

Rolls-Royce Motor Cars

# POTENTIAL DESIGN CONCEPTS DRAFT

18.01.2019



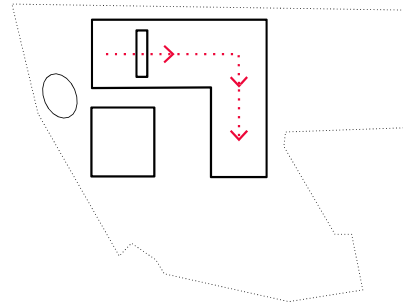


# ORIGINAL DESIGN CONCEPTS

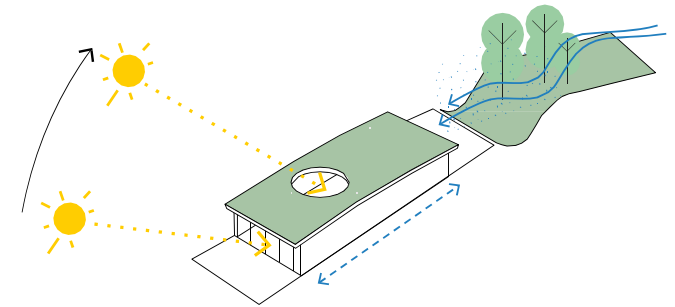
## Overview I

The starting point of the study was to review the key design concepts for the original buildings in order to identify where these should be carried forward to inform any potential future expansion plans. Those that are relevant have been illustrated here.

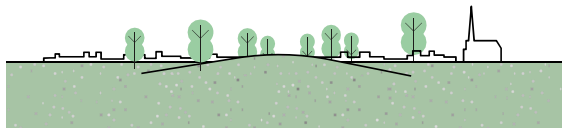
The building was arranged as a sequence of spaces reflecting the assembly process.



The building form was designed to maximise natural light and ventilation, and minimise light spill.



The building was designed to minimise visual impact on the sensitive rural setting.



The building adopted a low profile that sits into the void following mineral extraction.



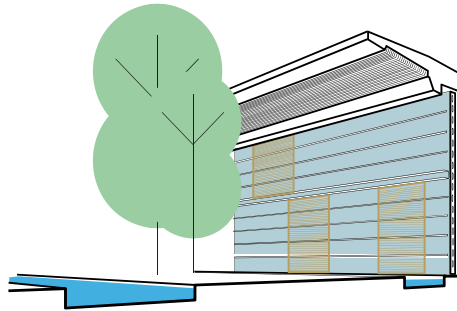
The main ground floor slab level was set above both the perched and local water table, but the paint shop was allowed to encroach on the perched table with appropriate separation.



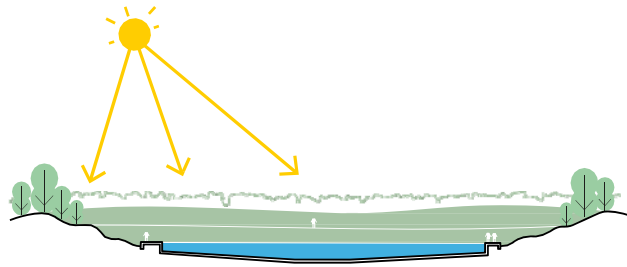
# ORIGINAL DESIGN CONCEPTS

## Overview 2

Natural materials were used on the external facades to assist in integrating the building in its landscape setting.



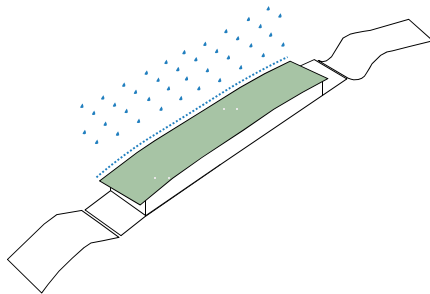
A lake was introduced on the site to aid in sustainable water management, providing rainwater attenuation ensuring that surface water run off doesn't surcharge local sewers.



