

THE BREAD OVEN ROOM WARRENS

Architectural Paint Research Report



December 2021

Lisa Oestreicher Architectural Paint Research
Esher House, Chaucer Road, Bath, United Kingdom, BA2 4QY
Tel 01225 466374 Mobile 07809 014939
email: lisa.oestreicher@sky.com

Executive Summary

The south elevation Bread Oven Room wall retained the most extensive paint history, a total of 11 separate phases of decoration over a red brick substrate. This is considered a sufficient number of decoration schemes to date back to the construction of the room between 1895-1898 and indicates that the space was painted in decorative cycles of every 10-15 years.

Although the pigments identified in the paint strata were in common use prior to the construction of the Bread Oven Room and therefore not helpful in dating the introduction of individual schemes, the use of lead, zinc and titanium-based paints assisted in pinpointing when specific decorations were applied. In particular the use of titanium-based paints from Scheme 8 helped identify those phases which were executed from the second half of the 20th century onwards.

When first constructed the walls and oven in the Brick Oven Room were plainly limewashed white and in subsequent phases white coatings, either in the form of limewash or paint, continued to dominate the decoration. Analysis indicates that the presently red painted bread oven lintel was either painted or limewashed white in tandem with the surrounding brickwork for most of its decorative history, only being visually differentiated in Scheme 8, executed at some point after c. 1960. Similarly, the east elevation wall at skirting level – although only retaining strata from Scheme 7 onwards - was also painted white until the existing grey scheme was applied, although one attempt at protection in the form of a shellac coating was noted.

The entrance door into the Bread Oven Room did not display decoration until Scheme 2. This corresponds with documentary evidence which indicates that it was erected by Philip Webb as part of his alterations at Warrens at the turn of the 20th century. In contrast to the plain white decorative treatment on the surrounding surfaces, the door was grained in imitation of timber. In subsequent years the door was more simply painted in uniform cream or brown colours before eventually falling into line with the room's white colourway at the end of the 20th century.

Research established that both red and orange-red coloured bricks were employed in the erection of the Bread Oven Room and the oven whilst a more limited survey of the Toilet Passage wall identified red brick. This slight variation in colour was obviously deemed acceptable and supports the theory that the brickwork surfaces were originally intended to be limewashed.

The findings relating to the east elevation wall below the embedded timber lintel are interesting. Instead of a red or orange-red brick substrate, a yellow stock brick was identified. Furthermore, only the penultimate warm white limewash and the existing white paint finishes were present on

the sample. These results indicate that disturbance occurred at the end of the 20th century which most likely involved the infilling of an opening. This contradicts documentary evidence which suggests that Webb was responsible for the blocking up a doorway in this location. However, the use of such an obvious contrast in brick colour would have been unusual for Webb, particularly when his nearby new service wing was being constructed with red bricks and therefore readily available.

Above and to the north of the lintel embedded in the east elevation wall, both the skirting and upper sections of the wall were constructed of red brick. However, neither retained decoration prior to Scheme 7, possibly indicating that this area was either paint stripped or that an original structure such as a piece of built-in furniture was removed at this time.

One physical feature of the Bread Oven Room are the two skins of brickwork, one of which is recessed, forming the west elevation wall adjacent to the bread oven. Analysis identified a hardwood lintel fixed into the front layer of brickwork, whilst the rear skin relied on a brick lintel for support. Floor plans executed by Webb show a door erected in this position, presumably with a door frame fitting into the recess. However, paint research indicates that the inner skin was exposed and decorated from the original construction phase onwards, bringing into doubt whether a door was ever inserted. Furthermore, the hardwood lintel did not record decoration until Scheme 3 suggesting that it was either paint stripped at this point, introduced at a later date to improve on the structural integrity of the front skin of brickwork or simply not painted for its initial two phases of development, as it may not have been considered appropriate or visually desirable to limewash this element in unison with the surrounding brickwork.

The Toilet Passage wall was similarly decorated to the adjacent Bread Oven Room, although it is evident that it experienced significant paint loss in its early and later phases of development. Furthermore, in the adjacent Toilet Cubicle the brick walls were plastered over in the late 20th century.

