

Ancient Monuments Laboratory
Report 23/97

WALL PAINTING CONDITION AUDIT,
GREYFRIARS CLOISTER, GREAT
YARMOUTH, NORFOLK

C Babington
S Stewart

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Summary

This condition audit of wall paintings at Greyfriars Cloister includes a wall painting record, general audit information, documentation of original materials and execution of the painting, and deterioration and damage including previously used materials and treatment, as well as proposals for treatment and monitoring strategies.

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Greyfriars Cloister Great Yarmouth, Norfolk

The following report has been generated by the Wall Painting Section database. This archival system provides a computerised record of all wall paintings in English Heritage Historic Properties and is intended to comprehensively document the collection. Each report has been subdivided into four sections to present the data in a clear format. These include:

1 Wall Painting Record:

Includes a description of the site and paintings, as well as archival information, such as bibliographic references and photographic records.

2 General Audit Information:

Describes any monitoring undertaken and a synopsis of future conservation requirements.

3 Technique:

Documents the nature and condition of the original materials and execution of the painting which is described according to its stratigraphy and any related analysis.

4 Deterioration and damage, added materials, treatment:

Deterioration and damage lists the types of alterations which may have occurred, that is either deterioration (natural alterations such as cracking or delamination) or mechanical damage (such as graffiti).

Added Materials documents all non-original materials present on or within a painting. These may include naturally occurring substances (accretions, such as dirt and dust) or deliberately added materials (coatings, coverings and repairs).

Treatment documents previous interventions and proposed treatment and monitoring strategies.

Throughout each section, an area of painting is assigned a number between 1 and 4 which is intended as a general indication of present condition. These are: 1 good, 2 fair, 3 poor, 4 unacceptable.

This report is based on information gathered prior to March 1996 and does not include any changes in condition, further research or treatment undertaken after this date. Amended editions will be produced as necessary.

1 Wall Painting Record

Property name	GREYFRIARS ABBEY		
Region	Midlands	County	Norfolk
Location of painting	Nave, south wall		
Orientation	WEST AND EAST TOMB RECESS		
Century 14 th	Date	Height (cm)	Width (cm)
Subjects included			
Architectural motifs			
decorative			
The Virgin			

Description

'The history of the friary is unclear, but the Franciscan order appears to have settled and began building in Yarmouth towards the end of the 13th century. The buildings were not destroyed during the Dissolution but after passing through various hands were eventually sold to the town council in 1593. Subsequently the site was largely demolished or re-sold and the tombs were presumably blocked in during this time. The tomb recesses, located on the south wall of the south transept of the original church, were rediscovered by accident during repairs to the building after bombing during the Second World War. The tomb recesses can now be viewed within a small enclosed space via a wooden platform, and the surrounding structure is now occupied by solicitors' offices.

The wall painting is situated on the back wall of the west tomb recess and shows a figurative scene containing a female figure positioned within an elaborate architectural framework. The scheme has been dated to c.1300 and it is probable that the female figure represents the Virgin. Another figure turning towards her in prayer may be a donor figure. However, the remains of this figure are extremely hard to discern.

The style and superb quality of the remains have been compared to a wall painting at Little Wenham church in Suffolk. This painting, dated to c.1310-20, contains three female saints positioned within an extremely similar architectural setting and showing the same detailed fictive canopies. Both paintings also exhibit the same fine lines and delicate execution as well as extensive remains of a green/blue pigment, probably verdigris, a very characteristic pigment in use in East Anglia during this period.

Both tombs also retain fine moulded and cusped canopies which show extensive fragments of red and green/blue pigments although part of the west canopy has been destroyed by the insertion of a later fireplace. The recess soffits in the two tombs also contain the remains of a geometric diamond pattern, again executed in red and blue pigments on a plaster ground, with a central circular motif. However little of this scheme now remains in the east tomb recess and the decoration on the ashlar reveals and back wall have also been lost on this side.'

