SPENCER RISE

Reuse driving the design on residential project

About - A domestic renovation project where architect and property owner David Kohn sought a radical approach to reclaiming building materials and was happy for reuse to drive forward the design.

Challenges - DKA was committed to making Spencer Rise an exemplar project to expand the practice’s interest and experience in reclaiming traditional and modern building materials. The challenge was to overcome the logistical barriers and learn how to navigate the reclamation trade.

LONDON - UK - 2021/22 - PRIVATE
Project Size : S - Interreg FCRBE partner : SALVO - Project Owner : David Kohn Architects - Project Manager : David Kohn Architects - Reuse operator : Multiple London Dealers - Dismantling company: n/a
Located in North West London, Spencer Rise is a Georgian red-brick terraced property and family home, belonging to the Architect David Kohn. Plans to renovate the property were put into motion, and, albeit its modest scale in comparison to projects across their portfolio, David Kohn was committed to making the renovation an exemplar reuse project to expand the practice’s interest and experience with reclaimed building materials.
WHAT IT’S ABOUT

DKA submitted a planning application to Camden Council shortly after the appointment of the FCRBE project. Due to the uncertainty of planning approval timings, which could exceed the course of the FCRBE project, it was agreed that a reuse strategy would be developed through the FCRBE framework. This would support the identification of suitable reclamation pathways to maximise same-site reuse and material integration, using the dealer network pathway to identify reclaimed material stock to integrate into the build.

With DKA positioned as both client and architect, this broadened the explorative and innovative opportunities for reuse integration within Spencer Rise, reducing the common and often uncompromising risk-averse challenges that prevent a large number of building materials from being reused.

In response to the same-site and integration reuse opportunities held within the project, DKA was able to refer to the FCRBE specification methods to develop a suitable reuse roadmap in preparation for planning approval.

OBJECTIVES

- Support the creation of a reuse strategy to equip DKA with tools and offer tailored assistance ready for approved planning
- Support in identifying reclaimed materials, which are an ideal substitute for 'new material' specified in the original scheme
- Provide assistance in using the futuREuse UK & Ireland 500 directory to connect with local London reclamation dealers
- Navigate same-site reuse processes wherever possible
- Introduce ways of sourcing materials, including 'wanted' alerts on the Salvo platform
- Create a SalvoNEWS story to promote the Spencer Rise project and the reclaimed materials required
Reclaimed material identification

INVOLVED MATERIAL

Using the FCRBE specification tools and support from the FCRBE project coordinator, DKA were able to identify the following materials with reuse potential:

- Brick - reused from the demolition may be sufficient
- Concrete roof slab
- Large flat roof light
- Wall insulation
- Sliding, folding and glazed external doors
- Main and secondary staircase
- Interior fixtures and fittings such as floors, wall coverings, lighting, furniture, cupboards

Spencer Rise exceeded the course of the FCRBE project, therefore the exact tonnage of material reused or reclaimed could not be calculated during the project reporting period.
Pilot Operations FCRBE | SPENCER RISE

RECLAMATION PATHWAYS

Dealer network - The planning application for Spencer Rise was submitted in November 2020, which included the details on reusing reclaimed building materials. In order to explore material availability, DKA was strongly advised to begin discussions with reclamation suppliers, prioritising London and Kent reclamation dealers listed in the futuREuse UK & Ireland 500 directory.

With the support of the pilot coordinator, DKA contacted several reclamation dealers in London and Kent, concentrating their efforts on traditional reclamation dealers who specialise in timber and brick such as London Reclaimed Bricks Merchant Ltd, Premier Reclaimed Bricks, General Reclaimed Bricks, Lazdan Builders Merchants, Epping Reclaim Ltd, J. Purdey & Sons Ltd, Abode Renovation and Ashwells Timber Ltd. By initiating direct contact with the reclamation trade, the architects could assess the type of material, availability, price and storage solutions for materials purchased in advance. DKA was pleased to learn that several reclamation dealers were able to store pre-purchased material free of charge or for a nominal fee up until the start of construction.
LESONS LEARNED

DKA was issued with a material specification example, which outlined the physical characteristics of reclaimed material. The specification document was a guide for the architects to use during the project the procurement and material sourcing workstream, which included details on material sizes, types, sourcing and installation. The material outlined in the example document was for reclaimed brick.

Material testing on the existing brick stock was slightly premature during this stage of the project, however, visual testing was encouraged to assess the material characteristics of the existing bricks, which were handmade.

The information obtained could support the identification of similar brick stock during the sourcing process, to cover any shortage of supply being reused from the original building fabric. Furthermore, this information could promote any unused material to the reclamation trade through demolition alerts or direct contact with local reclamation dealers.

DKA was advised to secure samples from the reclamation dealers to ensure that the client, architect and construction actors collectively agreed on the material condition and would be willing to share any liable responsibility.

This collective process could be repeated for all integrated materials to break down material certification and compliance issues, which is a dominating factor preventing common reuse practice across the UK construction industry.

The brick signposted into the same-site reuse pathway was a textured handmade victorian brick. It is predominantly red-orange in colour and varied slightly in size of up to (l) 229 x (w) 108 x (h) 64mm.
During the search for the UK pilot project, Salvo approached London-based construction company John Perkins Ltd, who was instrumental in early decision-making for projects such as PUP Architect's Surrey Docks Farm, which successfully reused a large proportion of the existing building. The company advocates reuse and expressed interest in being part of the pilot projects to test the specification methods. DKA had not yet appointed a building contractor and was therefore introduced to John Perkins Ltd to discuss the reuse ambitions and contractor appointment for Spencer Rise.

The collaboration between pro-reuse stakeholders created a dynamic opportunity for Spencer Rise, whilst supporting ambitious reuse targets within the building design.

In response to the same-site and integration reuse opportunities held within the project, DKA was able to refer to the FCRBE specification methods to develop a suitable reuse roadmap in preparation for planning approval.

Modern building materials such as wall insulation, sliding glass doors and internal staircases proved slightly more challenging to locate with fewer traditional reclamation dealers specialised in new building materials, however, the demand for such materials is becoming recognised by the trade and can be located with dealers outside of London, such as The End of the World Reclaimed Centre, Buckinghamshire who specialise in UPVC doors. DKA did not purchase any modern building materials during the course of the FCRBE project, however, they felt well equip and confident in identifying suitable second-hand building materials during building procurement.

By aligning construction professionals during the early stages of planning (RIBA Stage 2), best practice is established and reuse methods are more refined.