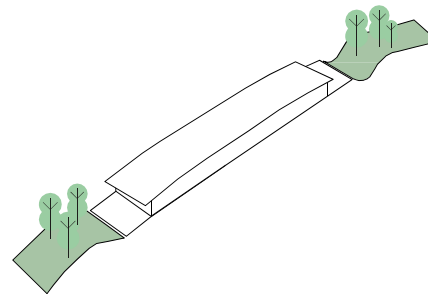
The remaining site was extensively landscaped to create a high quality, naturally secluded site with strategic landscape outside of the boundary.



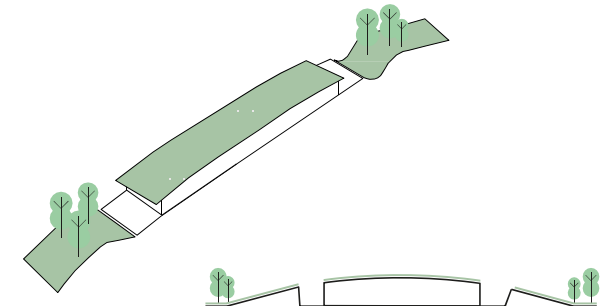
The building was designed with a green roof to reduce visual impact, increase biodiversity and capture rainwater to slow down surface run off.



The spoil from construction was used to build the landscape up around the building to screen it from view and to integrate it in to the landscape.



The building adopted a curved roof profile to reference the contours in the existing topography.



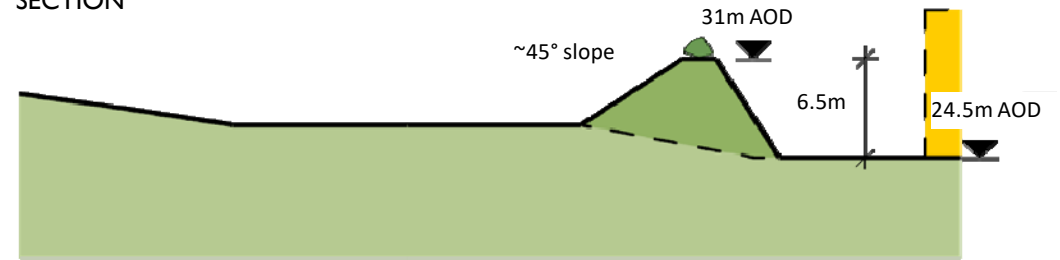
# MASSING STUDY

## Potential Mitigation Scenarios

If we were to develop on the adjacent land, we have looked at carrying over the original design concepts to establish mitigation measures that include a curved roof profile that lowers the height of any new building towards the edges, the addition of a landscaped bund around the perimeter and application of natural materials to the building facades.

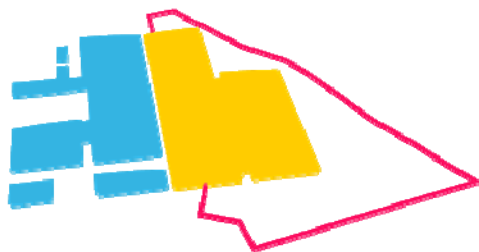
The different mitigation concepts are illustrated below. An example of a massing study is provided later on from the viewpoint of Halnaker Windmill.

### SECTION



#### CONCEPT A

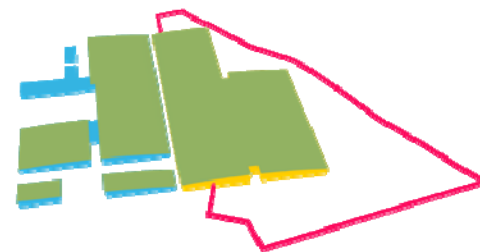
■ Curved Roof (34.5m AOD)



#### CONCEPT B

■ Curved Roof (34.5m AOD)

■ Green Roof

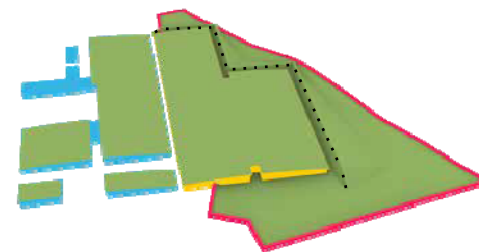


#### CONCEPT C

■ Curved Roof (34.5m AOD)

