

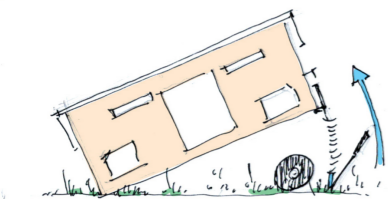
MOBILE HEN HOUSE



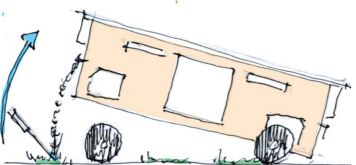
1
Mounting of internal strengthening struts



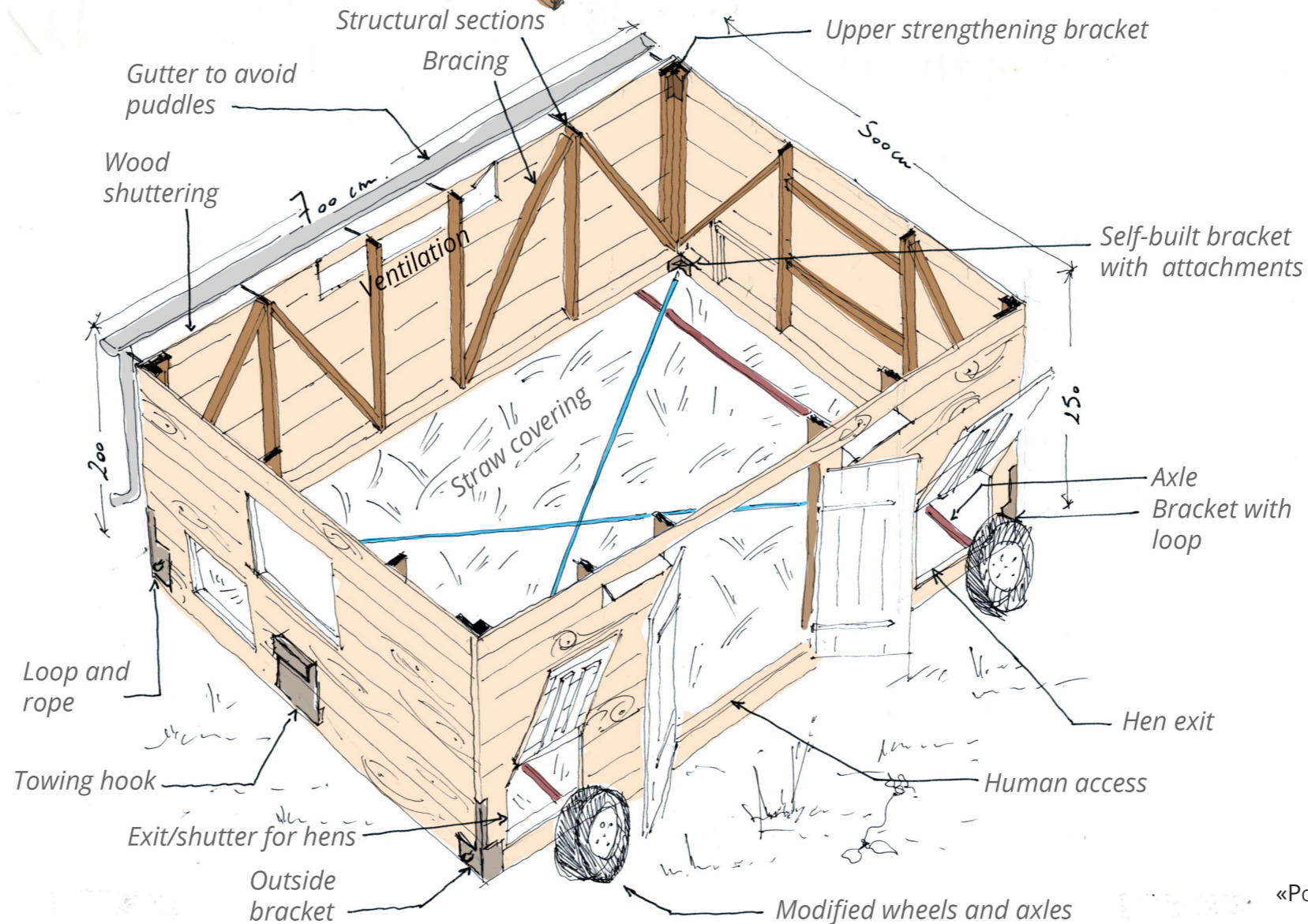
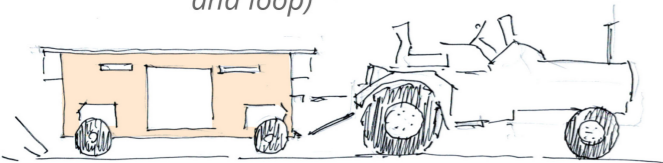
2
Lifting with jack and sliding in the long axle



3
Idem



4
Hitching up to tractor thanks to steel brackets fixed to hen house (hook and loop)

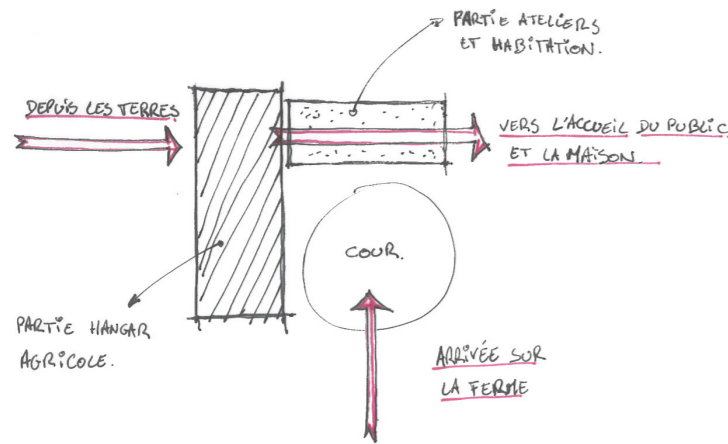


INTRODUCTION :

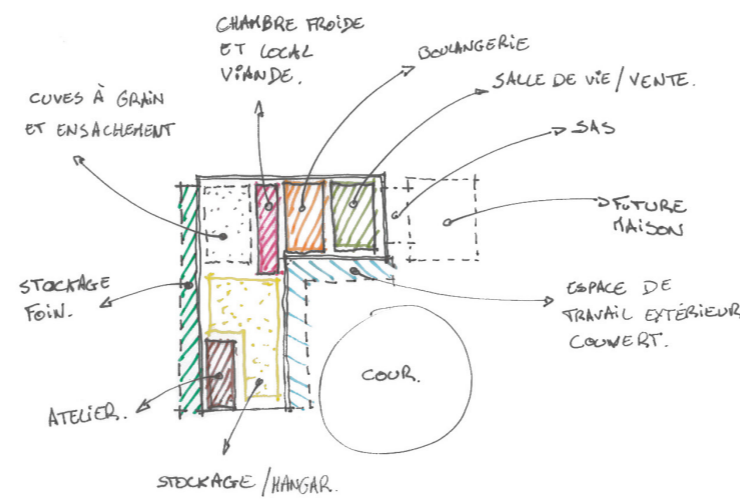
«These totally self-built structures were designed to be as mobile as possible : in static mode the hen house rests on the ground and when it is being towed the specially welded axles are placed underneath it and the structure is attached to the tractor. In around ten minutes, the job is done and the hen house can be moved to pastures new whilst leaving all the chicken manure behind it on the soil.»