[From: 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration', Wall Painting Section, July 1995].

Photographic Record

1983, HBMC - black and white photographs - see Studio files. 1993 CIA - colour slides - see Courtauld and Studio files.

29/6/94 EH 'current' contact photo files; no images of wall paintings.

Prints in Plans Room guard books, in Folder PK582

G2456; Cloisters from E. 'showing first aid repairs in hand' (pre-bombing) 26/4/42

G2463; Cloisters after bomb damage, 25/6/42

G2464; Cloisters after bomb damage, 25/6/42

G2495; Cloisters, first aid repair 'for second time'

A5590/3; Cloisters, shows arcade? 20/12/60

A5590/10; Cloisters (enclosed space?) 20/12/60

A6696; Cloisters shows unpicking? entire series, esp.3 7/1/65

A8311; Cloisters wall painting, entire series 19/8/70

A8807/1,4,7; Tomb detail, entire series? 28/6/72

Y11258/1,2,3; Wall painting in west tomb (details) east tomb general, 5/83

Y11259/1-22; Wall paintings (Colour), 5/83

* Photograph of watercolour of the wall paintings (Terry Ball?), not catalogued, but labelled 'Rec'd 11/85'.

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2 General Audit Information

Property name	GREYFRIARS ABBEY	County	Norfolk
Region	Midlands		
Location	Nave, south wall		
Orientation	WEST AND EAST TOMB RECESS		
Century 14 th	Date	Height (cm)	Width (cm)
Monitoring undertaken/in progress:	Start Date 2/02/95	End Date	
Comments	Appeared to show higher level of moisture/hygroscopic salts in central area between canopies?		
Monitoring undertaken/in progress:	Start Date 2/02/95	End Date	
Comments	Surface temperature sensors inserted into styrofoam cubes lined with gauze/tissue. Attached to 1) area of stone on lower-left side of west tomb recess and 2) area of unpainted, sulphated stone canopy on east recess.		
Monitoring undertaken/in progress:	Start Date 2/02/95	End Date	
Comments	Positioned adjacent to surface temperature probes in 1) area of stone on lower-left side of west tomb recess and 2) area of unpainted, sulphated stone canopy on east recess. Also one exterior probe.		
Auditor(s)	CB/SS	Start date 26/05/94	

Overall condition score **3**

Recommendations

The first condition audit, carried out in January 1994, highlighted the severity of the conditions affecting the paintings, in particular the heavy and persistent infiltration of liquid moisture. In addition, the condition of the painted decoration was found to be poor. Subsequently a more thorough examination was undertaken in July 1995. This audit report has therefore been updated to include the information gathered during that investigation.

This found that the condition of the tomb recesses appeared to have altered relatively little in comparison with a photographic record undertaken in 1983. This shows the presence of the existing black crust on the surface of the stone canopies which 'may indicate that the present infiltration is likely to be the recurrence of an historic problem with the fabric of the building. It is therefore remarkable, considering the level of moisture to which the tomb recesses and paintings have been exposed, that more loss of the paint layer has not occurred.'

In addition, the preliminary results of the environmental monitoring, initiated in February 1995, indicated that, despite the high levels of liquid moisture, the internal climate was relatively stable; that is, although the relative humidity level was high it had remained relatively constant.

Nevertheless, the investigation also found that the surface of the sulphated stone was wet to the touch and a moisture survey showed that the paintings were still exposed to an excessive amount of moisture:

'more alarmingly, high readings obtained on the east side of the west recess wall in an area of surviving painting indicate that the wall is saturated and/or that hygroscopic salts are present. That salt efflorescences were also found in this area can only indicate that the original paint layer is in immediate danger from delamination and lack of cohesion.'

Concern was also expressed that the situation would be further complicated once the internal area of the cloister has been made watertight.

