

ENGLISH  
HERITAGE

# WREST PARK ARCHAEOLOGICAL ARCHIVE STORE

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Archaeology Archival Storage: Problems, Potentials and Solutions  
Icon Archaeology Group  
Fishbourne Roman Palace

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# English Heritage collections

- Over 500,000 objects ranging from fine art to archaeology
- Located at 115 historic houses, museums, churches and stores across England
- 87% in store 419,096 objects



# The situation in 2010

- Stores strategy
- 160,000 archaeological and architectural objects stored in 4 rented warehouses in the west and 1 in the east of England taking up 26,491sq ft
- Little interest from public, EH senior management
- A 2008 feasibility study to convert a 1950' s building at Wrest Park in estimated cost of 2 million – unaffordable

# Cuts October 2010

- Surprise 30% cut to EH budget
- Conservator in leadership position brought a different approach to decision making based on evidence and risk assessment

# The convincing argument

- Proposed a radical acceleration of the stores strategy closing 4 warehouse stores and transferring collections to a refurbished building at Wrest Park
- Reviewed store specification and reduced estimated build cost by half to £850,000 making total cost inc. move £1.5 m
- Annual savings on lease and maintenance of £300,000
- Greater access to stored collections as located at a busy EH property in central England location
- State of Collections Report – Storage conditions highest risk
- Plan was approved by EH executive board

# What happened next

- Organising thought! Majority of objects are robust so keep it simple
- Store specification
- Evidence to support the specification
- Environmental Performance
- Preparation & move
- Community access

# Store specification

- Seal the building – no windows, minimal doors
- New roof using existing support structure
- Resurface floor
- New M&E, no heating
- Split space into three areas with varying levels of relative humidity control





# Storage space 1

- No relative humidity control
- Storing large bulk archaeological finds the majority being inorganic including stone, glass, ceramic



## Storage space 2

- Relative humidity control
- Keep RH below 75%
- Two Munters desiccant dehumidifiers
- Storing robust organic materials mainly wood



## Storage space 3

- New insulated room
- Relative humidity control to 50%
- One Munters desiccant dehumidifier
- Small finds – iron, copper alloy
- Paper and photographic archive