Paint research indicates that the Bread Oven Room and the Toilet Cubicle underwent a series of alterations in the 19th and 20th centuries. Whilst documentary evidence strongly suggests that Philip Webb introduced new windows and an entrance door shortly after the construction of this service wing, analysis has pinpointed further changes. It is feasible that during the inter-war period a hardwood lintel was incorporated into the west elevation opening and at the end of the 20th century a doorway between the Bread Oven Room and the room to the east was blocked up and the Toilet Cubicle brick walls were plastered.

TABLE OF CONTENTS

Executive Summary

1. INTRODUCTION

- 1.1 Historical Context
- 1.2 Project Brief

2. METHODOLOGY

- 2.1 Removal of Paint Samples
- 2.2 Examination of Paint Samples

3. DESCRIPTION OF PAINT SAMPLES

4. CONCLUSIONS

5. APPENDICES

- 5.1 Sample List
- 5.2 Sample Location Photographs

1. INTRODUCTION

1.1 Historical Context

Warrens is a Grade II* listed country house located near the village of Bramshaw in the New Forest National Park. It was designed on the site of an earlier property purchased by George Eyre in 1798. Eyre chose John Nash as the architect for his new home and the property was completed in 1805. Although an allowance was made for the reuse of building materials from the pre-existing house it is not known whether any sections of this earlier structure were incorporated into Warrens. The result was a relatively simple symmetrical designed two storey house with pedimented cross wings accessed through an open arched porch. This led into a centrally placed entrance vestibule and staircase chamber. The property contained three principal reception rooms, a conservatory and servants accommodation at ground floor with bedrooms above.

Very shortly after Nash's building was completed it was extended to the south, doubling in size. However, the architect for this phase of development is not known. Documentary evidence indicates that at some point between 1843-1877 Warrens was enlarged once again when a single storey service range was constructed at the southern end of the property. The Bread Oven Room and associated Toilet Passage and Cubicle were attached on to this range in c. 1895-1898.

In 1898, following an outbreak of dry rot, George Eyre's grandson - George Edward Briscoe Eyre - commissioned the architect Philip Webb to design a new and significantly larger three-storey service block on the north-east side of the service court into which a new main entrance was incorporated. In addition, Webb remodelled the earlier conservatory at the front of the property to create a two-storey vaulted Common Room in the Arts & Crafts style. Whilst this resulted in the loss of a number of small ground floor rooms and the servants' bedrooms above, the Bread Oven Room and the Toilets spaces were retained with a few minor alterations. These changes included a new entrance door, the possible infilling of a doorway in the east wall and the creation of two west elevation windows, one of which can be seen presently in the Toilet Cubicle.

Upon the death of George Edward Briscoe Eyre in 1922, the estate passed to his daughter Dorothy who with her husband adopted the surname Crosthwaite-Eyre. Their principal contribution to Warrens was the construction of a chapel at the south-west end of the property in 1934 following their conversion to Catholicism.

In 1980 Dorothy's son Oliver demolished the chapel along with a large proportion of Webb's service block. The property remained within the Crosthwaite-Eyre family until c. 2018 when it was sold to a private individual who initiated the lavish programme of decoration which can be

seen today throughout the property. The current owners purchased Warrens in 2020.

1.2 Project Brief

Architectural Paint Research was commissioned to determine the extent and nature of surviving decoration in the Bread Oven Room and to chart its physical development within the context of the property's building history, assigning dates where possible.

2. METHODOLOGY

2.1 Removal of Paint Samples

Fifteen samples were removed from the bread oven, walls, ceiling and entrance door in the Bread Oven Room and adjacent Toilet Passage and Toilet Cubicle. Samples were taken with a scalpel blade and a dentil drill with access at high level provided by a ladder.

Sample locations can be found on the sample list outlined in Appendix 5.1 and sample location photographs in Appendix 5.2.

2.2 Examination of Paint Samples

Samples were mounted in polyester resin and cross-sections prepared. These were examined microscopically at high magnification under incident and ultra-violet light. Once stratigraphy patterns were established micro-chemical tests were undertaken to identify pigments and media on several key strata.