'Although calcium sulphate has been identified as the typical material from the three samples analysed during this investigation, which certainly allows a greater understanding of the situation, the transportation of soluble salts and their relationship to their immediate environment is a complex and long-term problem

for which there are no immediate solutions. It is therefore very difficult to predict future deterioration behaviour during a possible 'drying-out' period.'

Since this investigation, and a further site-visit on 7 March 1996 (S. Stewart, T. Manning, Wall Painting Section and Dr Barry Knight, AML) it is now understood that the main causes of the infiltration appear to have been rectified to some extent and that the internal environment can be assumed to have reached this 'drying-out' period. This is obviously a critical stage and could result in extensive salt crystallisation. This is highly likely to occur as the moisture levels, and therefore the relative humidity, within the interior drops. Indeed, during the site-visit of 7 March it was noted that the salt activity had increased within one of the better preserved painted areas (west tomb recess, upper east corner) indicating that this drying-out phase had started. There was also visible salt activity on the area of repaired ceiling.

Therefore, given the complexity of the situation, and in particular the unknown effects of a 'drying-out' period there are no certain solutions. However, there are several recommendations concerning the building and the paintings which should be implemented while the monitoring continues.

1 REPLACEMENT OF THE GRILLE DOOR

After a year of environmental monitoring data some assumptions can be made about the internal and external environmental factors which might be affecting the fabric and paintings. Firstly, this would appear to show that, although the internal relative humidity does not fluctuate as strongly as externally, indicating that the building is providing some form of buffering, it does tend to follow to some extent. Certain improvements could therefore be made to attempt to reduce these internal fluctuations. For example, as was noted in the 1995 investigation, the recently installed metal grille door, whilst improving ventilation, would allow the internal relative humidity to be influenced by variations in the external environment. The consequences of such a change to the internal climate cannot be predicted at this stage and may even prove hazardous. If a solid door, such as that previously in position, was installed, variations in the internal relative humidity could be significantly reduced. This would therefore be a prudent measure to reduce the possibility of cycles of salt crystallisation.

2 CONTINUED WATER PENETRATION

At present the area behind the sheet covering the exterior fireplace is inhabited by pigeons and a large quantity of excreta is building up. In addition, in its present position, this sheet would appear to deflect water directly down the exterior wall, as well as onto the hearth, which could then penetrate through to the interior. Therefore, not only does this still contribute to the level of penetrating moisture but in combination with the excreta could lead to an unacceptable level of nitrate salts.

It would therefore be preferable if this sheet be adapted to extend below the level of the hearth to deflect rain water away from the wall as well as preventing pigeons from nesting in the fireplace. This of course would also require the installation of an appropriate water disposal system, for example, a gutter directly below the fireplace.

In addition, if at all possible, it might still be sensible to provide some form of capping to the top of the wall.

3 ENVIRONMENTAL MONITORING DATA

Attention should now be paid to interpreting the results of the environmental monitoring, undertaken since February 1995 by the Mechanical and Engineering Department, to assess the present condition of the internal climate.

4 TREATMENT OF THE WALL PAINTINGS

The recommendations of this present audit remain the same, that is, a programme of remedial emergency conservation is urgently required to assess the feasibility of stabilising the paint and plaster layers as necessary.

Given the complexity of the present situation, any treatment options available for the conservation of the paintings can only be considered short-term remedial measures and cannot be expected to guarantee the future preservation of the paintings. However, some limited recommendations can be made. These include:

- **STABILISATION OF THE PAINT LAYER:** Although the paint layer appears essentially sound all areas of

paint layer and pigment are vulnerable and should be checked for their cohesive properties and consolidation undertaken where necessary. This should follow a programme of testing appropriate materials and should primarily consider the environmental conditions within the cloister and the presence of soluble salts (for example, this may discount the use of aqueous solutions).

