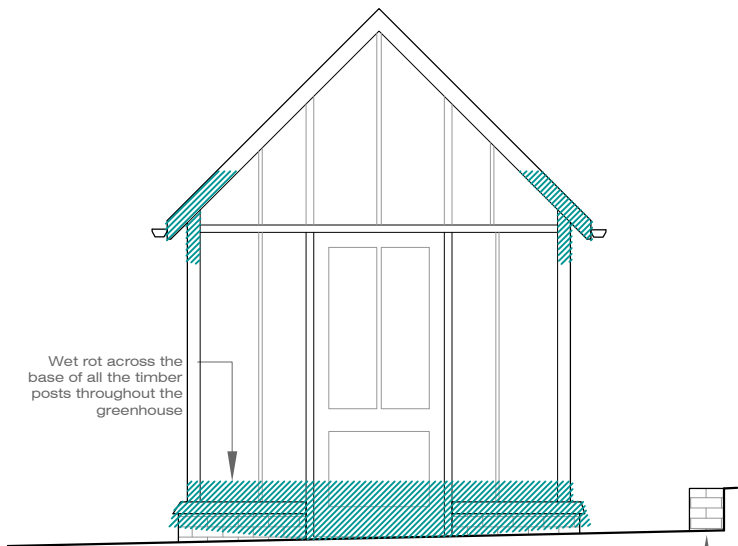
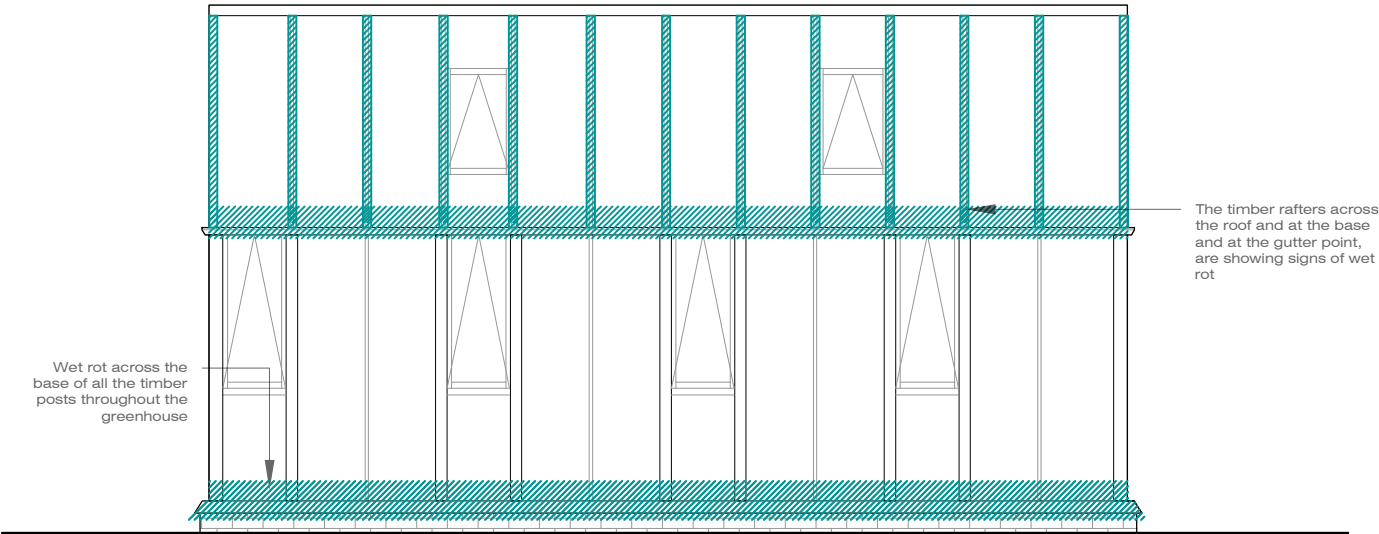




