

An oasis on the motorway

Designed as a cathedral to food, the new Gloucester services on the southbound M5 are the complete opposite to big-brand motorway fuel stops. "Could they revolutionise motorway services' design?" asks Alison Harmer



At a stunning rural location flanking the Cotswolds there's an oasis on the UK's motorway network that offers a radical approach to motorway services area (MSA) design and is setting a new sustainable standard.

Gloucester Services southbound opened on 19 May between junctions 12 and 11a of the M5, a year after its sister site was completed on the northbound carriageway. The new southbound services mirrors the northbound in design, apart from minor changes made due to its different typography and outlook.

The site is on the edge of the Cotswolds area of outstanding natural beauty (AONB) and the operators Westmorland Ltd – the family firm that runs the award-winning Tebay Services in Cumbria – and charity the Gloucestershire Gateway Trust wanted the buildings to blend in to the landscape and be highly sustainable.

After shortlisting six practices in 2009, Westmorland appointed Glenn Howells Architects (GHA) to create motorway services that, like Tebay, would be dedicated to food, farming and the community – this time, in Gloucestershire.

The practice's director and principal designer Glenn Howells created designs that would use natural local materials as much as possible and embed the main facilities building

into the hillside to avoid impinging on long-distance views.

To make the buildings even 'stealthier', a landscape design team from Pegasus Group, led by director Jeremy Peachy, also created a series of imaginative landscape interventions including bunds and plants to screen the buildings and picnic areas from the road.

Clad in local Cotswold stone, it's hard for anyone used to the harsh lines of traditional, homogenous motorway service stations to believe this unassuming crafted building is at an MSA. Even the petrol station roof is grass covered.

Food focus

Discreet as it might be on the outside, inside travellers are left in no doubt that this business is all about local food and the community.

The dramatic sky-lit interiors include dining areas, kitchens, a farmshop, deli and butcher's counters, and even a fishmonger. Exposed beams of glued laminated spruce create church-like ceilings above an environment that worships local produce.

GHA project manager James Spencer says: "As a young architect in 2009, it was a rare and fantastic opportunity to create a building around great local produce."

'It was decided that the services should feel more human in scale – more like a cruck-framed barn'



"Most motorway services take every opportunity to sell people something. They're designed from the inside out, taking the needs of franchises into account. They seem to make the journey to the toilets – where everyone wants to go first after a long drive – as torturous as possible. We wanted to avoid that."

MSA antithesis

Spencer acknowledges that the major operators have made significant efforts in recent times to improve the architecture of motorway services, but he says "they still house the same basic glass boxes full of franchised food and retail outlets overlooking a sea of cars".

Even new services like the acclaimed £75 million Extra Motorway Services opened at Cobham in 2012, between junctions 9 and 10 of the M25, focus on the same popular brands travellers will see throughout the motorway network. That's fine if you like fast food franchises but it leaves little choice if you don't, he says.

Westmorland is the antithesis of the giant branded MSA operator. With its community-focused ethos, it shuns all franchises in favour of stocking food and craft produce from local producers in its cafes and shops.

For the build, this thinking also meant placing the largest possible volume of work with local businesses – like Hope Construction Materials. In partnership with Buckingham Group Contracting, the main building contractor on the project, it provided concrete for foundations, ground engineering, pavements and concrete designs from its nearby plant in Gloucester.

The Cotswold stone used in the walls was also sourced from a local quarry – Tinker's Barn Quarry, Gloucestershire.

By involving the community, Westmorland CEO Sarah Dunning wanted to create an MSA that "looked like it belonged". It also had to be an oasis where people would want to spend some dwell time. She was keen to give travellers the physical and psychological break from the driving experience intended when motorway services were a new concept.

So when they won the bid, GHA began by researching the first motorway services and the buzz they created. When the Watford Gap MSA opened in 1959 at the same time as the M1, the motorways promised an exciting period for architecture. They were the future of travel. In the early 1960s, people even made weekend trips just to use the services.

Spencer says: "Over the years, the concept of a glamorous place where you'd want to stay for any length of time was



Project details

Architect: Glenn Howells Architects
Main contractor: Buckingham Group Contracting
Engineering project managers: Frank Whittle Partnership
Landscape design: Pegasus Landscape Design
Planning: Pegasus Planning
Concrete: Hope Construction Materials
Quantity surveyor: Frank Whittle Partnership
Cotswold stone cladding: Tinker's Barn Quarry
Glulam beams: B&K Structures (northbound MSA)

watered down. Originally they were intended to encourage you to take breaks but people get in and out of most modern services as soon as they can."

With an animated and enthusiastic client behind GHA, Glenn and his team were free to take their design forward into a rigorous planning process.

Topographical challenges

Given the area's outstanding beauty, many residents were negative about plans for a motorway services at the site while others welcomed the chance of transforming the region.

For GHA, the planning application – entered by Pegasus Planning – was challenging in terms of its many 'green' constraints, which included considering the view from two elevated views at Robinswood Hill and Cud Hill.

The building was to be read as another natural rise and fall in the Cotswolds landscape, so Spencer says they used the topography as much as possible to avoid making a huge impact on the levels.