TIMBER-BUILT BARN, PART 1

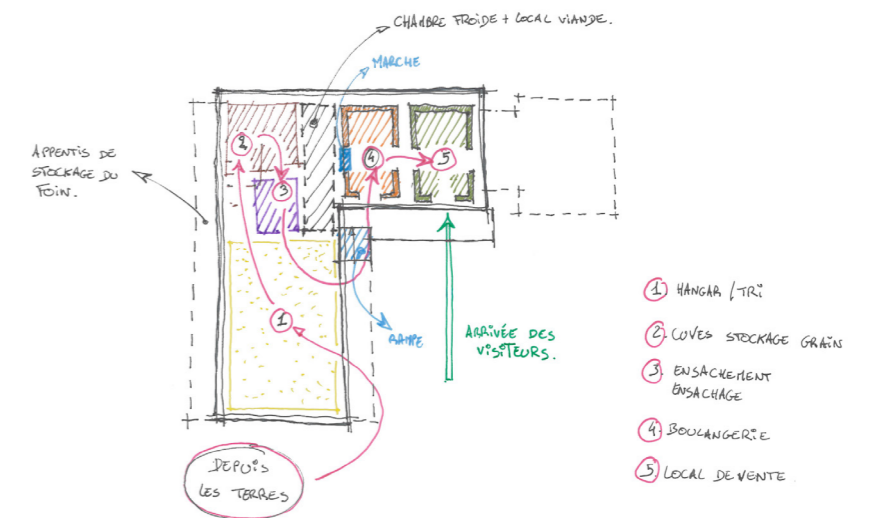
L SHAPE : SEPARATION OF BARN AND BAKERY



ORGANISATION OF SPACE



ERGONOMICS : WORK STAGES

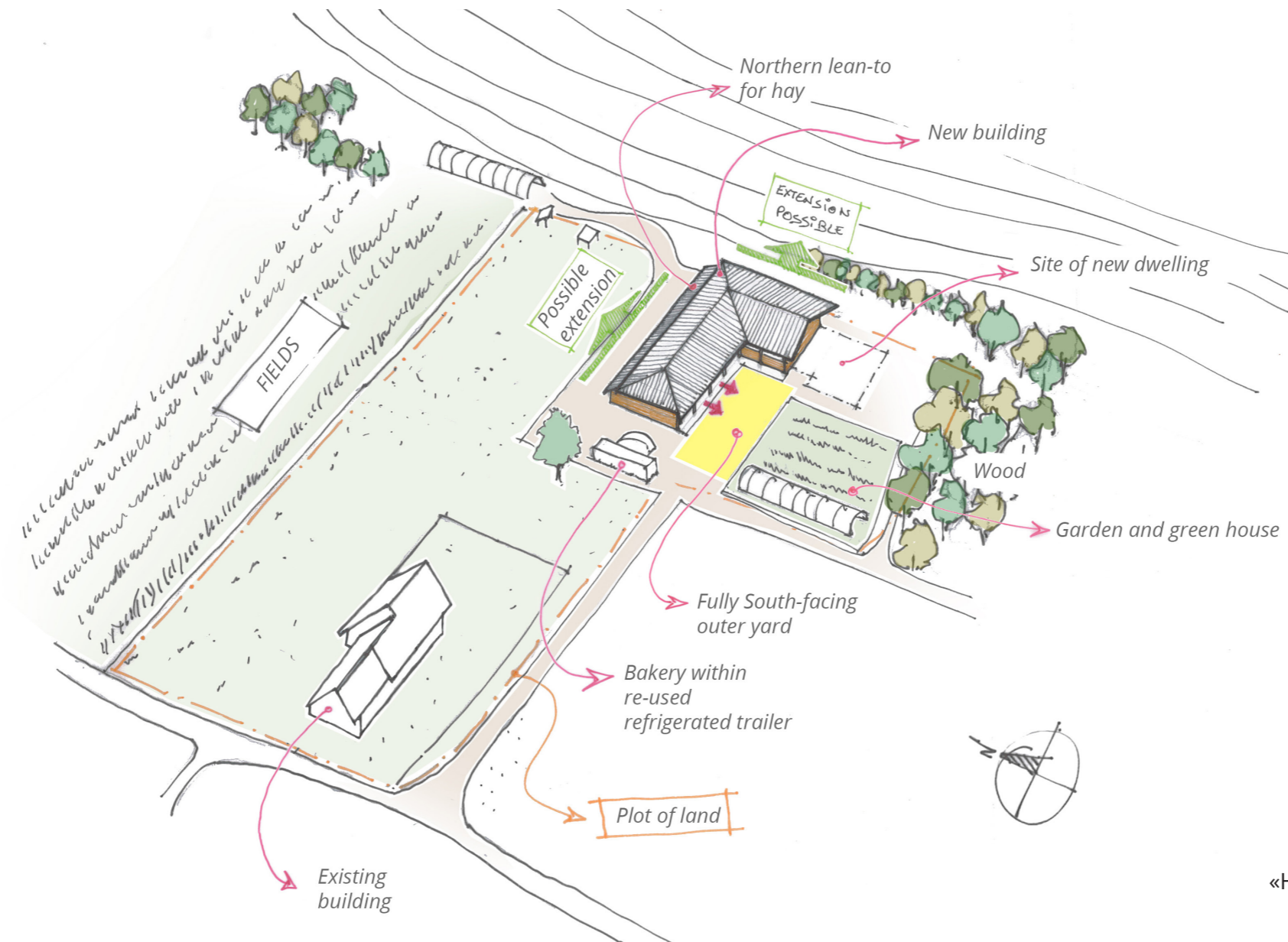


PRÉSENTATION :

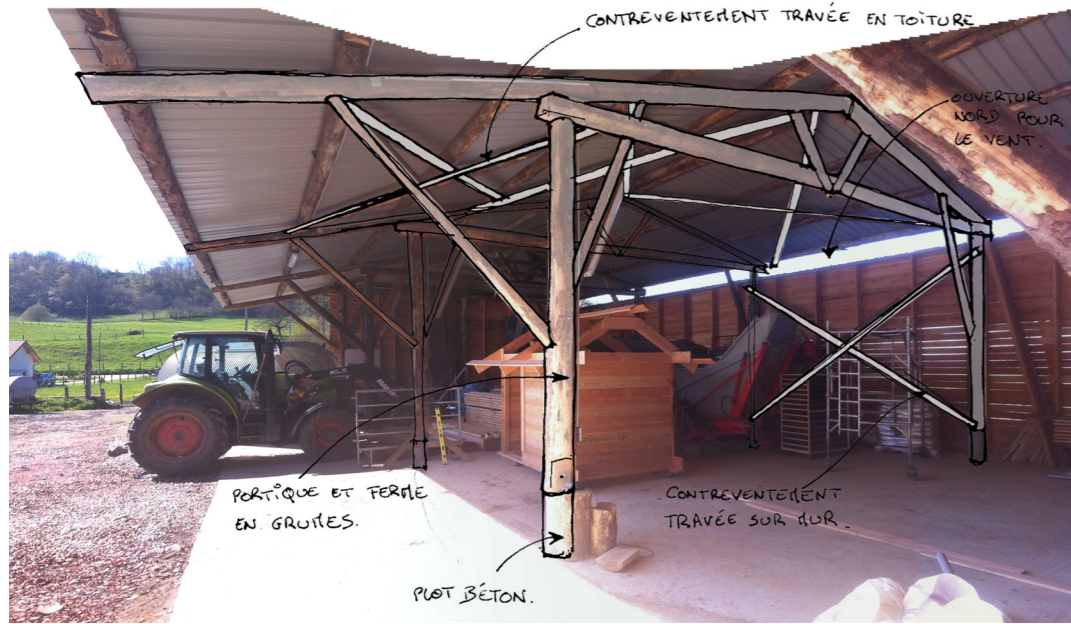
« From the quality of the design (challenging and masterly) to the speed of construction over just a few months, this building could not have been seen the light of day without considerable prior self-build experience.