- TREATMENT OF PLASTER SOFFITS: the areas of plaster in both tombs should be examined to check the adhesion of the render to the underlying support (access was not possible during this present investigation but it was noticed that dust was falling from above and settling at the base of the tomb. This may indicate that treatment is necessary). In addition the possibility of surface cleaning and the insertion/adjustment of repairs should be considered to improve the presentation of these areas which have darkened considerably and are subject to blistering and loss.

[Total Timescale for emergency works: 2 conservators, 3 weeks, as soon as possible].

- FRAGMENTS OF STONE CANOPY, AT PRESENT LOCATED IN A CORNER OF THE ROOM: the fragments should be removed from this area, stabilised as necessary and appropriately relocated.

The above recommendations should be considered as a preliminary measure to protect the paintings in the immediate future. Further treatment may be required once the impact of the drying-out period has been assessed.

Although this report only concerns those areas related to the conservation of the painted decoration it is also highly recommended that a stone conservator inspect the stonework and suggest suitable treatment. Of particular concern is the very large crack present on the tracery of the west tomb canopy. The repair in this area has cracked and the area of stone appears extremely vulnerable.

Finally it is requested that adequate protection of the painted areas be conducted during any building works within the cloister.

3 Audit Information: Technique

Property name	GREYFRIARS ABBEY		
Region	Midlands	County	Norfolk
Location	Nave, south wall		
Orientation	WEST AND EAST TOMB RECESS		
Century 14 th	Date	Height (cm)	Width (cm)
Auditor(s)	CB/SS	Start date	26/05/94

Overall Condition Score **3**

Stratigraphy

Layer type	Support Layer	Specific condition Score	3
Thickness	70 cm		

Comments

The wall is composed of flint rubble and brick approximately 70cms thick. The canopies and back walls of the recesses are composed of limestone. Both recess soffits contain stone ashlar up to the level of the top of the capitals and then a render layer composed of a smooth plaster over a rubble core.

Layer type	Ground Layer 1	Specific condition Score	3
Thickness			

Comments

The ground layer has been largely lost. However, there are remains of a fine white or slightly ochre coloured ground in some areas which has been applied directly over the stone.

Layer type	Paint Layer 1	Specific condition Score	3
Thickness			

Comments

'PAINT LAYER AND PREPARATORY TECHNIQUE: It appears that the preliminary outline was executed in a dark red (probably red earth). This is particularly evident with the architectural canopy (presumably most of the upper paint layers have been lost). The colours have then been blocked in and the detailing and outlining finished with fine black lines. No preparatory techniques, such as direct or indirect incisions were observed but the execution of the architectural framework is very regular perhaps indicating that a straight edge was used.

PIGMENTS: The high quality of the painting is indicated by the rich palette employed. This includes two types of red (possibly red earth and vermillion), yellow, black, white and blue/green. It is also interesting to note that a sample of salt efflorescence taken from the upper east side of the west recess and examined using XRD (x-ray diffraction analysis) contained minute traces of both lead and copper. These may indicate the remains of pigments such as lead white as well as verdigris. Of particular interest are the minute traces of gold leaf still present on the central column of the architectural framework in the centre of the west recess wall. Thorough access was not possible during this present examination but it is probable that other areas may be found elsewhere. The range of pigments used indicates that an organic binder was employed'.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Layer type	Attachment 1	Specific condition Score	4
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Thickness

Comments

Minute traces of gold leaf on capital of central column of architectural framework about centre of west recess wall.

4 Audit Information: deterioration and damage, added materials, treatment

Property name	GREYFRIARS ABBEY		
Region	Midlands	County	Norfolk
Location	Nave, south wall		
Orientation	WEST AND EAST TOMB RECESS		
Century 14 th	Date	Height (cm)	Width (cm)

DETERIORATION AND DAMAGE

Deterioration phenomena

Type losses (paint layer)

Location Paint layer

Comments Loss of about 85% of the paint layer has occurred.

Type loss of cohesion (paint layer)

Location Paint layer, particularly at apex of tomb recess.