This involved sculptural work to ensure the building blended seamlessly and earth modelling to bring it back into the landscape.

Although GHA originally wanted to use standardised

timber to form the basket shape of beams under the roof, it was decided that the services should feel more human in scale – more like a cruck-framed barn. Glulam, sourced from Austria, was the perfect natural material for the front-of-house areas, such as the foyer, server and restaurant. The back of house, shops and offices are all steel framed.

The roof geometry was complex to model and posed a challenge when GHA tried to produce fabrication drawings for a heavyweight roof system. Although grass-covered roofs have become a standardised product, the implied weight load means care has to be taken building it up in layers.

Westmorland's Lake District visitors' centre at Rheedeg is the largest grass covered building in Europe but has had problems with rabbit burrows damaging the waterproof membrane. With this in mind, GHA put in a more robust waterproof layer and the grass, which includes a mix of local wild flowers, is less deep.

Reducing light spill

Another environmental challenge was to temper the light spill from the buildings to reduce its impact on residents nearby. Although the temptation was to orientate the building so the large windows focused out onto the hills, GHA rotated it

further west to create less impact and the overhang of the canopy was brought further out to reduce light spill.

"Over the next 15 years, a local charity will work to plant trees and further screen the site," says Spencer.

Another example of a change made because of the site's aspect was a series of studies of long sections from vantage points so that car parking was minimised.

Spencer adds: "Others might have wanted to make a large car park or spread the car parks out, but for us it was about reducing the surface area they took up, so there was less water run-off and the area of parking created was reduced. We also used the landscape banking to screen these from wider views.

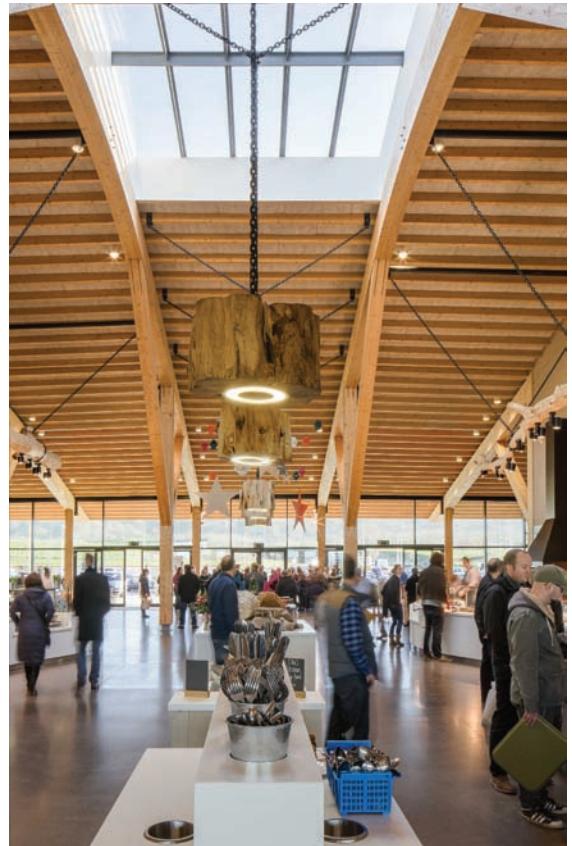
"There's an acoustic change too, so by the time you go through the building and out to the garden at the back, the noise is imperceptible."

Sustainability

GHA took a holistic approach to sustainability, encouraging alternative modes of transport for the staff by connecting up cycle-paths and footpaths so they could get to work without using the roads. It also provided an Ecotricity electric vehicle charging point.

Again, with a view to reducing light-spill, the usual huge glowing totem signage and fascia on the petrol station is reduced to a simple 6ft sign with the Texaco logo and no other branding apart from on the pumps. Even the signpost on the slip road leading to the services is subtle – it just says Gloucester Services Farmshop and Kitchen.

Other signs, such as the diagrams on entering the building were made as legible as possible, clearly showing hot drinks on one side and farmshop and shops to the left. Unlike many traditional MSAs, the toilets are clearly signposted from the



entrance so travellers can go directly to them without being tempted to buy anything if they wish to.

"The toilets had to cater for high numbers but there's a real sense of quality to the fittings. It was great for us to not only think of sheer traffic to these spaces but how we could improve the visitor experience," says Spencer. "The showers for truckers are equally impressive, as are the family rooms."

These careful touches and the site's high sustainability credentials combined to win it a BREEAM Excellent rating award.

As an architect Spencer is conscious of the rarity of such projects.

"They are few and far between, but it was a wonderful opportunity to change something that's universally miserable and create a sense of delight during a journey, and a sense of drama at such an unexpected building."

He adds: "I hope it raises the bar for other motorway services. People are becoming more responsible about how they shop, but there will always be those who want a fast-food outlet. At least this provides for people who don't want them."

Quick facts

Total cost:

£40 million

Number of people who worked on its construction:

200

Staff now employed:

300

- Supports 130 food and craft producers within 30 miles
- Local sourcing policy has injected £4.5 million in the local economy