In parallel with his new venture as a farmer-baker, Pierre has built an impressive new agricultural building, incorporating all the facilities necessary to the launch of his new activities.

This L shaped building fulfils several functions : a separation of the barn/storage area from the processing/ bakery area, whilst managing to connect these areas with an outer yard. In the shape the building has taken, each space corresponds with a production stage in the work, is accessible from outside and benefits from good natural light (apart from the storage area which required less light). The ergonomics of the building are reinforced by the proximity of the different areas, and the ground floor layout (on an extensive concrete screed) facilitates all movement and transport.»



TIMBER-BUILT BARN, PART 2



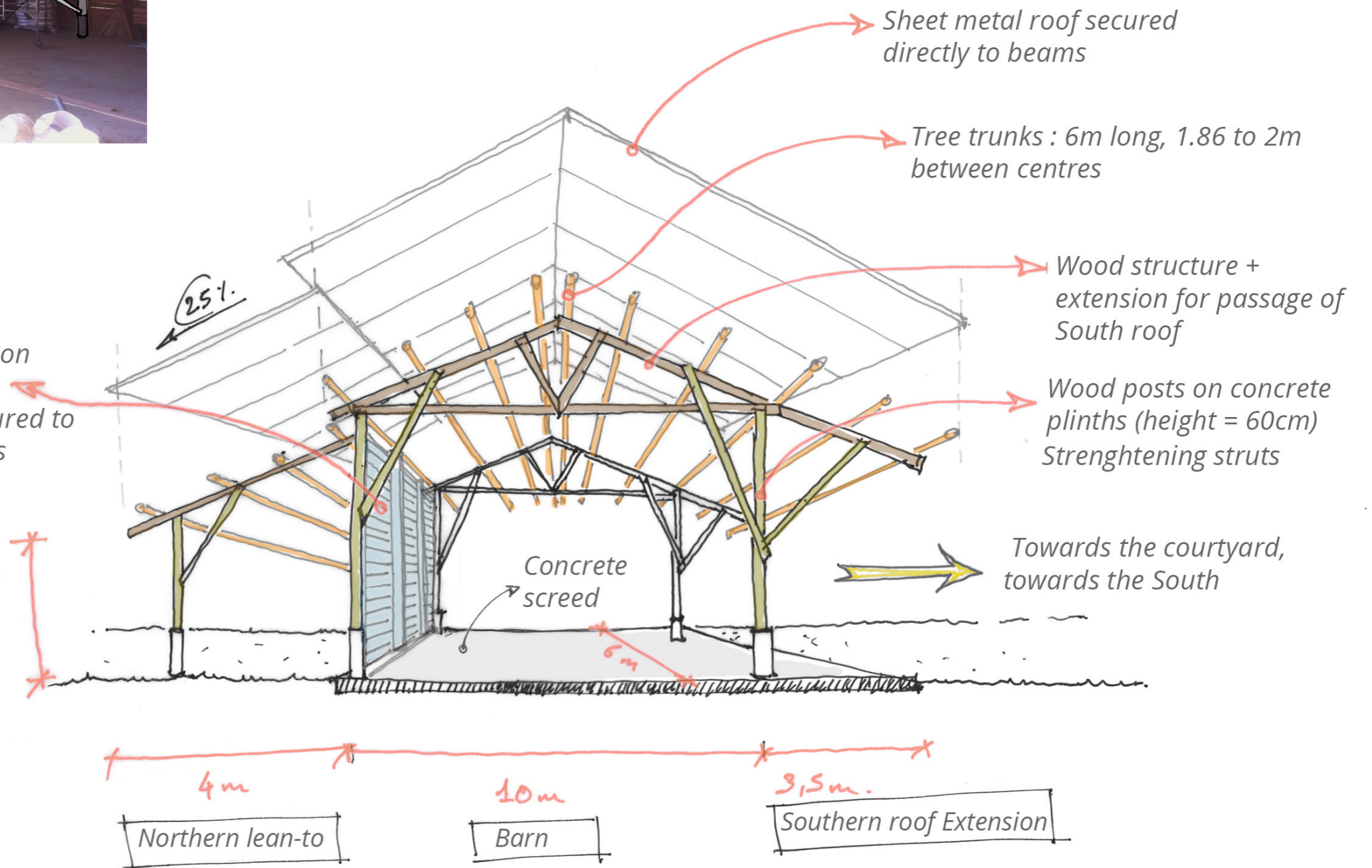
INTRODUCTION :

«As regards construction, the structural elements were made of frames made out of tree trunks, prepared by Pierre using a chainsaw and assembled on-site. A crane, purchased second hand, was used to lift the timbers from where they were stored nearby over to the concrete screed ; the frames were lined out respecting the marking out of the screed, then they were erected and secured to the concrete plinths. Each frame took about 6 hours to put in place, without any additional help.

A light shuttering of planks on the elevations made the building weather-proof. The areas dedicated to the bakery were built from stud work. Finally, the main work on the barn was finished within 4 months, with very little outside help and a price per sq meter difficult to beat.»