The findings are noted in the Description of Paint Samples and Conclusions sections of this report.

3. DESCRIPTION OF PAINT SAMPLES

3.1 Bread Oven Room

Wall surfaces

Sample 10 was removed from the south elevation wall. Sample 11 was taken from the east elevation wall below and sample 12 from above a timber lintel lodged into the brickwork. Sample 14 was removed from the east elevation painted skirting. Sample 5 was taken from the west elevation outer wall and sample 4 from the adjacent wall opening lintel. Sample 6 was removed from the west elevation inner door lintel and sample 7 from the inner painted brick wall.

The south elevation wall retained the most extensive paint history, a total of 11 separate phases of decoration over a red brick substrate. This is considered a sufficient number of decoration schemes to date back to the construction of the Bread Oven Room in the last decade of the 19th century and indicates that the walls were painted in decorative cycles of every 10-15 years.

In the initial two phases the wall was plainly limewashed white. In Scheme 3 the wall was redecorated with a white painted mixture blued a more brilliant shade of white with particles of French ultramarine. Micro-chemical tests and examination of this mixture under incident and ultra-violet light suggests that it was composed of a lithopone-based oil paint.

Limewash has been used consistently from at least the Middle Ages to present day as a decorative coating and therefore is not helpful in assessing when the first two schemes were applied. Lithopone-based paints were first manufactured in 1876. Early products tended to discolour but manufacturing improvements in the late 19th century led to greater popularity in the early 20th century. French ultramarine was first introduced as a pigment in 1828 and was in common employment by the time the Bread Oven Room was constructed

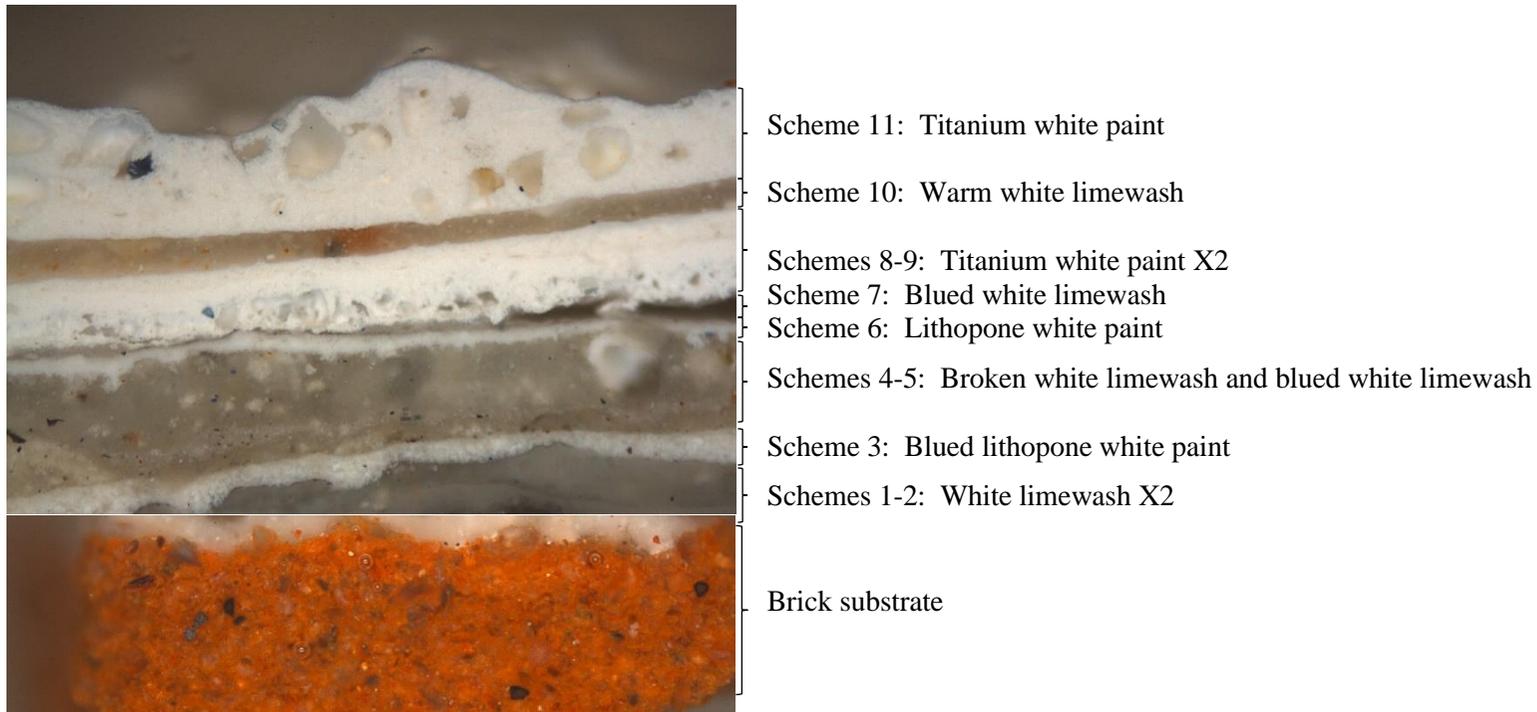
Two further white limewash decorations followed, broken with flecks of iron oxide earth, carbon black and French ultramarine. Iron oxide earth and carbon black have been in continual use as pigments since prehistoric times and consequently are not valuable date markers.

