

RX Architects' salt-free home on the sand

Young renters join Mecanoo's Kampus

Profile: Adam Khan Architects

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Penal reform

HAT Projects' refurbished and extended museum in Ely's 17th century gaol tells tales of the past while doing community service

Words: Jan-Carlos Kucharek Photographs: Philip Vile



This image A sizeable extension to the city's former gaol blends into the streetscape.

Bottom The approach to the museum from Market Street. The old 'Felons' Yard' is beyond the threshold.

In Ely's former Bishop's Gaol – now city museum – there's a punt gun on display. Unfeasibly large, in normal use it was for shooting wild-fowl on the Fens but in 1816 one was lashed to a cart and used as artillery in the Ely and Littleport riots. Part of a fascinating collection of artefacts, it's mounted on a wall beside a cell reconstructed from found timbers of the building, some carrying graffiti by inmates eyeing their own futures; images of scaffolds and deportation ships gouged into the planks.

It hadn't always been a gaol. A house had been on the site since 1417, becoming a gaol in 1679 and remaining so until 1836. After numerous iterations, it was occupied by district and then city councils from 1974-1995.



In 1997 Ely Museum moved in, just as new curator Elie Hughes took the helm.

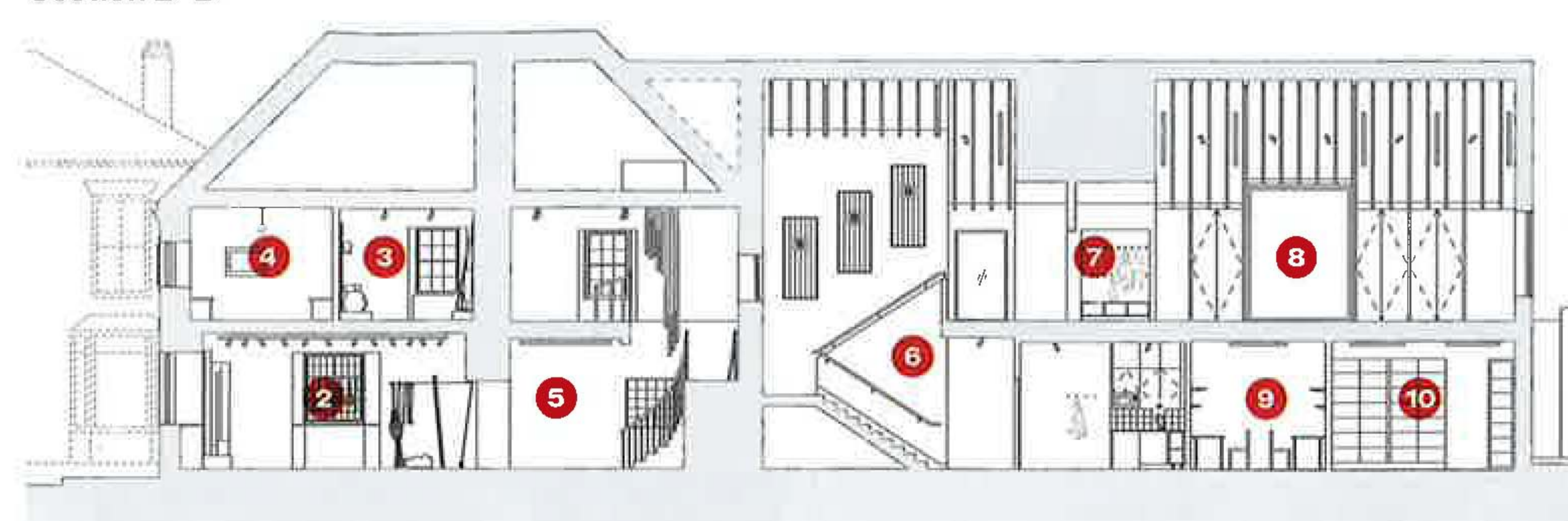
Hughes' account of that time paints a forlorn picture. While the museum had a good collection, spanning prehistory to Roman times, the medieval period to the 17th century fen drainage projects, and up to the current day, display quality was woefully inadequate. Badly-lit or windowless spaces predominated; objects such as an amazing Roman sarcophagus were ill-placed and badly-lit in a rat run of random rooms. 'Council funding kept us going but there was nothing for development,' Hughes explains. 'We had visitor income, but numbers were dropping as content was getting less relevant and we realised that

Buildings Museum

Section A-A



Section B-B



- 1 Felons' Yard
- 2 Pre-drainage Fenland history
- 3 Post-drainage Fenland history
- 4 Gaol cell
- 5 New oak stair
- 6 New extension stair
- 7 Kitchen area to community room
- 8 Community room and bay window
- 9 Staff office
- 10 Exhibit storage

IN NUMBERS

532m²
gla

617m²
gross area

£1.01m
construction cost

£1,636/m²
construction cost

either the museum was going to run itself into the ground or big changes were needed.' A first attempt at Heritage Lottery Funding was unsuccessful, but when a second went in 18 months later, outlining outreach work with local schools and communities, £1.7 million rewarded the effort in 2018, so long as they could raise £0.5 million in match funding.