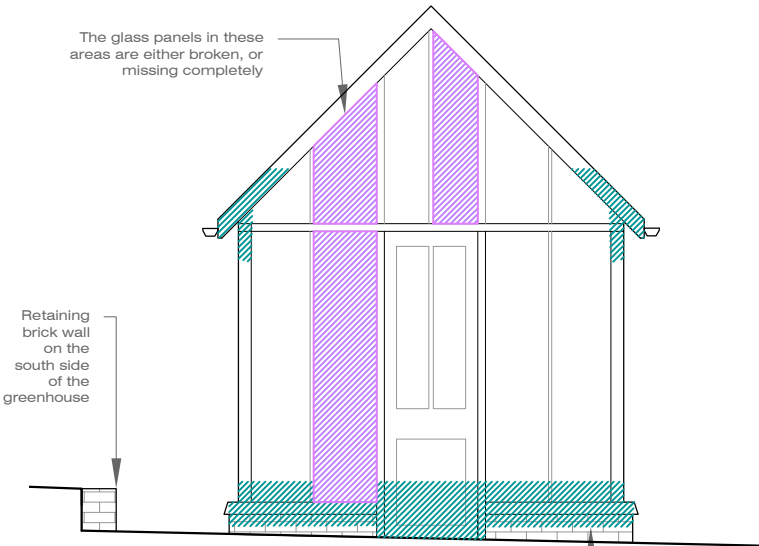
SOUTH WEST ELEVATION

Retaining brick wall
on the south side of
the greenhouse



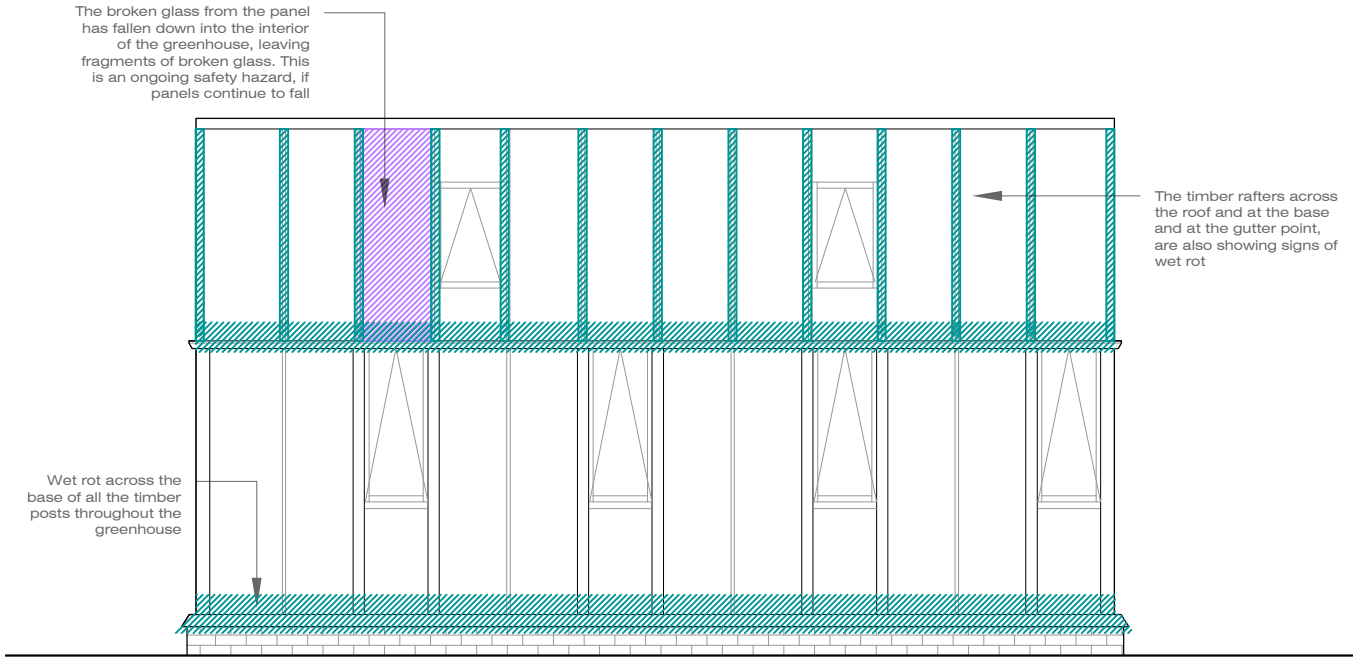
NORTH EAST ELEVATION

The timber rafters across
the roof and at the base
and at the gutter point,
are showing signs of wet
rot