Light wooden non load-bearing shuttering, secured to vertical sections

Minimum 3.5m height to cater for the movement of machinery



Sheet metal roof secured directly to beams

Tree trunks : 6m long, 1.86 to 2m between centres

Wood structure + extension for passage of South roof

Wood posts on concrete plinths (height = 60cm) Strengthening struts

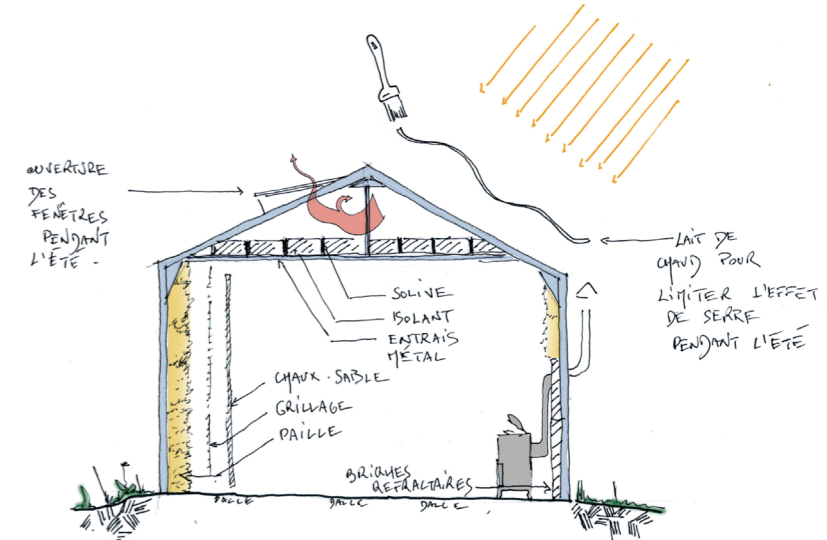
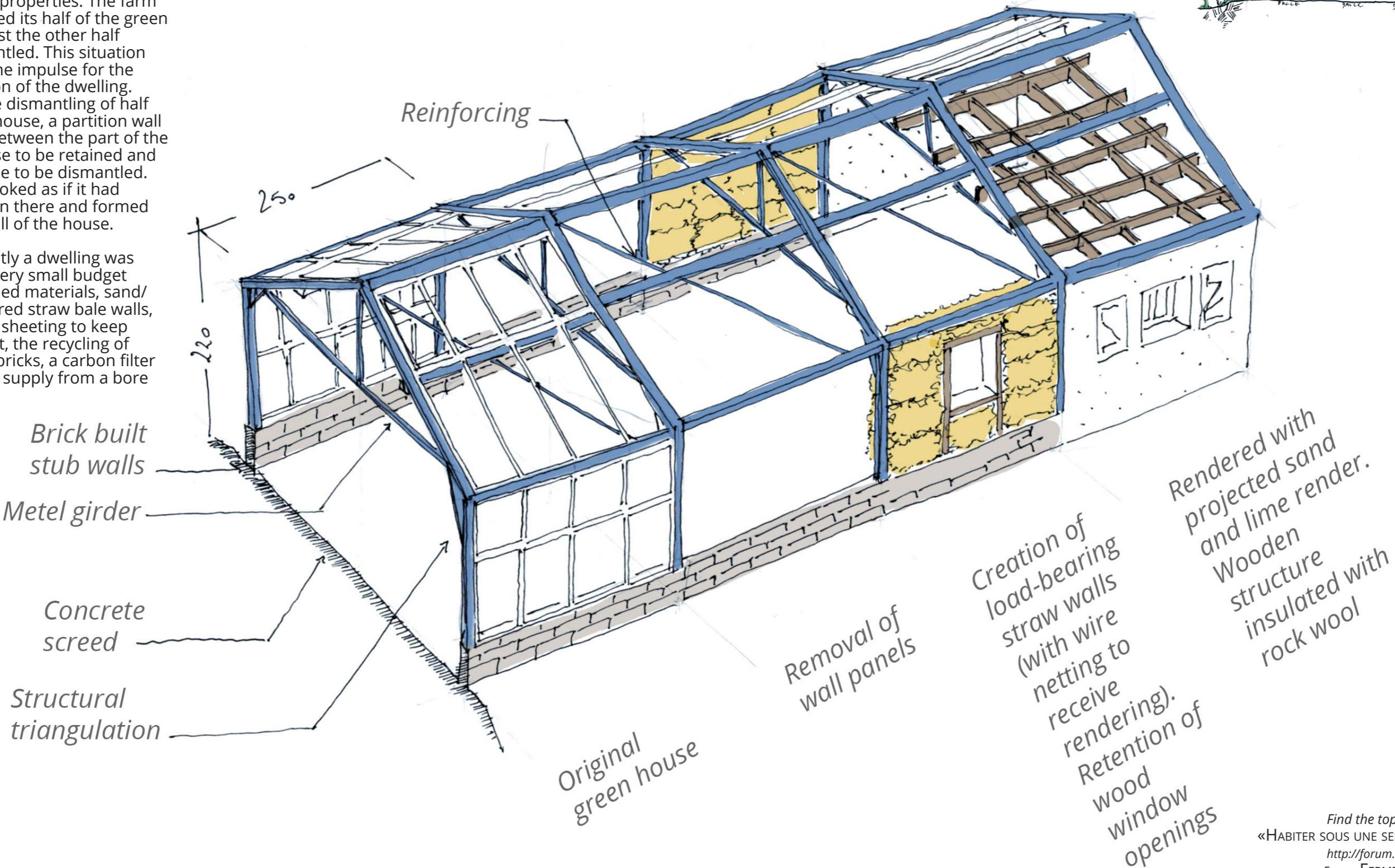
Towards the courtyard, towards the South

LIVING ACCOMMODATION WITHIN CONVERTED GREEN HOUSE

INTRODUCTION :

«This extensive green house was divided into two parts following the sale of part of the land it occupied : one part remained with the farm and the other was sold to make allotment gardens for nearby properties. The farm part retained its half of the green house whilst the other half was dismantled. This situation provided the impulse for the construction of the dwelling. Prior to the dismantling of half the green house, a partition wall was built between the part of the green house to be retained and the part due to be dismantled. This wall looked as if it had always been there and formed the first wall of the house.

Subsequently a dwelling was built on a very small budget from recycled materials, sand/ lime rendered straw bale walls, polytunnel sheeting to keep the rain out, the recycling of refractory bricks, a carbon filter for a water supply from a bore hole.»



COVERED BAKERY

INTRODUCTION :

«Here is the example of a modified mobile home featuring bread preparation and bakery, all contained under the shelter of a polytunnel. From this tidy little site, two oven loads a week are delivered to the AMAP (association of local farmers)»



Entrance to bakery

Addition of outside chimney to improve draft

Mobile home on blocks

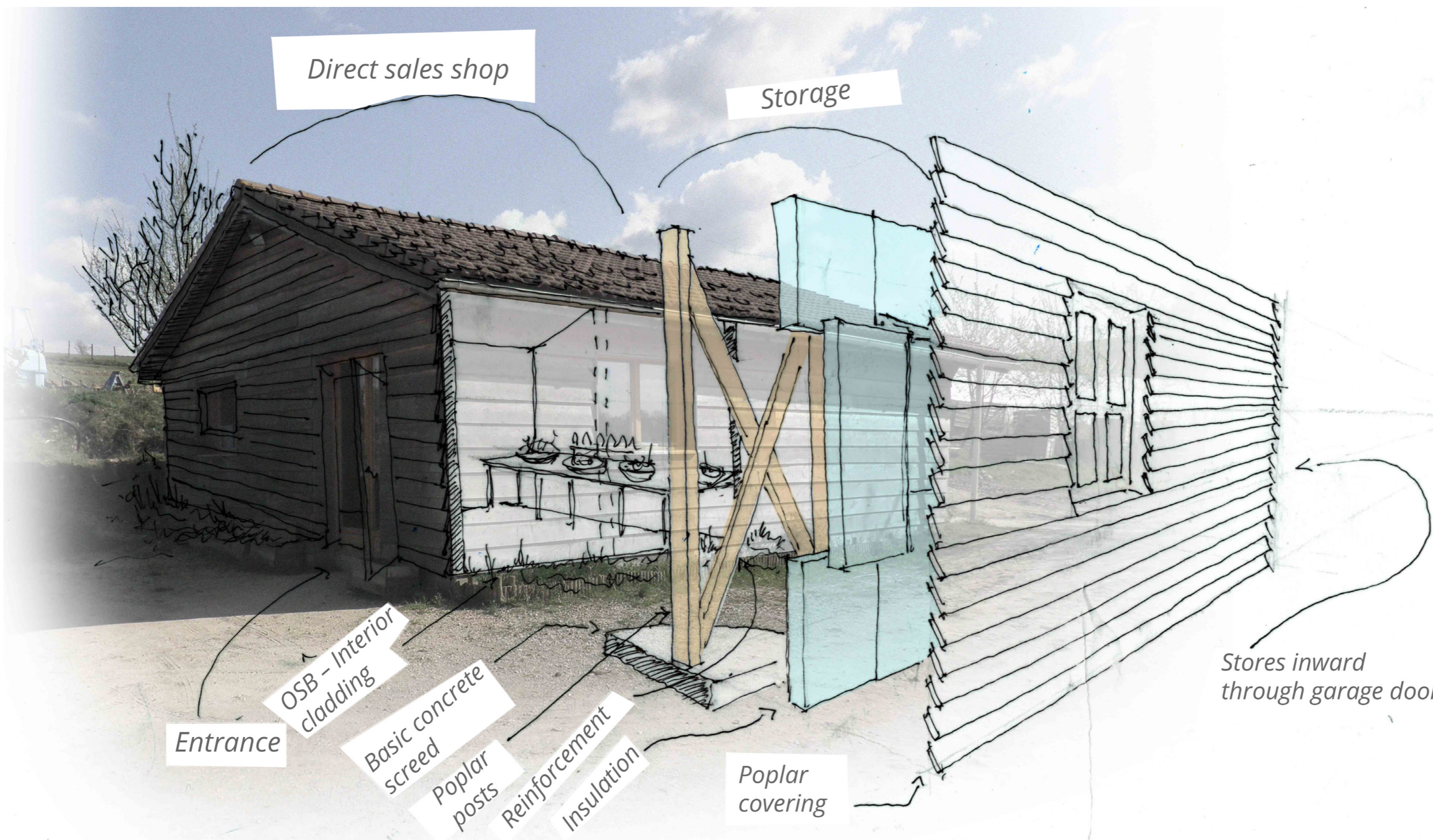
Relaxation area

Flour supply through window

Insulation (using a roll of insulation material)

