



TIMBER ROOF STRUCTURAL SURVEY

Client name	ITJ Development Ltd
Property address	Carpenters Cottage, Former RAF Uxbridge, St Andrews Park, Hillingdon Road, Uxbridge, London
Survey date	12/02/2022
Issue date	19/02/2022
	Edris Farhat BSc MSc CEng MICE

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1. Introduction

This structural survey is produced by Mr. Edris Farhat BSc MSc CEng MICE. The content of this report is solely for use of the named client.

The structural survey report describes the findings of engineer on site and gives professional recommendations in regards to structural aspect of the elements surveyed.

Declaration:

"I confirm that I have inspected the property and prepared this survey.

Edris farhat
BSc MSc CEng MICE

A handwritten signature in black ink, appearing to read 'Edris Farhat', with a large, sweeping flourish at the end.

19/02/2022

2. Inspection Terms and Conditions

Surveyor's Name: Edris Farhat
Company name: E&F Engineering Ltd
Date of Inspection: 12/02/2022
Reference number: 001107
Full Address of property: Carpenters Cottage, Former RAF Uxbridge, St Andrews Park, Hillingdon Road, Uxbridge, London
Weather condition: Dry - Cold breeze – overcast
Property Status: vacant – construction work in progress

- We only surveyed roof rafters, ridge beam, collar tie and wall plate of the cottage roof structure and the survey is only limited to this area. This survey doesn't cover any potential structural and non-structural defects in other areas of the building, including, but not limited to, tiles, walls, floors, foundations, insulation, flues, chimneys, fittings and fixtures etc.
- This report doesn't assess stability of the structural elements.
- We inspect the roof structure from inside the roof space using MEWP.
- We note in our report if we are not able to check any parts of the property that the inspection would normally cover. If we are concerned about these parts, the report will tell you about any further investigations that are needed.
- We do not report on the cost of any work to put right defects or make recommendations on how these repairs should be carried out.
- We don't carry out any ground contamination, ground investigation, historical mining searches.
- We are not reporting on invasive vegetation and hazardous substances unless evident from the inspection or revealed from routine enquiries.
- Not any part of this report can be shared or published in any way without written consent from E&F Engineering Ltd engineer.

3. Executive Summary

The survey of pitched roof was carried out from inside of the building. The roof structure is typical pitched timber roof with rafters forming the slope of the roof with a ridge beam at the top. A tie collar provided about 600mm above the ceiling level.

The roof structure timber is modern day graded timber and much younger age than rest of the structure. This shows that the roof timbers have been replaced in the past. As such the majority of roof rafters are dry, in good condition and can be reused. There are limited number of rafters with localized rot or damage that need replacement.

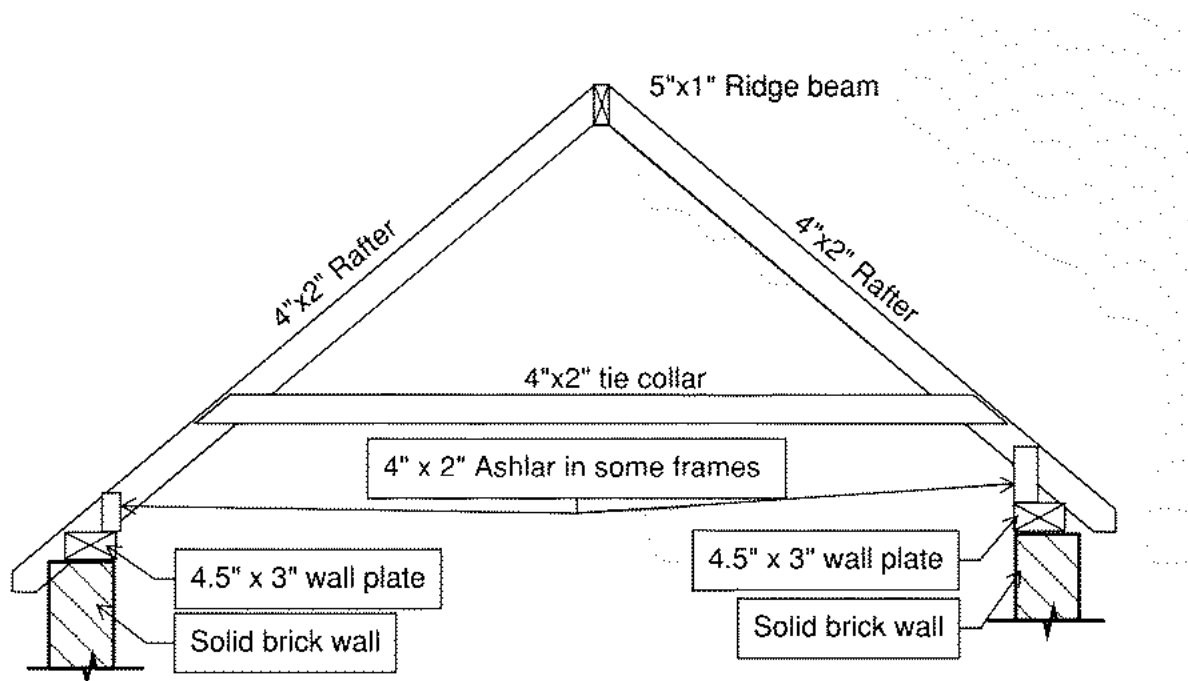
Roof battens are also modern day graded timber. All battens recommended to be replaced with new to allow for installation of new breathable membrane at the roof.