Publicly procured, the museum approached architects warily, having been warned that working with them, and their egos, could be fraught. But with HAT Projects they felt an immediate sense of common purpose. 'Their proposal really stood out. It was well thought-out and detailed but inspiring, exciting and interesting; full of potential about what the place could be,' Hughes recalls. 'Yes, we had issues that needed resolving during design and construction, but never conflicts. It was a pleasure working with them.' HAT even helped in securing the match funding, building a physical model that could be opened up like a doll's house to reveal the interiors, which 'we trucked around in the back of a Ford Fiesta going out to grant givers and local landowners. It made a massive difference.' When they used it to lean on the council for the final £150,000 from its CIL funds, the model could become a reality.

HAT's design, on a construction budget of just over £1 million, succeeds in doing simple moves beautifully. Having no issue with the city's urban grain, which builds tight to pavement, the practice continued it here, its principal facade sticking to Lynn Rd, running south to the cathedral. And with no choice but to build on the footprint of a recent, single storey rear extension, the museum now unapologetically pops above the historical wall that formerly hid it, deftly expressed in contextual modernism; a new, pitched-roof structure, keying into the old gaol's wall. HAT decided against the sophistry of



Felons' Yard comfortably receives visitors in its timber and copper-clad new entrance area.



cladding a timber structure in solid brick but instead continued the Cambridgeshire gault clay-tiled roof down the wall face as hung tile, creating a pleasing expression of loading hierarchy. Its new gable end is of reclaimed gault brick; a sizeable window on the right winking at city-bound traffic. HAT's Hana Loftus says they considered copper for the large bay window but felt the material detailing distracted from the simplicity of intent. Instead, they chose a matt-finish, russet-toned aluminium, the vertical bays intimating Romanesque clusters of columns found on the cathedral.

Approaching from Market Street, the corner entrance takes you into Felons' Yard, where the gaol's wall bears the marks of centuries of modification, odd brick infills cheek-by-jowl with pretty but super-soft local clunch stone. HAT's new entrance area, replacing a uselessly small lean-to, finally allows space in the museum for groups to gather before starting a tour. Clad in copper and oak boards, it initially appeared on the physical model, got supplanted by the lean-to due to perceived expense; but when tenders came in under budget, was swapped back on again. It's an important breathing space for the museum, thinks Hughes, with shadows cast by the trusses below the light slot running along the back wall 'reminding kids of prison bars'.