Polytunnel frame section

SELF-SUFFICIENT FARM (SELF-BUILD)



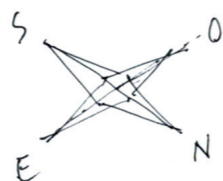
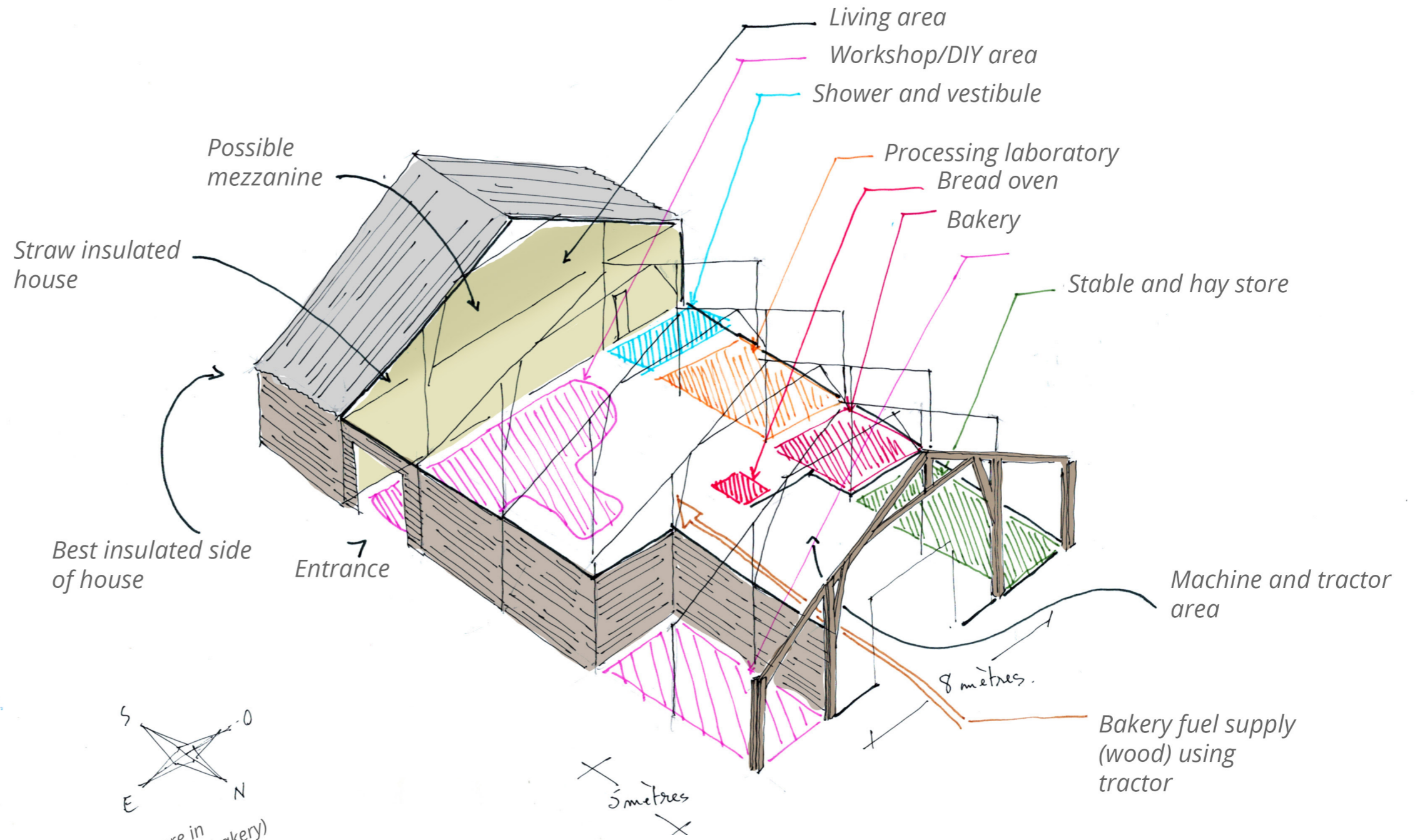
INTRODUCTION :

«This 60sq meter building now has a twin vocation : farm shop and potato store. It has an interesting history : its owners were not only self-builders but also recyclers. And they started from a basic observation, they had plot of land which needed levelling and which had poplar trees on it. From this everything else followed. The farmers brought in a mobile sawmill, had a small screed laid and erected the building. A few years later they had a stroke of luck, they obtained a lorry load of polystyrene insulation panels for ver little, which meant they could close the building and insulate it on the outside.»