4. About the property and structural survey

This Property is single storey masonry building with tiled pitched roof.

The pitched roof is timber rafters supporting structure without any membrane and roof flat tile covering with a segmented ridge line.

The typical shape of roof structure is shown below:



Typical roof frame structure

Roof frames is modern day graded timber and much younger age than rest of the structure. This shows that the roof structure has been replaced in the past; however, the wall plate was different timber and of the same age of the original cottage building.

Since the roof timber is of newer age, it is in good condition in majority of areas except localized joists where signs of decay were evident.

The survey has identified the decayed joists as listed in drawing SK001. All decayed joists should be replaced.

The replacement process should be carefully managed.

The roof timbers should be propped while decayed element is being replaced.



Photo 1: Roof Structure in good condition



Photo 2: Roof Structure in good condition



Photo 3: Roof Structure in good condition



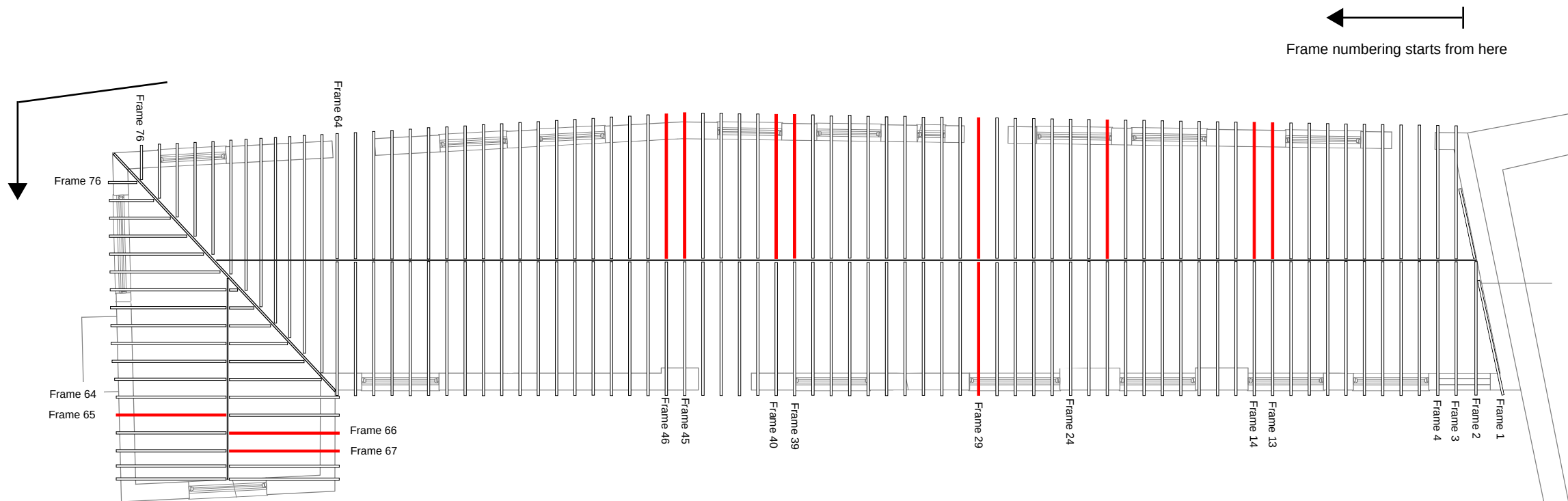
Photo 4: Roof Structure in good condition