In Scheme 6 the south wall was repainted lithopone white. This was followed by a white limewash decoration broken with chunks of French ultramarine, iron oxide earth and carbon black.

In Schemes 8-9 the south elevation wall was once again decorated white. However, in this instance modern titanium-based paint mixtures were identified. Titanium-based paint were introduced commercially in c. 1920 and by 1960 had become the dominant paint coating employed in house decoration. In the penultimate phase the wall was limewashed white warmed with a few particles of iron oxide earth before the existing titanium white painted decoration was applied.

Bread Oven Room Wall Surfaces

Photomicrograph illustrating sample 10 taken from the south elevation wall, showing its painted history. Photographed in cross-section in incident light using a 10X lens. Printed magnification not calculated.



The outer skin of the west elevation wall retained the white limewash decorations associated with Schemes 4 and 7 and the titanium white painted decorations relating to Schemes 8-9 and 11 over a red brick substrate.

Interestingly, the inner west wall displayed a more comprehensive paint history and followed the stratigraphy pattern identified on the south elevation described above. However, the white limewash decorations associated with Schemes 5 and 10 were not present in this location. It is possible that their absence represents localised paint loss. However, as it was considered good decorative practice to hack off earlier layers of limewash prior to redecoration it is feasible that these limewash coatings were purposefully removed. These findings suggest that the inner west wall was exposed and decorated from the initial phase of construction of the Bread Oven Room.

However, it is worth noting that the inner wall employed an orange- red coloured brick rather than the more uniform red brick identified on the outer east wall, suggesting that slightly different shades of bricks were employed in the erection of the late 19th century service wing.

The adjacent inner door lintel was also fabricated from orange-red brickwork and was initially limewashed white twice and then painted a blued shade of lithopone white. The limewash coating associated with Scheme 4 was absent in this location.

In Scheme 5 the lintel was differentiated from the surrounding wall surfaces and decorated a light shade of brown using zinc-based oil paints. A cream coloured coating followed. Micro-chemical tests indicated that this was a titanium-based paint adulterated with a small amount of lead carbonate. Both mixtures were pigmented with a variety of iron oxide earth and carbon black particles. Zinc-based oil paints were first introduced commercially in c. 1850 but became more popular in the late 19th to early 20th centuries.

From Scheme 7 onwards the inner door lintel followed the stratigraphy pattern established on the south and inner west walls. Once again, the white limewash coating relating to Scheme 10 was not present on the lintel.

The wall opening lintel located in the outer skin of the west elevation brickwork was constructed of hardwood timber and did not retained decoration until Scheme 3, when it was painted lithopone white and blued with a few particles of French ultramarine. From Scheme 4 onwards it was decorated in tandem with the south elevation wall, although the limewash coatings associated with Schemes 5 and 10 were absent. The

identification of a timber rather than a brick lintel and the absence of the first two phases of decoration raises the possibility that the lintel was introduced at a later phase to improve on the structural integrity of the wall. It is unlikely that the opening was formed at this time as the inner skin of the west elevation wall displayed decoration from Scheme 1 onwards.