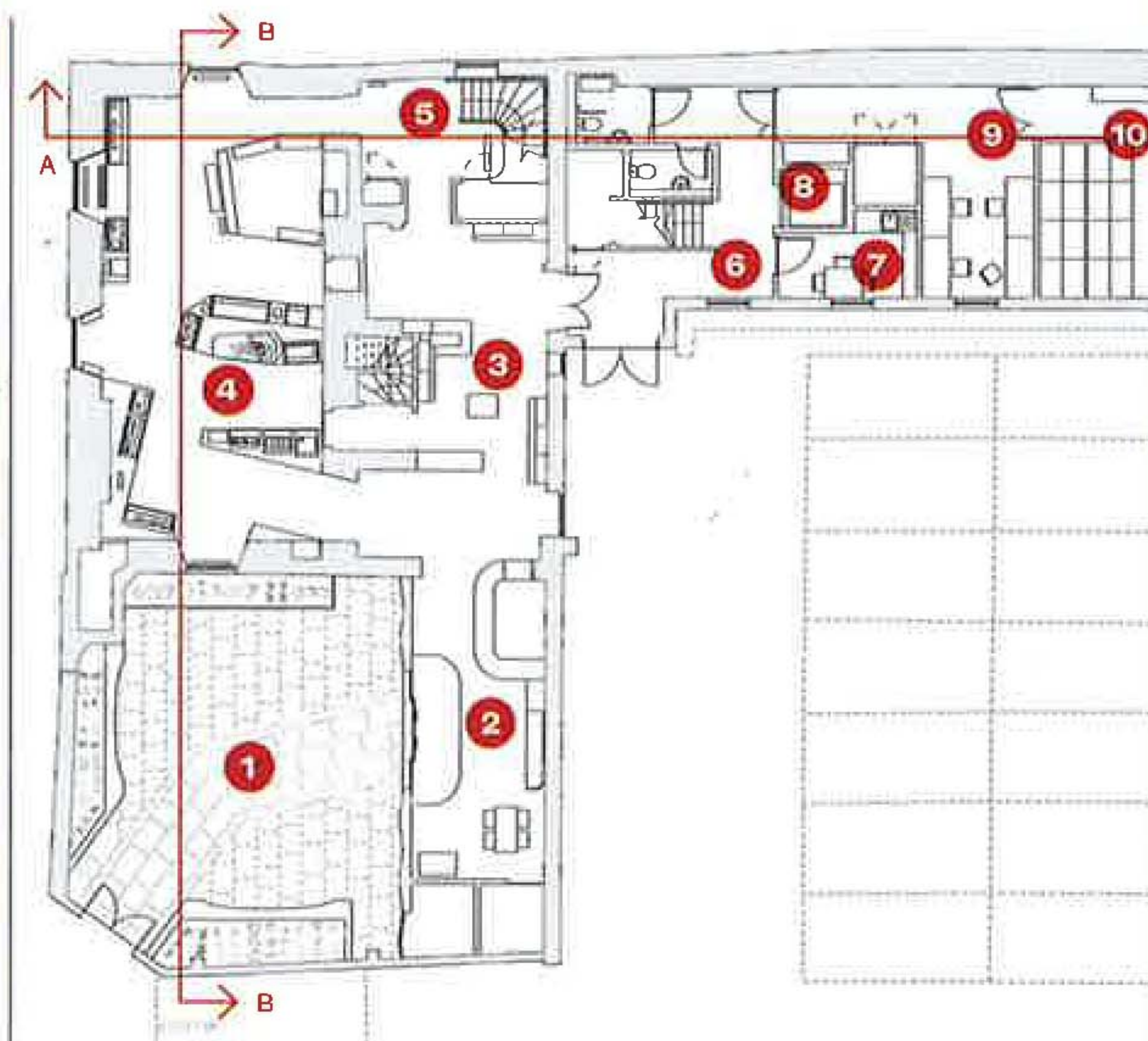
HAT's interventions internally were simply to pare the structure back to its original iteration and give exhibition designer Simon Leach room to move. 17th century windows were restored and slimline secondary glazing installed behind while old, rotten sash

Above A former rat run of exhibition is now a light and airy, open-plan experience for visitors.

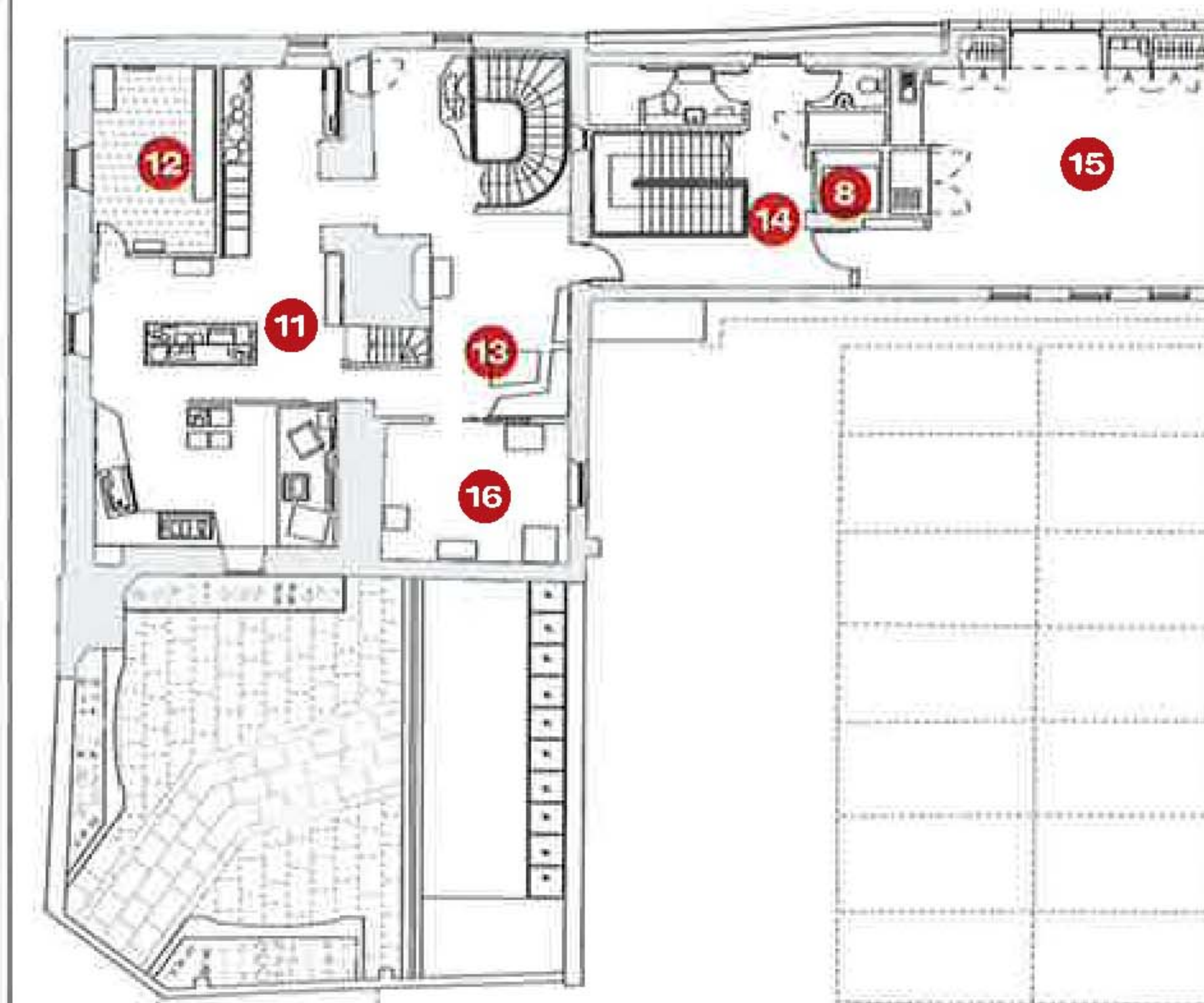
Below The new entrance creates space for school groups to gather. To the right, found planks from the gaol line the wall.