SOUTH EAST ELEVATION

Wet rot across the
base of all the timber
posts throughout the
greenhouse



NORTH WEST ELEVATION

The broken glass from the panel
has fallen down into the interior
of the greenhouse, leaving
fragments of broken glass. This
is an ongoing safety hazard, if
panels continue to fall

The timber rafters across
the roof and at the base
and at the gutter point,
are also showing signs of
wet rot

GREENHOUSE DEFECTS:

Summary

The existing greenhouse is a modern structure within the historic walled garden and is now in a poor and unsafe condition. The timber frame supports a glazed structure and includes steel tie rods to brace the vaulted ceiling, along with diagonal steel strapping fixed across glazing panels for additional support. These elements appear to have been added to strengthen the structure.

Despite this, the greenhouse has suffered widespread decay. There is significant wet rot to the base of the timber posts and wall plate, as well as to the upper faces of the rafters. Several single-glazed panes are broken or missing, and others are cracked. The failure of both timber and glazing has left the structure unstable and no longer weather-tight.

Timber Frame

Wet rot is present at the base of the vertical posts and within the lower wall plate, where prolonged moisture exposure has caused advanced decay. This has reduced the structural capacity of the frame.

The rafters forming the vaulted roof also show signs of rot along their upper surfaces, caused by ongoing water ingress. While steel tie rods brace the roof structure, they do not address the deterioration of the timber members themselves.

The extent of decay suggests that significant dismantling would be required to properly assess and repair the frame.

Brick Plinth and Base Detail

The timber frame sits on a brick plinth that is poorly detailed. Lead flashing has been installed around the base, but it is not properly formed and is allowing water to enter the timber wall plate and lower frame.

This detail does not provide effective drainage or separation between brick and timber. As a result, moisture is retained at the base of the structure, which has directly contributed to the rot in the posts and wall plate. The plinth detail is inadequate and would need to be redesigned to prevent further decay.

Glazing and Secondary Bracing

The greenhouse is fitted with single glazing. Several panes are broken or missing due to the use of non-reinforced glass, which has shattered under impact and weather exposure.

The diagonal steel strapping across the glazing panels appears to have been added for extra support. However, this is visually intrusive and does not resolve the underlying structural and material failures.

Broken glazing and decayed framing present a clear safety risk.

Structural Stability and Safety

The combined effect of rotting timber, failed glazing, and poor base detailing has left the greenhouse structurally compromised. Although steel tie rods and strapping provide some restraint, they cannot compensate for the loss of strength in the timber frame.



7. VIEW OF SOUTH WEST
ELEVATION



8. CLOSE UP OF LEADED BRICK
PLINTH AND ROTTEN TIMBER WALL
PLATE

Scale:



PROJECT:

PROPOSED OUTBUILDINGS REPAIR /
REPLACEMENT AT OWLETT'S MANSION,
COBHAM

CLIENT:

NATIONAL TRUST

DRAWING TITLE:

GREENHOUSE - EXISTING
ELEVATIONS

DRAWN BY:

NF

PURPOSE:

LISTED BUILDING
CONSENT

SCALE:

1:50 @ A3

DATE:

FEB 2026

REV

P1 - 06.03.2026 -
Final issue

DEFECTS KEY:

- Water Damage, Damp, Mould & Rot
- Damaged, broken or missing glass

RAW STUDIOS
Architecture + Interior Design



JOB NO:

25.025

DRAWING NO:

031

REV:

P1