Comments 'the loss of cohesion of the paint layer was difficult to assess as almost all areas give the appearance of being very powdery and delicate. However, upon inspection their cohesive properties appeared to be fairly sound. Nevertheless, full access was not possible to all areas of polychromy and it must be assumed that some parts are extremely vulnerable and in need of remedial consolidation and fixing. This appeared to be particularly the case at the apex of the west tomb recess wall, especially as salt efflorescences were observed in this area. This is clearly the most immediate concern, especially as treatment of the paint layer has been necessary in the past. In general, the upper half of the west recess wall is better preserved than the lower area'.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type flaking

Location Paint layer: particularly at apex of tomb recess.

Comments There appears to be some flaking of the paint layer.

Type staining

Location Paint layer

Comments 'an area of staining is apparent on the major surviving area of paint layer on the upper east side of the west tomb recess wall. The source of this staining is unknown but has presumably been aggravated by the continual infiltration of liquid water. It is also possible that the treatment in the early 1980's using a synthetic consolidant may have contributed to this phenomena and should be considered when outlining treatment proposals'.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type loss of cohesion

Location Stone support

Comments 'this has occurred in various areas of the support leading to partial loss of the upper surface. Pitting, leading to small losses would seem to be the first phase of this process. This has probably been caused by the recrystallisation of soluble salts as a direct result of high levels of moisture within the wall and a fluctuation in the internal environment'.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type loss

Location Stone support

Comments There has been pitting and small losses throughout the ashlar support, especially in the lower areas.

Type staining

Location Stone support

Comments There is patchy staining of the stone, apparently from water infiltration, throughout the lower half of the tomb.

Type blistering (stone)

Location most apparent on upper canopy of east tomb recess

Comments 'blistering of the stone support is associated with areas of the black crust in certain parts, indicating that continued moisture has aggravated the problem leading to lifting of the upper surface'.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type cracking

Location STONE: east upper area of the west tomb recess

Comments 'this has occurred principally to either side of a repair in the east upper area of the west tomb recess. Of major concern however is a large crack separating one area of tracery from the arch on the west side of the western canopy'.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type cracking

Location PLASTER: recess soffits

Comments 'there are minor cracks to the plaster, especially in the vicinity of recent repairs, indicating some continued movement. Some of these appear vulnerable.'

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type blistering (plaster)

Location particularly east recess

Comments 'the surfaces of the plaster, particularly in the east recess, are generally blistered and exhibiting loss'.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Mechanical damage

Type cracking/fracturing

Location Stone and paint layer - to either side of top-left repair (KB 1983).

Comments These cracks are relatively recent and must have occurred after treatment in 1983. Monitor cracking.

Type abrasion

Location Paint layer, especially upper area.

Comments

Type scratches

Location Stone and paint layer, especially upper area of tomb recess.

Comments

ADDED MATERIALS

Accretions

Type dirt

Location Throughout

Comments There is a general accumulation of dirt and dust.

Type dust

Location Throughout

Comments There is a general accumulation of dirt and dust.

Type cobwebs

Location Especially upper areas

Comments Regular removal recommended.

Type black surface crust

Location Stone canopies

Comments 'this is particularly evident on both the stone canopies and has caused serious discolouration and, in certain areas, severe blistering of the surface, in particular on the upper part of the canopy of the east tomb. A dark accretion also appears to be present in certain areas on the west recess plaster soffits. However, it is not clear whether this is associated with the black crust or is general surface dirt. It was observed during this present investigation that the black crust was wet to the touch and that some further darkening appears to have occurred since the 1983 photographic record.

The formation of such a black crust on stone and plaster is usually associated with the deposition of the atmospheric pollutant sulphur dioxide in the presence of water which reacts with calcareous building materials to produce calcium sulphate. A sample of this crust (from the west side of the tracery on the east tomb recess) was analysed during this present investigation using X-ray diffraction (XRD) and it was found that the most predominant material was indeed composed of calcium sulphate. This can also occur in combination with microbiological growth which may lend a dark or black colour to the surface of the stone.