Credits
Client Ely Museum
Architect/ CDM co-ordinator HAT Projects
Structural engineer Momentum Engineering
M&E consultant Max Fordham
QS Gleeds
Exhibition design Simon Leach Design
Main contractor RG Carters

- 1 Felons' Yard
- 2 Main entrance
- 3 Shop
- 4 Pre-drainage Fenland history
- 5 New oak stair
- 6 Hall to staff and accessible WC
- 7 Staff kitchen
- 8 Lift
- 9 Staff area
- 10 Exhibit storage
- 11 Post-drainage Fenland history
- 12 Gaol cell
- 13 Knowledge hub
- 14 Hall to WCs
- 15 Aedwen community room
- 16 Temporary exhibitions



Ground floor plan



First floor plan



windows were replaced with double-glazed equivalents. The firm worked with Max Fordham who, says Loftus, went above and beyond to specify the MVHR and keep services interventions discreet. The brick skin was made fully breathable too, re-pointed in lime mortar externally, with porous finishes and clay paint used internally.

Hughes' favourite part of the museum is the oak stair swooshing visitors gracefully from the pre-drainage fen history up to post-drainage and modern day, but the show stopper is the rear extension, making the museum accessible in a dramatic way. A birch and tulipwood stair in its hall allows the history of the old gable wall to be on show – including an original window connecting both staircases. All lead to the new lofty, double-height space for use not only by school kids but all manner of local groups too, and it is a much-needed revenue generator. Triple-aspect, with a large bay and rooflights, it's proving popular. 'We've had the WI, belly dancers, Quakers, astronomers and spiritualists in here!' quips

Hughes, but it's a serious point: it all helps embed the building in the community.

So, a simple building charged with the important task of creating a sense of place for this small city, steeped in history of its own, resisting the appellation of being a dormitory town for Cambridge. And the case of a motivated architect which embedded itself in the project from its genesis, guiding a green client through the process. It's clear this was a labour of love. Loftus sums up the big picture, saying: 'The story at Ely – to me – plays to the levelling up agenda in terms of how pride in place and access to culture and opportunities is made real in marginalised and regional communities.' But it's Hughes who makes the politics personal: 'The museum is the first touch point for so many local kids in terms of a cultural experience, so if we can make it something that feels amazing and special and beautiful and exciting, they might come back again, or go and see a museum somewhere else. That first perception here could stay with them for life.' *

Top left The new oak staircase installed at the north end of the old gaol.

Above left The stair's double height allows exhibits such as 12' long fen spades to be better displayed.

Above Looking south in the new pitched, rooflit extension. The gaol's old wall carries marks of previous interventions.

Below A reconstructed gaol cell for 20 prisoners shows original graffiti cut into the found planks.