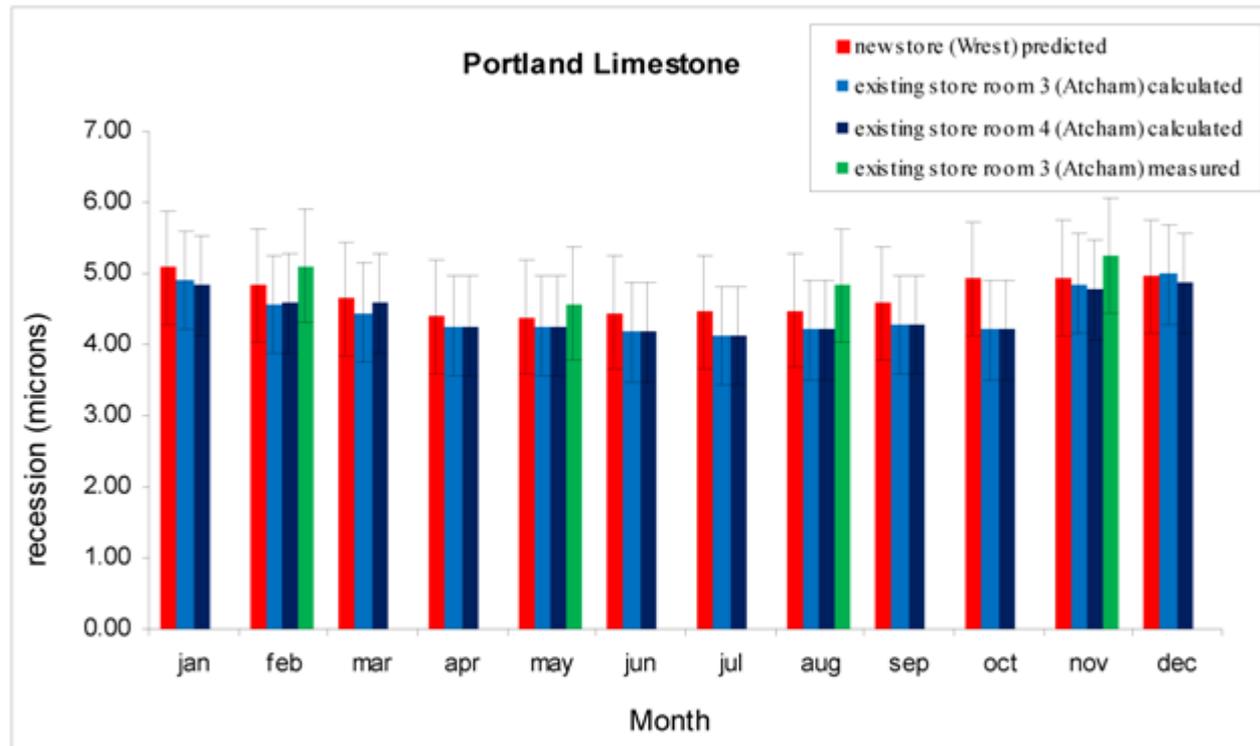


# Evidence in support of the specification

- Conservation scientist on the team
- Damage functions
- Relative humidity and temperature data
- Aiming for environmental conditions as good or better than the old stores

# Damage functions

- To predict the impact of the new store conditions on the main materials using damage functions developed for Portland Limestone, Cast Bronze and Carbon Steel



- Red bar is the predicted damage function for the new store using the predicted RH & temp and indoor pollution concentrations
- Light blue, dark blue and green bars calculated from measured data at old stores
- Damage rate similar between old and new store

# The environment

- Modeling RH and temp data from the un-refurbished store adjusted for removal of windows suggested that RH may rise above 80% over winter.
- Temperatures would remain above 5 °C.
- Needed RH control in the organic materials store
- No need for heating