The moisture necessary for this reaction may in part result from the known infiltration of liquid water. In addition, the recent results of the environmental monitoring data also indicate that on two occasions during the period monitored so far, from February to May 1995, the dewpoint temperature was approached twice. It is therefore possible that condensation, and therefore surface moisture, occurred at these times.'

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type surface 'veil'

Location West recess wall

Comments 'this is present predominantly on the west recess wall and occurs as a thin compact layer over the surface of the stone. Such a phenomenon is distinct from salt efflorescences which appear less evenly and erupt more prominently from the stone. However, the formation of such a layer would also indicate the movement of soluble salts within the wall. Of interest is the comparison of these areas with the photographic survey taken in 1983 which shows that the pattern of the bloom has not changed during the intervening years.'

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type salt efflorescences

Location West recess wall

Comments 'certain areas are particularly obvious, for example in the eastern reveal of the west recess, and in one of the most complete areas of painting on the upper east side of the west recess wall painting in an area of the canopy. Samples from these areas were examined using XRD and both showed that the main component was calcium sulphate. Salt efflorescences were also noted on the cement rendered panel in the north-west corner'.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Coatings/Coverings

Type limewash

Location Patchy, throughout surface

Comments Minute traces of overlying limewash.

Repairs

Type lime:sand

Location In particular, apex of both soffits

Comments 'There appears to be two types of repair, one yellow (lime mortar) and one grey (possibly cement), which occur principally within the render layers of both tomb soffits. In addition repairs are present at the apex to the tomb wall in the west recess, particularly on the upper-east side and there are also general repairs to the stone canopies. Some repairs are of an inappropriate colour and have an uneven surface texture. They do not appear cut-back and are at a higher level than the surface plane. Most repairs appear to be functioning despite minor cracking.'

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type stone

Location east wall

Comments Some of the ashlar blocks in the east recess wall appear to be replacements.

Type MONITORING CONDITION Date 01/01/66

Person M.E.Keevil

Comments Further correspondence describes the paintings and site during subsequent years:

"I visited the above on November the 14th 1968 to inspect the remains of wall painting that were uncovered during November 1967. Since the paintings were uncovered, very little further work in the way of reconstruction of the building has been done, and as the painting has been exposed to damp atmosphere, etc., it was thought that they may be in danger of fading or suffering other damage. It is my opinion, that as the paintings are not exposed to any direct contact with the elements they are in no danger, and that final conservation work should be postponed until the building work in the immediate vicinity of the paintings has been completed, which I understand will be in the spring or early summer of this year". [Letter from M.E.Keevil (Conservation Studio) to A.N.Stewart (Chief Restorer, Conservation Studio).

Correspondence also refers to treatment of the paintings but no documentation found during this investigation verified that this was conducted:

"The paintings above the wall tombs have not faded in my opinion. It appears that there is a layer of dust over them, owing to the reconstruction around them, and also a certain amount of dribble marks, probably due to condensation. I will send a restorer in the near future to remove these and to spray the painting to revive the colour. There are traces of further decoration, here and there, under layers of rough plaster which should be removed. Cracks in the corners of the arches must be filled with lime and sand." [Letter from A.N.Stewart (Chief Restorer, Conservation Studio) to J.A.Stent (A.M.Architect) 6/7/70].

"In comparing my original slides with the painting I found that no actual loss of the painted surface has occurred, however, when the weather improves a little I will arrange to have the paintings sprayed with a Molsolex glaze which was not available when the paintings were originally treated. This should strengthen and slightly improve the optical appearance. Any deterioration suggested is minimal, and the treatment outlined above should made a slight improvement" [Letter from M.E.Keevil (Conservation Studio) to D.Sherlock, 17/2/75].