■ Green Roof

— 6m High Bunding (31.0m AOD)



#### CONCEPT D

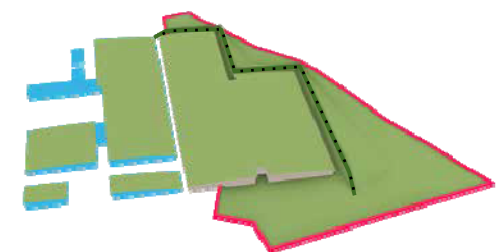
■ Curved Roof (34.5m AOD)

■ Green Roof

— 6m High Bunding (31.0m AOD)

— 2m High Planting (33.0m AOD)

■ Brown Timber Facade



# POTENTIAL DESIGN CONCEPTS

We have established a series of potential design principles that address the key issues that might have an adverse impact on the surrounding area. These will be used to govern any future expansion plans for the site to ensure that any such proposals are sensitive to their surroundings.

- 1** The predominant height of any new building should not exceed the predominant height of the existing roof (34.5m AOD). Where limited areas exceed the predominant height, they should be designed to be sympathetic to the surrounding landscape.
- 2** A landscape bund should be formed along the boundaries of the site to screen the development from view and to reduce visual impact from key visual receptors including the South Downs National Park. The bund should vary in plan area, height and gradient to ensure a natural appearance is achieved.
- 3** Any new building should have a planted roof using species that provide year-round green foliage to reduce visual impact and to blend in with the surrounding landscape.
- 4** The form of the roof should establish a relationship with the bund to create the appearance of a continuous landscape.
- 5** Visible areas of facade should be clad in western red cedar as per the existing building.
- 6** The development should be designed to minimise light pollution and glare, with considerations of 'Dark Skies' and protection against light spill.
- 7** Any potential expansion of the existing site should recognise and pay regard to the policies of the South Downs National Park relating to the surrounding landscape, city and cathedral.

# MASSING STUDY

Building massing study to explore a potential development scenario.

# MASSING STUDY

## Existing Viewpoint Halnaker Windmill

The current building is contained effectively within the landscape.



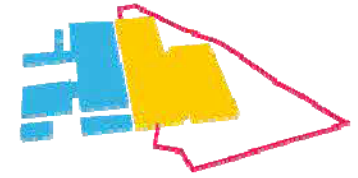


# MASSING STUDY

## Viewpoint Halnaker Windmill

This illustration shows a potential new building in yellow with a flat roof and **no mitigation**.

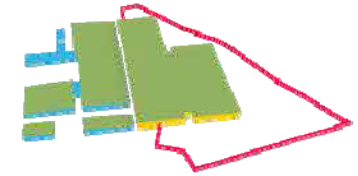
The existing building has been highlighted blue otherwise it is not visible.



# MASSING STUDY

## Viewpoint Halnaker Windmill

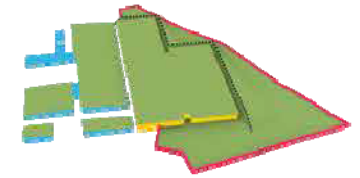
**Mitigation:** This illustration adds a green roof to the top of the potential new building.



# MASSING STUDY

## Viewpoint Halnaker Windmill

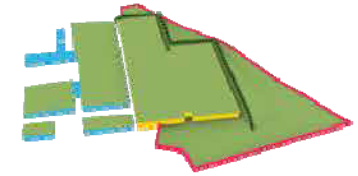
**Mitigation:** This illustration adds a 6 metre high landscaped bund around the perimeter of the potential new building.



# MASSING STUDY

## Viewpoint Halnaker Windmill

**Mitigation:** This illustration adds an additional 2 metres of planting on the top of the bund.



# MASSING STUDY

## Viewpoint Halnaker Windmill

**Mitigation:** This illustration adds a brown timber facade to the potential new building.



# MASSING STUDY

Viewpoint Halnaker Windmill

## Proposed Full R-RMC Mitigation

**Mitigation:** This illustration adds an additional curved roof profile to the top of the potential new building.