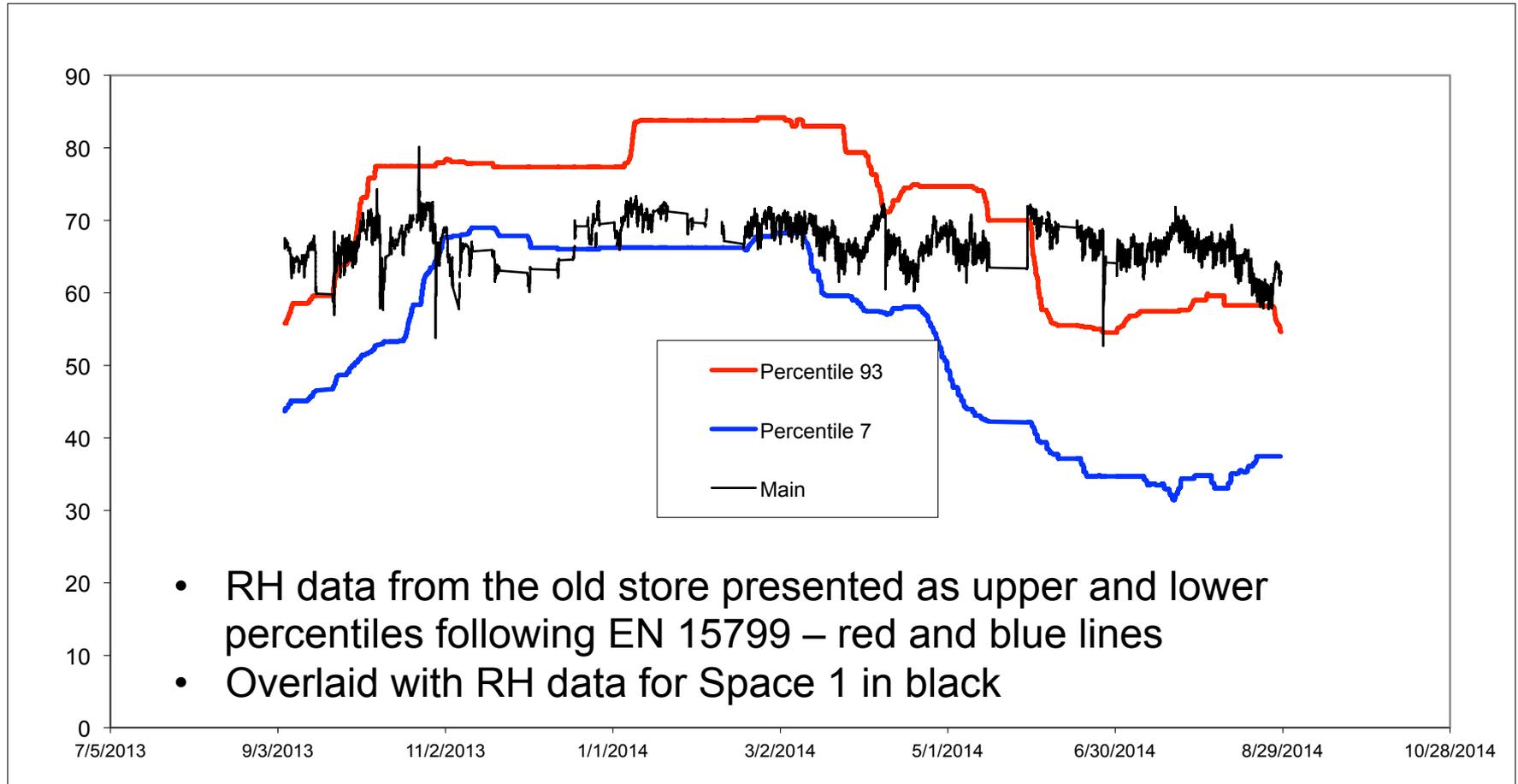
# Environmental Performance

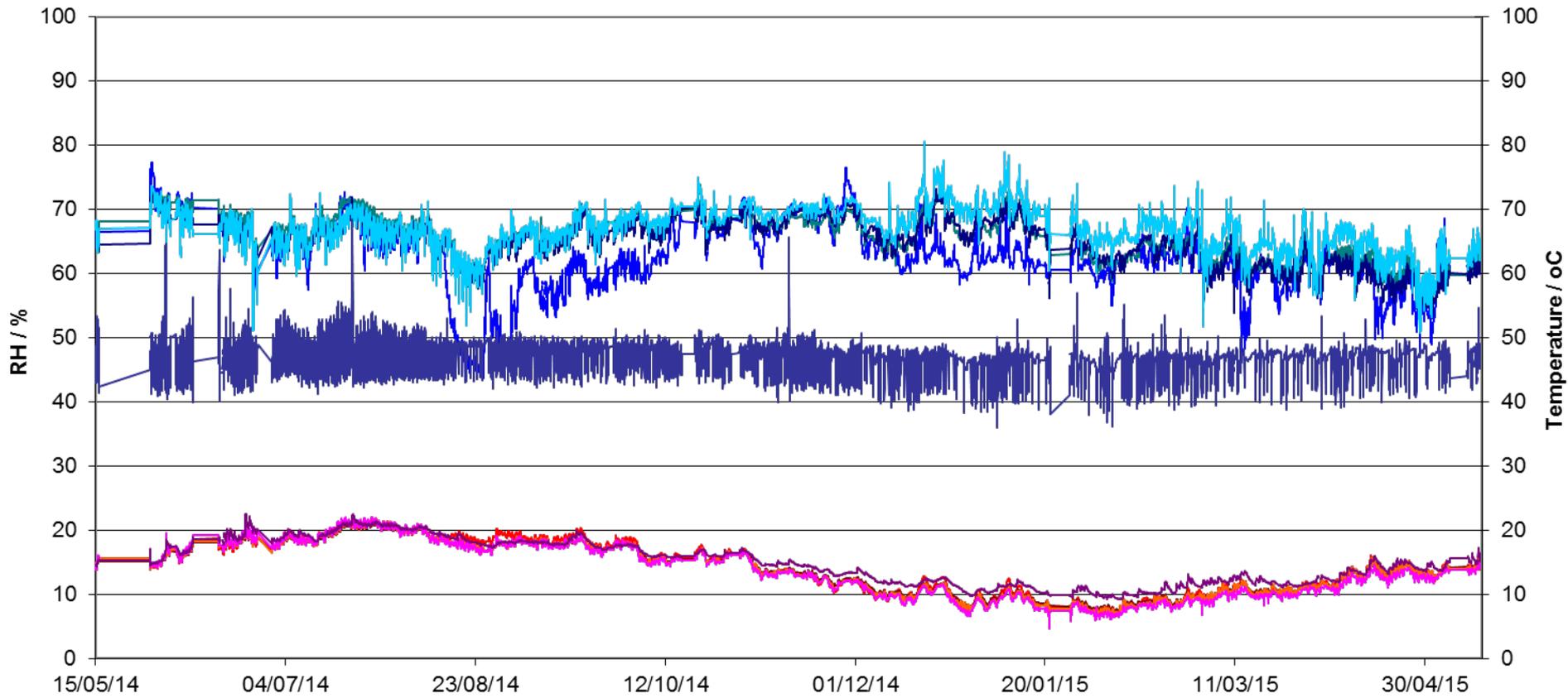
Space 1 [Main store]