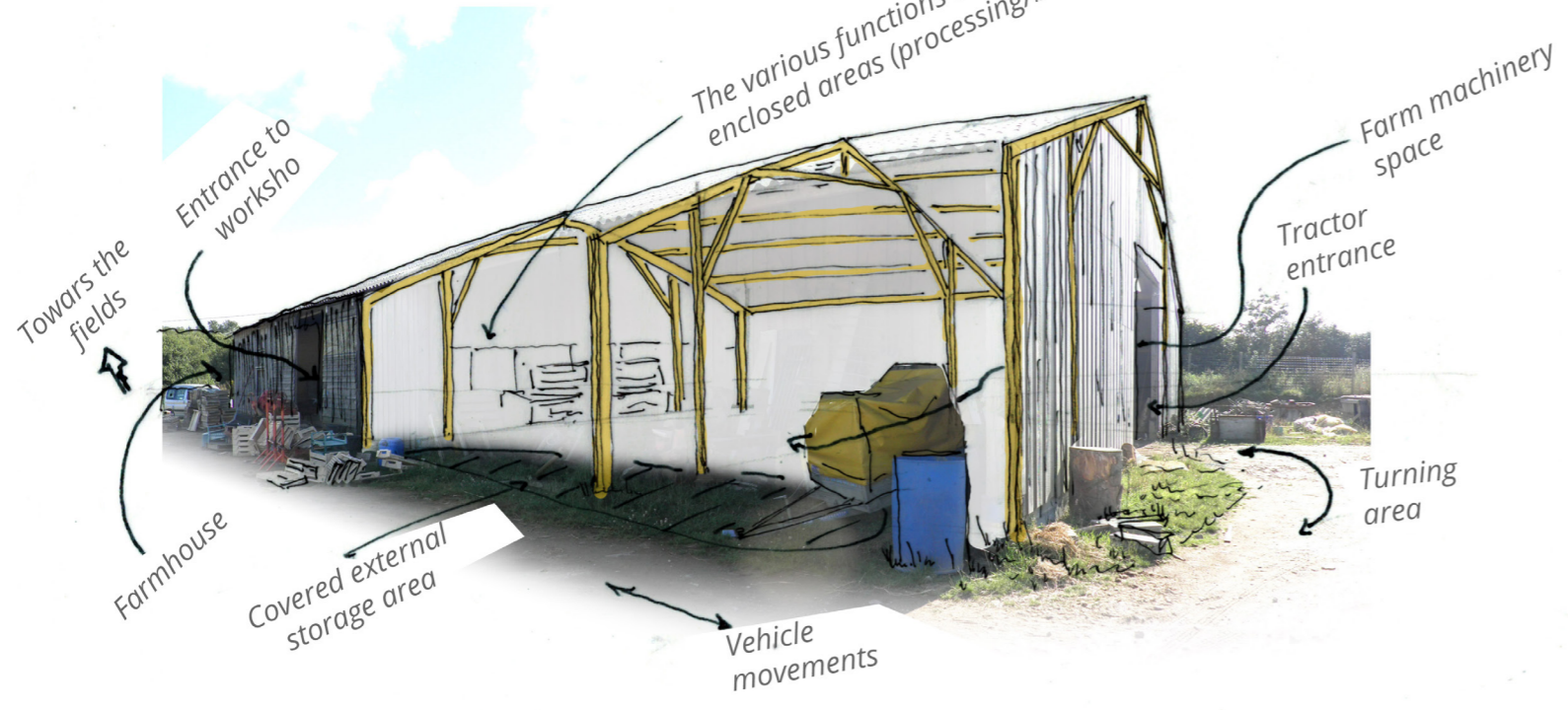
ALL IN ONE FARM

INTRODUCTION :

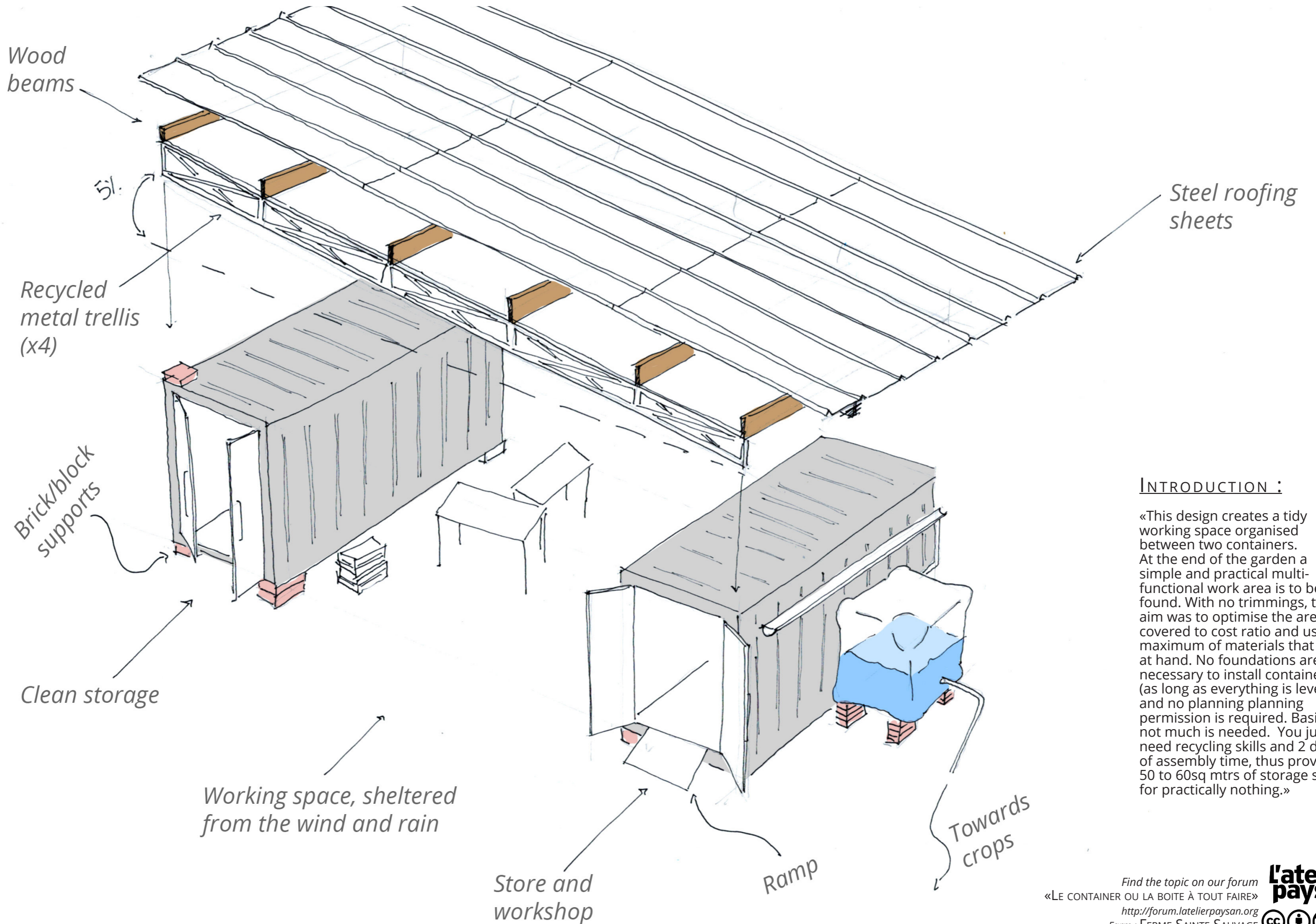
«This self build project was executed in two stages : a dwelling to the South and barn to the North. Given the multifarious nature of the farm's activities, the programme was an ambitious one : bread preparation, bakery, processing facility, stable and hay store for the horse, a tractor shelter, access between the farm and the barn, a workshop space, grain store and general storage area. In all, 400 sq meters of agricultural building.»



The various functions are in enclosed areas (processing/bakery)



WORKING SPACE SET BETWEEN TWO CONTAINERS



INTRODUCTION :

«This design creates a tidy working space organised between two containers. At the end of the garden a simple and practical multi-functional work area is to be found. With no trimmings, the aim was to optimise the area covered to cost ratio and use a maximum of materials that lay at hand. No foundations are necessary to install containers (as long as everything is level), and no planning permission is required. Basically, not much is needed. You just need recycling skills and 2 days of assembly time, thus providing 50 to 60sq mtrs of storage space for practically nothing.»