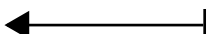
Photo 5: Roof Structure in good condition

Appendix A shows the roof structure layout and its condition.

5. Appendix A: Site recordings



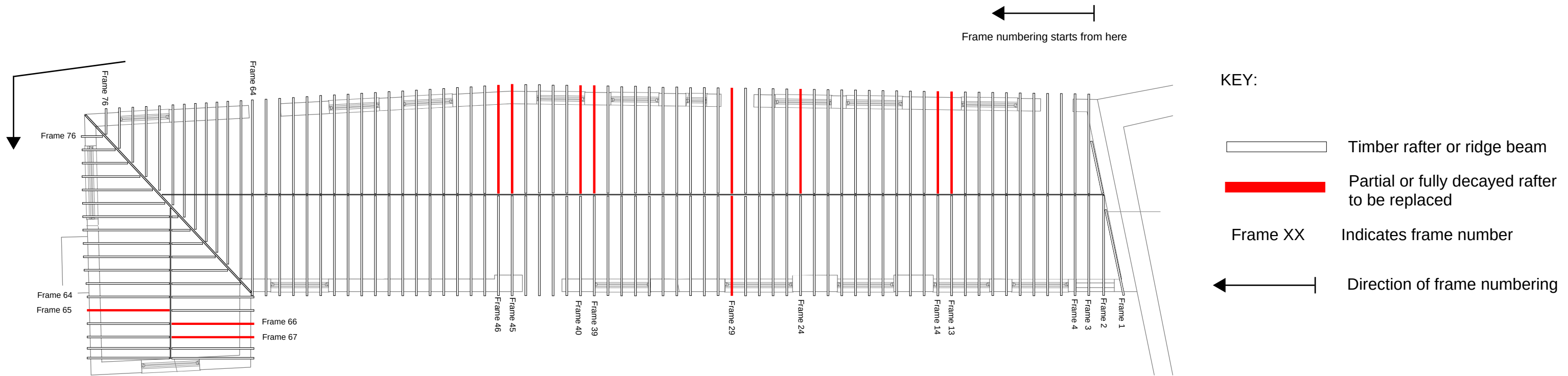
KEY:

-  Timber rafter or ridge beam
-  Partial or fully decayed rafter to be replaced
- Frame XX Indicates frame number
-  Direction of frame numbering



REV	DATE	DESCRIPTION	BY	CHECKED
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PROJECT	Former RAF building - Uxbridge	TITLE	Roof structural survey recording
DATE	18/02/2022	SCALE	1:100
CAD FILENAME		STATUS	For information
DRAWN	HR	CHECKED	E
PROJECT No.	001107	DRAWING No.	SK001
REV	P1		



Rafter cut short. It has to be extended to the wall plate at frame No.13.