Uncontrolled



# Space 1 – Main Store - Relative humidity





- |  |   |
|--|---|
| — 25 Store Aisle H Bay 4 Rack 2 RH                 | — 21 Store Aisle W/V Bay 1 Rack 2 END RH          |
| — 22 Store Aisle L/M Bay 8 Rack 2 END RH           | — 23 Store Aisle L/M Bay 1 Rack 4 END RH          |
| — 26 Archive Store inner room (AU Bay 1 Rack 2) RH | — 25 Store Aisle H Bay 4 Rack 2 T                 |
| — 21 Store Aisle W/V Bay 1 Rack 2 END T            | — 22 Store Aisle L/M Bay 8 Rack 2 END T           |
| — 23 Store Aisle L/M Bay 1 Rack 4 END T            | — 26 Archive Store inner room (AU Bay 1 Rack 2) T |

# Preparation and the move

- Racking
- Packing
- Documentation
- Transport

# The move – key to success

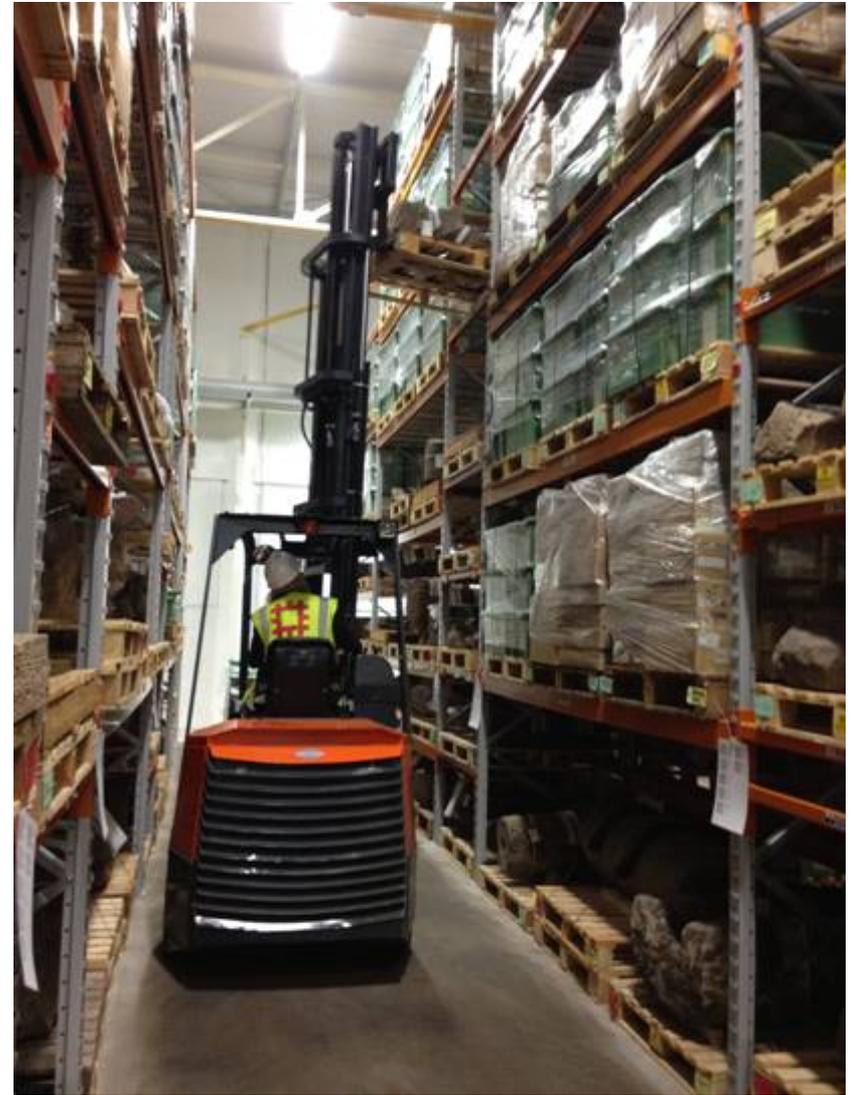


# The move - details

- Preparing and moving took 2 years
- Documented, packed and moved 153,810 objects  
[estimated 160,000 objects]
- 83 Lorry loads [estimated 85 to 90]
- 1869 pallets created [estimated 1900 pallet spaces required]
- 6,763 boxes [ plastic and wooden crates, polypropylene boxes]
- 376 pallets spaces still available
- 26,491 sq ft reduced to 15,650 sq ft

# Racking

- Pallet racking
- Narrow aisle forklift truck



# Packing

- Pack everything to a good, basic standard
- Keep objects as visible as possible to aid tracking during transport and easy access in the new store

- Large objects padded and strapped onto heat treated wooden pallets
- Smaller objects padded and packed in green plastic crates, stacked 3 high on pallets



- Small finds – polypropylene boxes stacked six high for transport then transferred to roller racking in archive store