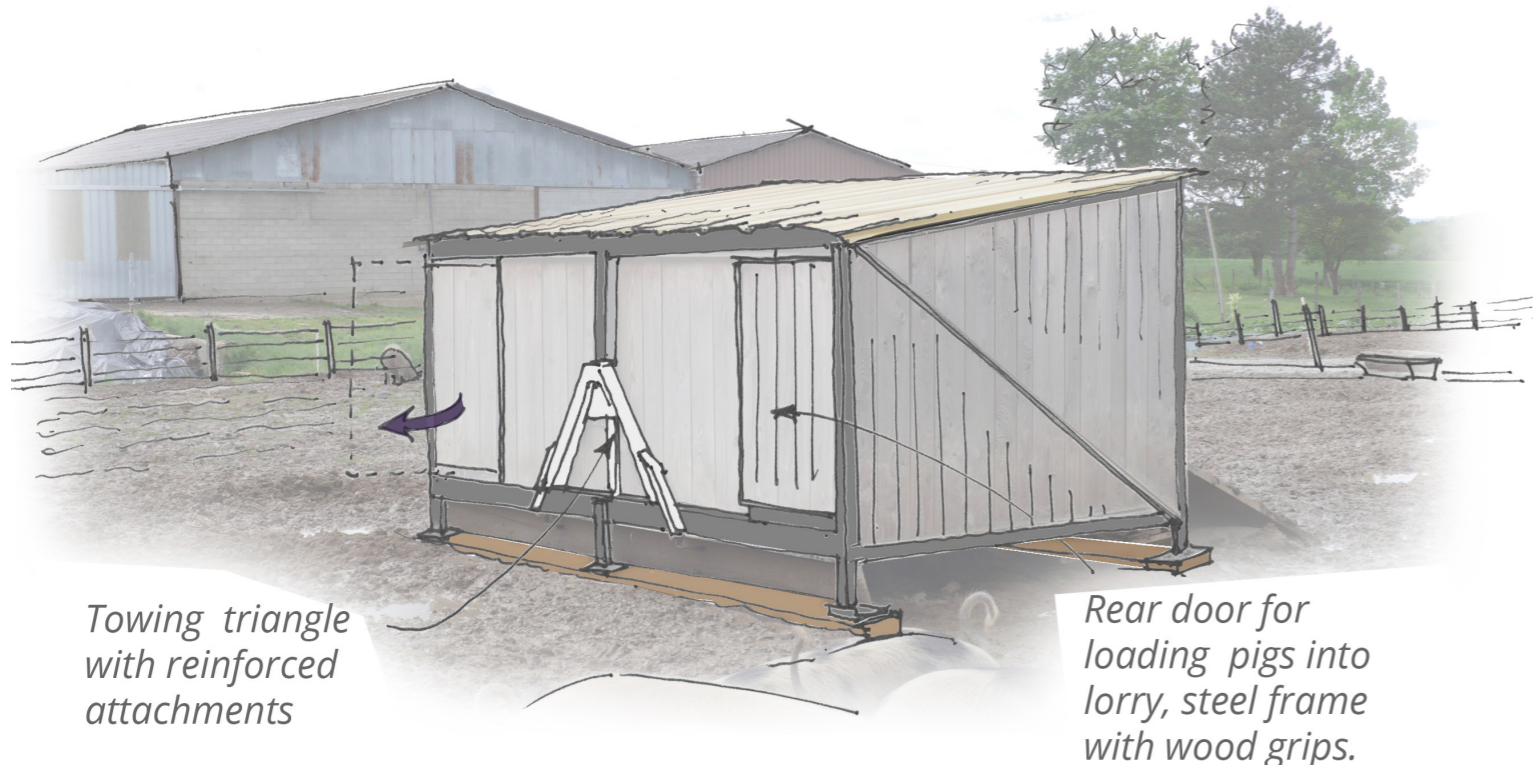
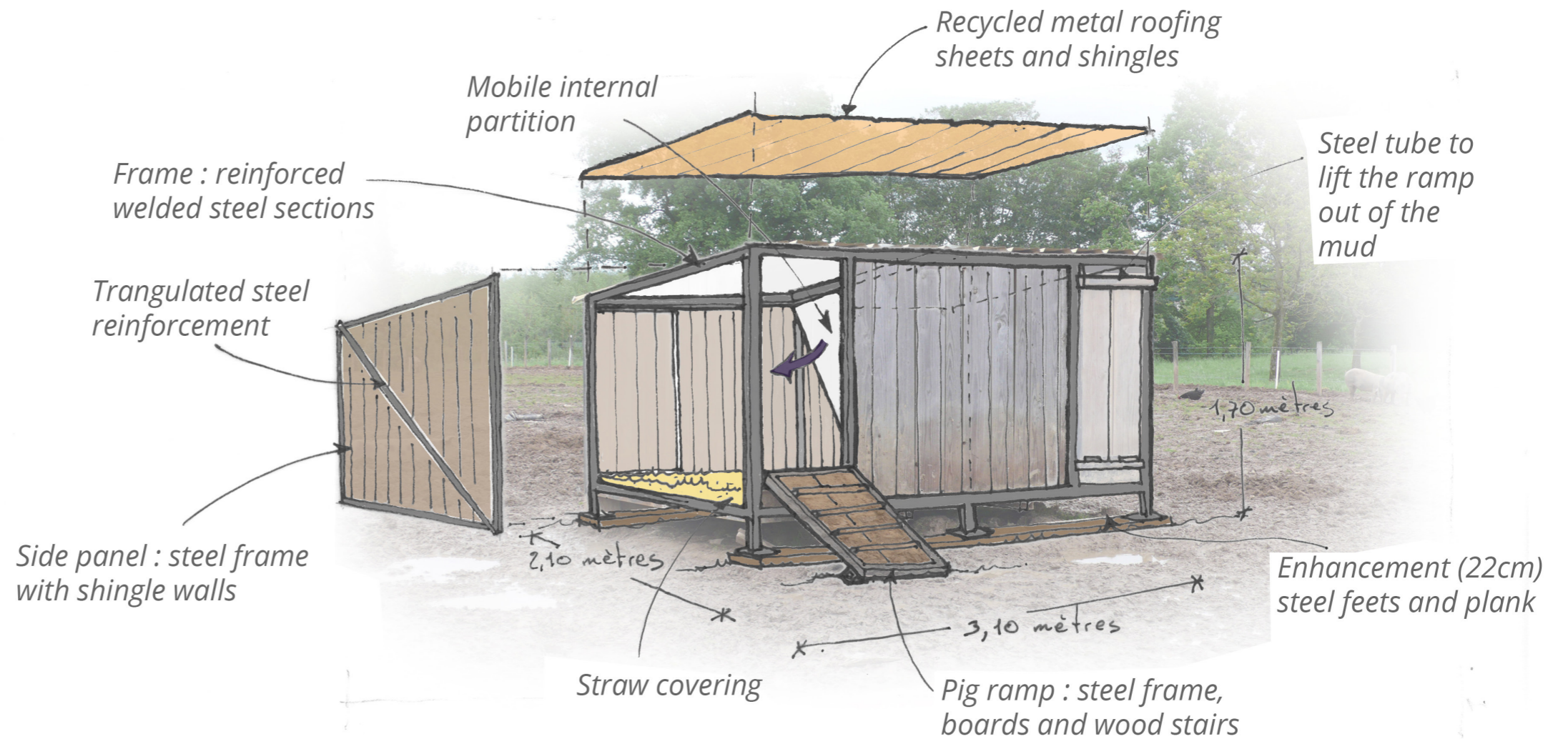
MOBILE PIG PEN

INTRODUCTION :