A further inspection by Krystyna Barakan (D.O.E. Conservation Studio) notes:

"The adhesion of the paint is very good and there are no signs of powdering. The extractor which was installed to provide ventilation of the site has no adverse effect on the painting. In my opinion, the wall painting does not require any restoration and there is no apparent reason for the fading of the colours" [Letter from K.Barakan (Conservation Studio) to D.Sherlock, 2/10/78].

However, by August 1983 conservation was felt to be necessary.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Type UNCOVERING **Date** 01/01/66

Person M.E.Keevil

Comments 'A precise date for the discovery of the wall painting varies in the documentation but in November 1966, M.E.Keevil (D.O.E. Conservation Studio) refers to the uncovering of the west tomb recess wall during recent building operations. It would appear that an extensive amount of the painting was lost during this procedure:

"Unfortunately the wall forming the back of one of the tombs has been destroyed but the wall at the back of the other is intact and is of great interest. It was found that this wall was coated with a layer of lime mortar, cement etc. under which were traces of a painting. By carefully removing this layer of lime etc. it was possible to recover approximately half of the original painted decoration. The painting consists of two painted niches with cusps, crockets, finials etc. In the niche on the right had side it was possible to recover the painted figure of a woman on a red background. The condition of the painting is best at the top, but deteriorates as it gets nearer to ground level, possibly due to rising dampness. The painting is of a very high standard, gold leaf having been used on the painted masonry, the ribs etc. being picked out in different colours. The whole work being executed in a very skilful manner". [Report by M.E.Keevil (Conservation Studio), December 1966.

[From 'Greyfriars Cloister, Great Yarmouth: examination of the painted decoration, Wall Painting Section, July 1995'].

Past Treatment

Type CLEANING **Date** 01/08/83

Person K.Barakan

Comments 'The extremely powdery and fragile surface of the painting was cleaned thoroughly with a very soft (gilders) brush'. [Letter from K.Barakan (Conservation Studio) to D.Sherlock, 2/12/83].

Type CONSOLIDATION **Date** 01/08/83

Person K.Barakan

Comments 'The whole area has been treated with an application of deionised water and methylated alcohol (1:10), then several times with 2% of Primal (B33, B74 - 1:1) in 1:1 water and alcohol solution. Previously fallen particles were collected for pigment identification (red, green and blue)'. [Letter from K.Barakan (Conservation Studio) to D.Sherlock, 2/12/83].

Type FILLS/REPAIRS INSERTION **Date** 01/08/83

Person K Barakan

Comments There appear to be two types of lime:sand mortar. One is distinctly yellow in tone and may be attributed to K.Barakan's treatment in 1983. The other is greyer in tone and is similar to material used in the east soffit recess. This presumably pre-dates the 1983 treatment.

All repairs are an inappropriate colour and have an uneven surface texture. They do not appear cut-back and are at a higher level than the surface plane. They appear to be functioning despite minor cracking described above. However, this should be monitored as it indicates movement since 1983.

Type FLAKE FIXING **Date** 01/08/83

Person K Barakan

Comments 'Larger loose parts of paint were fixed back to the wall (stone with 5% primal. Similar treatment has been applied to the remains of the painting of the accompanying arch above the entrance'. [Letter from K.Barakan (Conservation Studio) to D.Sherlock, 2/12/83].

Proposed Treatment

Type CONSOLIDATION **Date** 27/05/94

Person CB/SS

Comments STABILISATION OF PAINT LAYER: Although the paint layer appears essentially sound, all areas of paint layer and pigment are vulnerable and should be checked for their cohesive properties and consolidation undertaken where necessary. This should follow a programme of testing appropriate materials and should primarily consider the environmental conditions within the cloister and the presence of soluble salts (for example, this may discount the use of aqueous solutions).

Type FLAKE FIXING **Date** 27/05/94

Person CB/SS

Comments STABILISATION OF PAINT LAYER: Although the paint layer appears essentially sound, all areas of paint layer and pigment are vulnerable and should be checked for their cohesive properties and consolidation undertaken where necessary. This should follow a programme of testing appropriate materials and should primarily consider the environmental conditions within the cloister and the presence of soluble salts (for example, this may discount the use of aqueous solutions).