- Custom made crates for large fragile objects



- Robust large objects strapped into transport lorries



# Documentation

- All objects have a digital record
- Tracking movement and location via QR barcodes



# Transport

- 27-tonne soft curtain trailers
- 25 pallets per load
- Hard-sided lorries used to transport fragile large objects

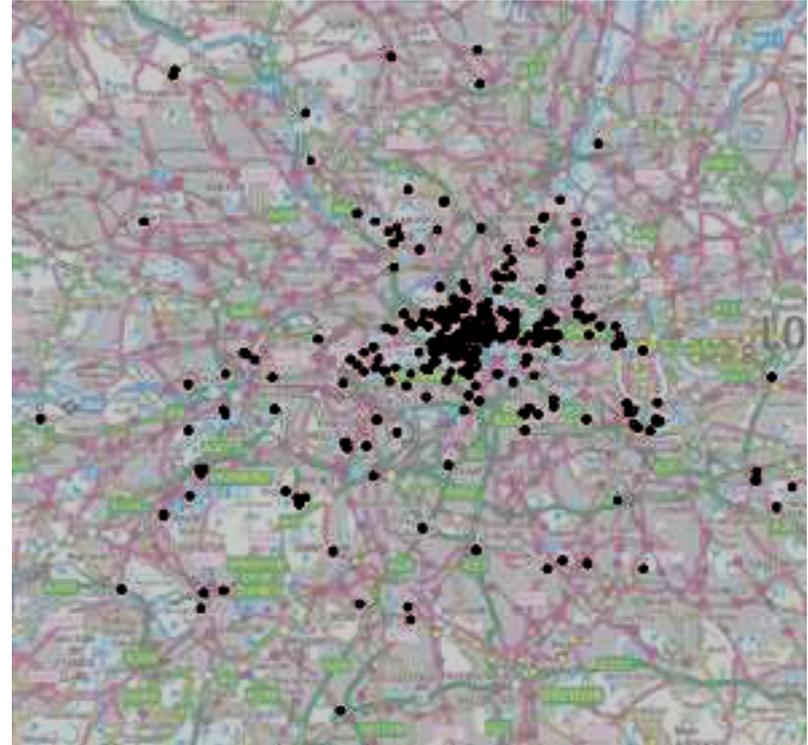


# Access to collections transformed



# New research partnerships

- Fully documented architectural studies collection has unlocked research potential
- Lead to a range of University partnerships
- EH is part of the 'In habit' research network established by the University of Oxford, which will result in future publications



# Volunteering

- Our volunteers program enables us to work with interested members of the local community
- Our volunteer team undertakes our stores cleaning program
- Assist with repacking, photographing and documentation



# Public tours

- Paid once month public tour
- Booked group visits (once a week)
- Tours are lead by a new volunteer team
- Curator led EH members events on various themes relating to the collection – like A Grand Tour of Wallpapers – and All Things Save and Small – all have sold out
- First under 16 group ... ‘young archaeologist club’.



# Press show

THE TIMES | Thursday May 8 2014 10M

## Warehouse that charts 2,000 years of history and mysteries

English Heritage has gathered its collection of 153,000 artefacts together under one roof, writes **Valentine Low**

To the untutored eye, it looks like an extremely well-organised junk yard: row after row of shelving, reaching all the way to the ceiling and packed with pieces of stone, lengths of wood, old fireplaces and discarded doors.

Charlie Newman, fortunately, has a tutored eye. Every bracket, every pillar, every gargyle tells a story, and if Ms Newman does not actually know the tale behind every one of the 153,000 artefacts in English Heritage's vast new warehouse housing its archaeological collection, she knows more than most. She knows more than most. She knows more than most. She knows more than most.

to researchers and the public. "It gives people an idea of the work that goes on behind the scenes."

Some of the objects are eye-catching. The bell jacks — wooden figures from the roof of Columbia Road market, depicting 17th-century tradesmen — stand just under 8ft high. A wooden crane on wheels from the end of the 19th century, used for changing the light bulbs at Covent Garden, probably reached 7 metres high.

There are others that have even more fascinating stories. A piece of painted glass comes from Kirby Hall in Northamptonshire, home in the 17th century to Sir Christopher Hatton, according to Ms Newman, and an extensive home improvement project in the hope of impressing Elizabeth I. "I'm always adding windows to the house, but she never visited."

Even a humble clay pipe has its story. One has a bat and stumps on one side, and a cricketer on the other: a prize, perhaps, from a Victorian cricket club. Her favourite is an 8.5m long early Victorian cast iron beam that used to support the roof of St George's Hospital at Hyde Park. "I would like to say how proud I would be to know because it's the only one of its kind."



Itv news



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