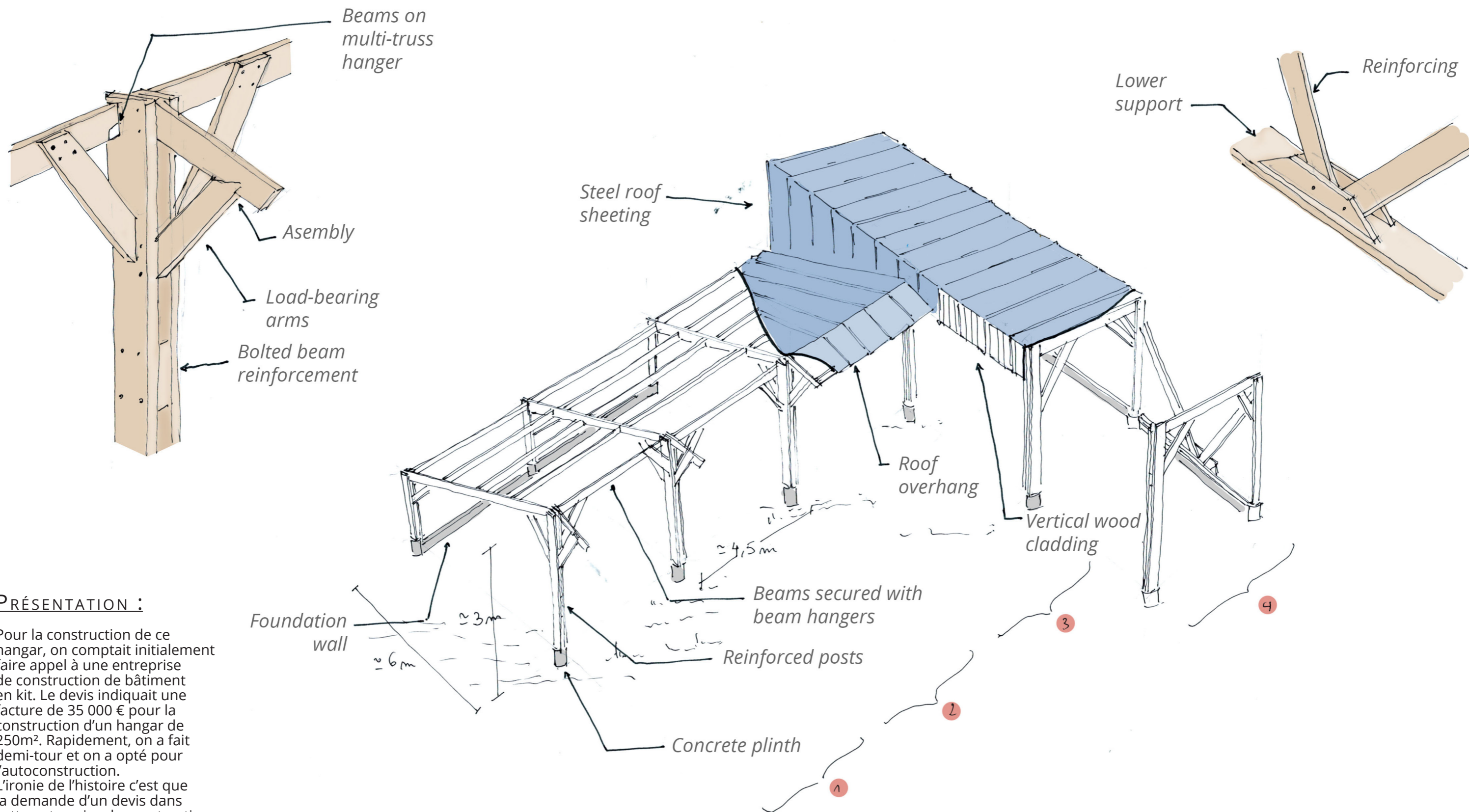
Set up on a mixed farm, this little pig pen made it possible to combine outdoor pig grazing with market gardening.

Featuring a structure made of small welded steel sections and wood shingle walls (with small gaps for ventilation purposes), the structure weighs around 300 kilos. It is easy to tow with a tractor thanks to a triangular hitch welded onto the structure, together with the pigs still inside it (8 large pigs - around 1.5 tons).

Door settings on the front and rear elevations mean the pen can be set within, outside or on the edge of the plot, giving access in any position. As a bonus, an internal partition makes it possible to manage two different batches of pigs.



L SHAPED STORAGE FACILITY



PRÉSENTATION :

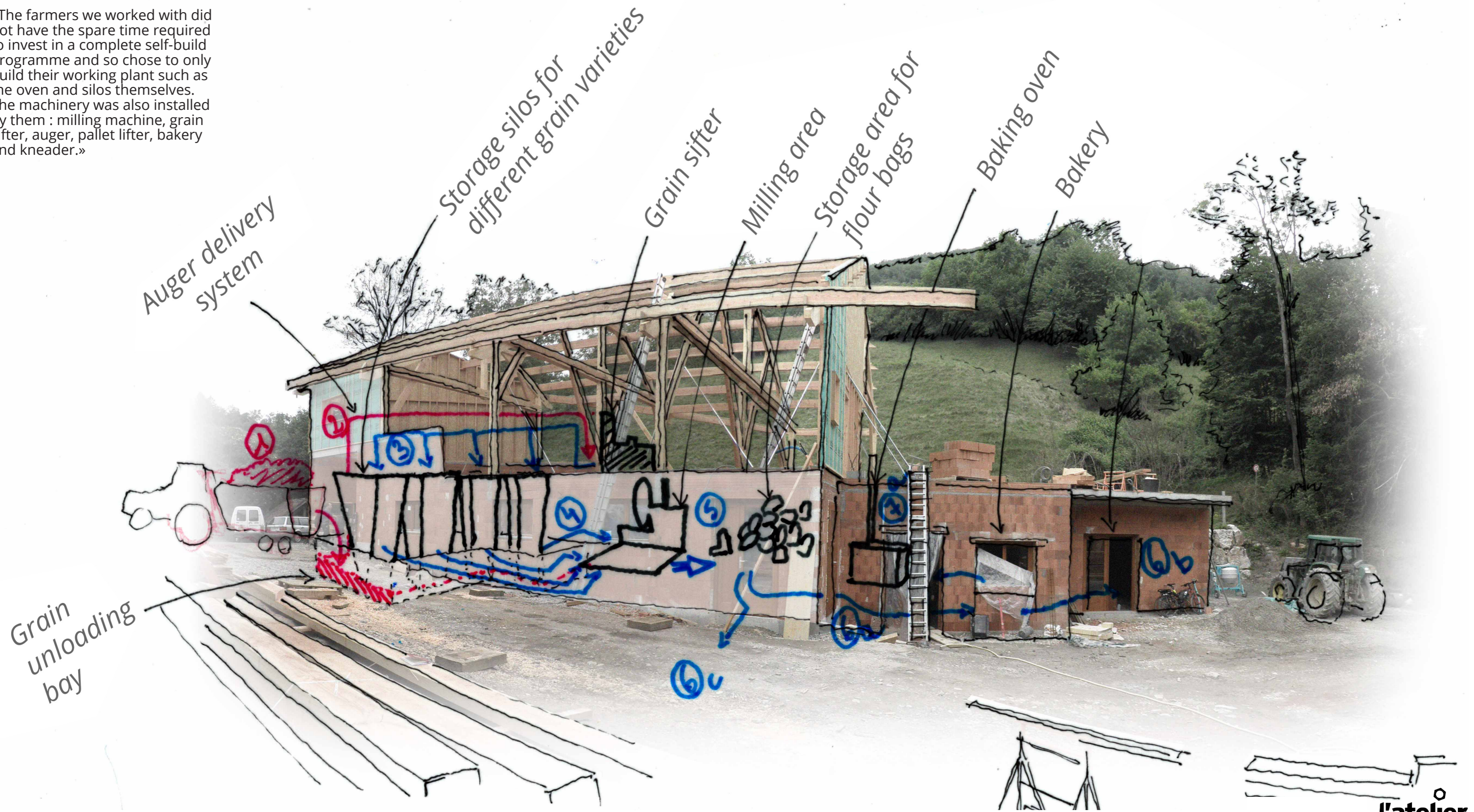
Pour la construction de ce hangar, on comptait initialement faire appel à une entreprise de construction de bâtiment en kit. Le devis indiquait une facture de 35 000 € pour la construction d'un hangar de 250m². Rapidement, on a fait demi-tour et on a opté pour l'autoconstruction.

L'ironie de l'histoire c'est que la demande d'un devis dans cette entreprise de construction s'accompagnait d'une demande de permis de construire automatique. Le permis avait été obtenu. Les associés ont donc profité de ce support pour autoconstruire un bâtiment similaire.

FROM GRAIN TO BREAD

INTRODUCTION :

«The farmers we worked with did not have the spare time required to invest in a complete self-build programme and so chose to only build their working plant such as the oven and silos themselves. The machinery was also installed by them : milling machine, grain sifter, auger, pallet lifter, bakery and kneader.»



Find the topic on our forum
«PAYSAN BOULANGER : AUTO-INSTALLATION D'ÉQUIPEMENT»
<http://forum.latelierpaysan.org>
Farm : FERME POMMART

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