Type MONITORING CONDITION **Date** 27/05/94

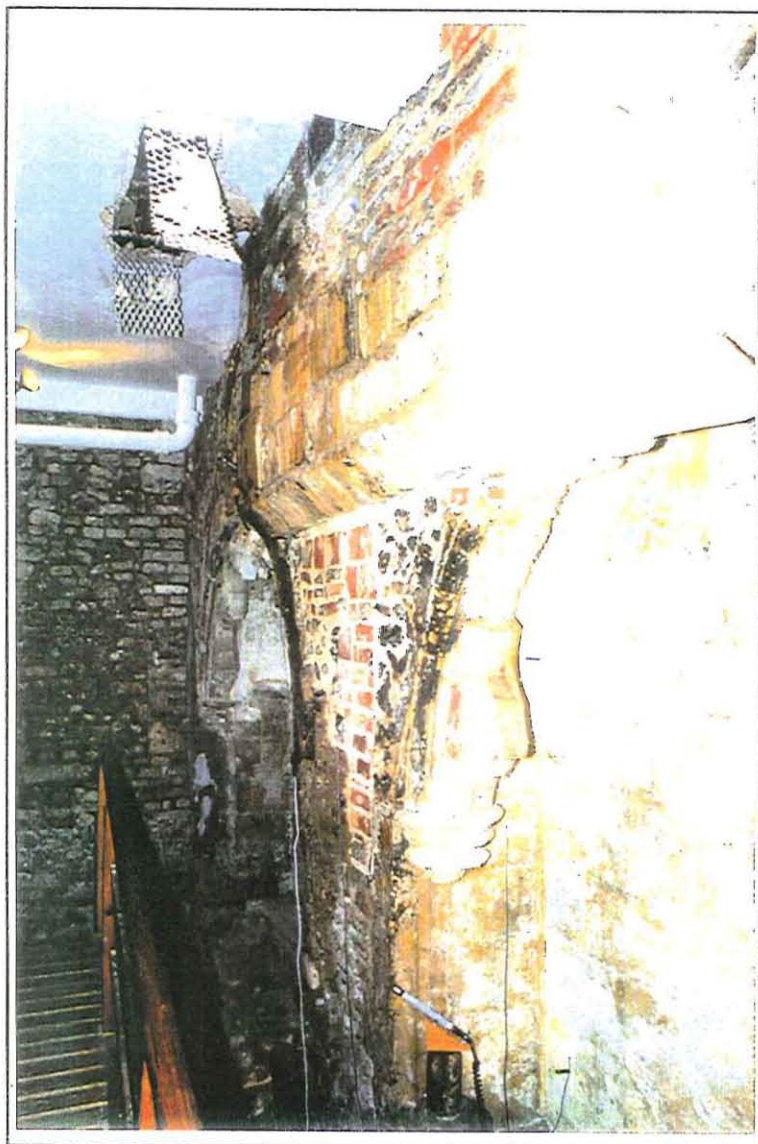
Person CB/SS

Comments Frequent monitoring required.

Type VARIOUS **Date** 27/05/94

Person CB/SS

Comments TREATMENT OF PLASTER SOFFITS: The areas of plaster in both tombs should be examined to check the adhesion of the render to the underlying support (access was not possible during this present investigation but it was noticed that dust was falling from above and settling at the base of the tomb. This may indicate that treatment is necessary). In addition the possibility of surface cleaning and the insertion/adjustment of repairs should be considered to improve the presentation of these areas which have darkened considerably and are subject to blistering and loss [Timescale for emergency works, including emergency treatment of paint layer: 2 conservators, 3 weeks, as soon as possible].



General view of tomb recesses to the east



West tomb recess, detail of painted decoration