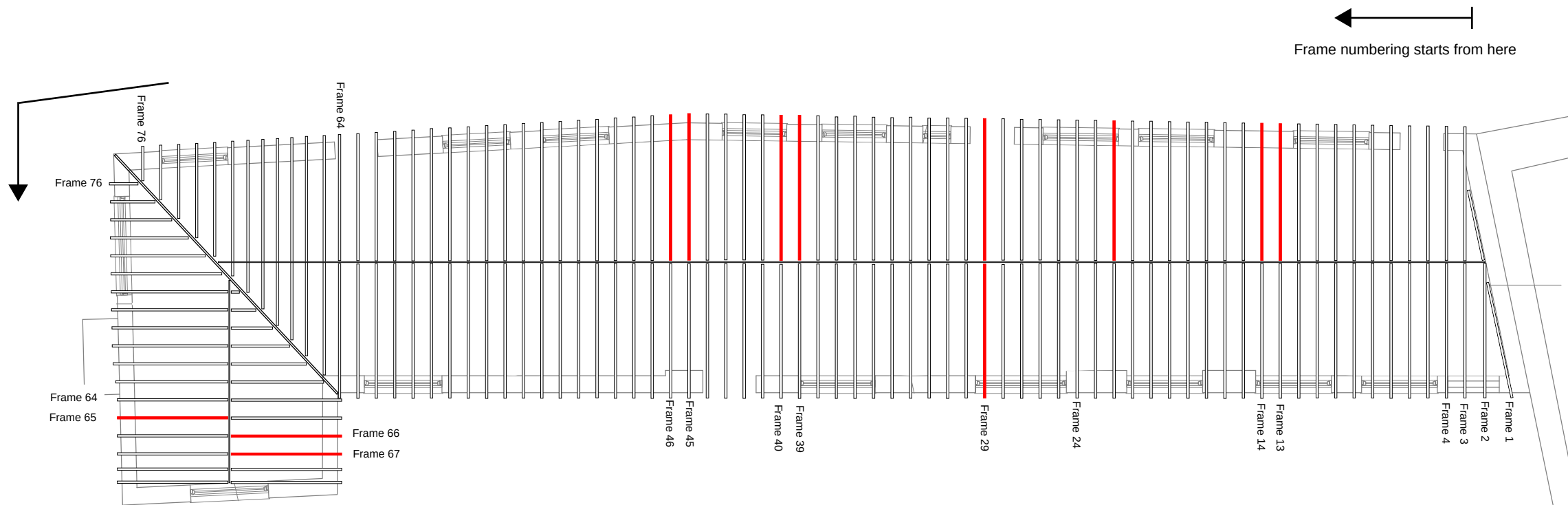


Poor repair to roof rafter at frame No.14. The rafter to be replaced.

REV	DATE	DESCRIPTION	BY	CHECKED
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PROJECT	Former RAF building - Uxbridge	TITLE	Roof structural survey recording
DATE	18/02/2022	SCALE	1:100
CAD FILENAME		STATUS	For information
DRAWN	HR	CHECKED	E
PROJECT No.	001107	DRAWING No.	SK002
REV	P1		



KEY:

-  Timber rafter or ridge beam
-  Partial or fully decayed rafter to be replaced
- Frame XX Indicates frame number
-  Direction of frame numbering



Rafter at frame No.24 is decayed and needs full replacement.

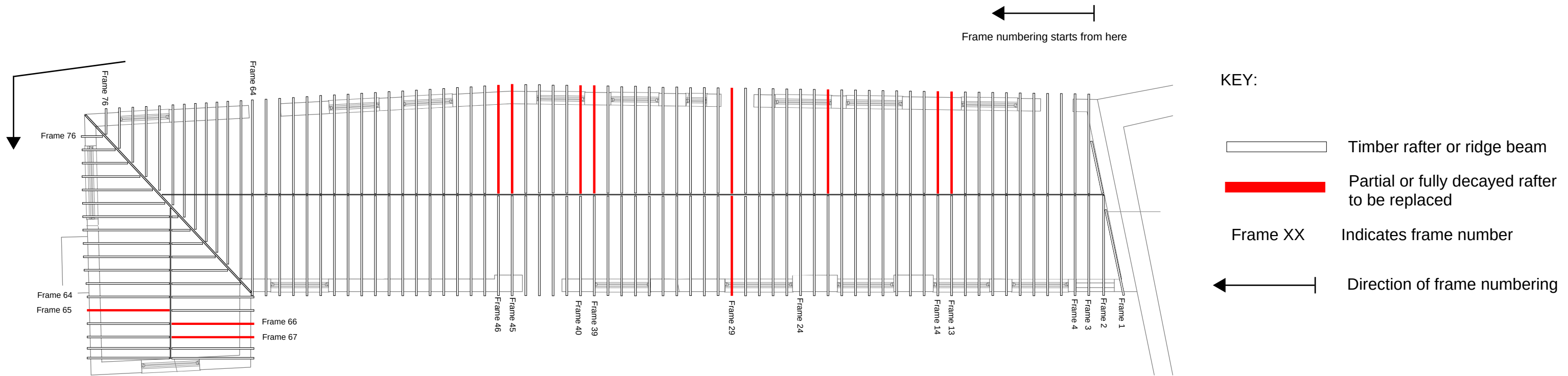


Roof Frame 29 decayed and should be fully replaced.

REV	DATE	DESCRIPTION	BY	CHECKED
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PROJECT	Former RAF building - Uxbridge	TITLE	Roof structural survey recording
DATE	18/02/2022	SCALE	1:100
CAD FILENAME		STATUS	For information
DRAWN	HR	CHECKED	E
PROJECT No.	001107	DRAWING No.	SK003
REV	P1		



Rafter at frame No.39 is decayed and needs replacement.



Roof Frame 40 decayed and should be replaced.

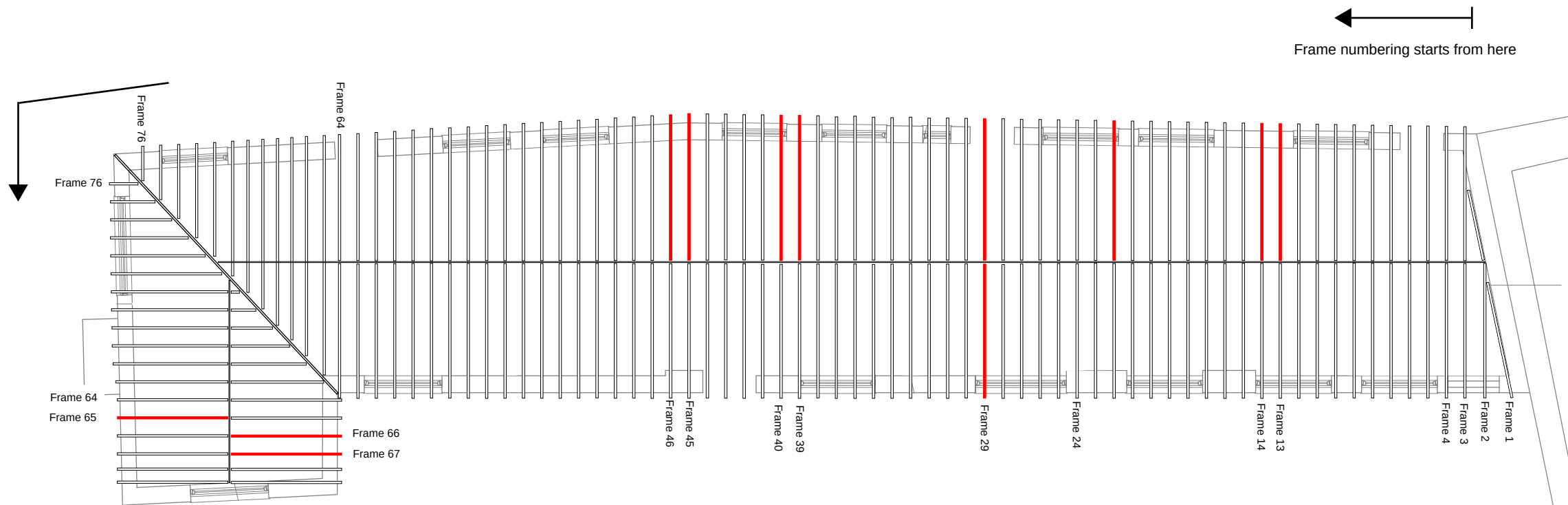


Roof Frame 45 and 46 decayed and should be replaced.

REV	DATE	DESCRIPTION	BY	CHECKED
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DATE	18/02/2022	SCALE	1:100
CAD FILENAME		STATUS	For information
DRAWN	HR	CHECKED	E
PROJECT No.	001107	DRAWING No.	SK004
REV	P1		



- KEY:
- Timber rafter or ridge beam
 - Partial or fully decayed rafter to be replaced
 - Frame XX Indicates frame number
 - Direction of frame numbering



Rafter at frame No.65 is decayed and needs replacement.



Rafters at frame No.66 and 67 are decayed and needs replacement.



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DRAWN	HR	CHECKED	E
PROJECT No.	001107	DRAWING No.	SK005
REV	P1		