The east elevation wall at skirting level retained decoration from Scheme 7 consisting of a limewash coating blued a brilliant shade of white with particles of French ultramarine over a red brick substrate.

In the following two phases the wall was repainted titanium white. The first of these decorations was protected with a coat of clear varnish. Next, traces of a warm white coloured limewash can be seen pigmented with particles of iron oxide earth and carbon black. In the existing scheme the wall at skirting level was painted grey over a white undercoat using finely ground titanium based coatings.

The east wall above the embedded timber lintel was built of red brickwork and also retained no strata prior to Scheme 7. It was, in tandem with the skirting, initially limewashed a blued white. Two further titanium white painted decorations were subsequently recorded.

These findings suggest that areas of the east elevation wall were either stripped of previous decoration as part of Scheme 7 or that an original structure or piece of built-in furniture was removed at this time. Also, during its limited paint history, the skirting area of the wall was not differentiated through colour until the present phase, although one attempt at protection in the form of a shellac coating was noted.

The east elevation wall below the embedded timber lintel displayed an interesting development history. Instead of a red or orange-red brick substrate, a yellow stock brick was employed in this location. Furthermore, only the penultimate warm white limewash and the existing titanium white paint mixture were present on the sample. These findings suggest that the wall experienced disturbance at the end of the 20th century as part of Scheme 10 which feasibly involved the infilling of an opening.

Table 1: Bread Oven Room Wall Surfaces I

	Sample 10 Wall White painted brick South elevation	Sample 4 Wall opening lintel, outer skin West elevation	Sample 5 Wall, outer skin White painted brick West elevation	Sample 6 Door lintel, inner skin White painted brick West elevation	Sample 7 Wall, inner skin White painted brick West elevation
11	Titanium white paint	Titanium white paint	Titanium white paint	Titanium white paint	Titanium white paint
10	Warm white limewash				
9	Titanium white paint	Titanium white paint	Titanium white paint	Titanium white paint	Titanium white paint
8 Post 1960	Titanium white paint	Titanium white paint	Titanium white paint	Titanium white paint	Titanium white paint
7	Blued white limewash	Blued white limewash	Blued white limewash	Blued white limewash	White limewash
6	Lithopone white paint	Lithopone white paint		Cream paint	Lithopone white paint
5	Blued white limewash			Light brown paint	
4	Broken white limewash	White limewash	White limewash		<i>Dirt deposit</i> White limewash
3	Blued lithopone white paint	Blued lithopone white paint		Blued lithopone white paint	Blued lithopone white paint
2	White limewash			White limewash	White limewash
1 c. 1895-98	White limewash			White limewash	White limewash
Substrate	Red brick	Hardwood timber	Red brick	Orange-red brickwork	Orange-red brickwork

Table 2: Bread Oven Room Wall Surfaces II

	Sample 11 Wall White painted brickwork East elevation	Sample 12 Wall, above timber lintel White painted brickwork East elevation	Sample 14 Skirting Grey painted brickwork East elevation
11	Titanium white paint	Titanium white paint	Grey paint on titanium white undercoat
10	Warm white limewash		Warm white limewash
9			Titanium white paint
8 Post 1960		Titanium white paint	<i>Shellac</i> Titanium white paint
7		Blued white limewash	Blued white limewash
6			
5			
4			
3			
2			
1 c. 1895-98			
Substrate	Yellow brick	Red brick	Red brick

Bread oven

Samples 1 and 2 were removed from areas of white painted brickwork and sample 3 was taken from the red painted lintel.

One of the white painted areas retained decoration from Scheme 2 over a red brick substrate. Initially it was limewashed white three times before being painted a brilliant shade of lithopone white. Flecks of iron oxide earth and carbon black were noted in the limewash coatings whilst particles of French ultramarine were visible in the lithopone white paint mixture.

No further decoration was recorded until Scheme 9 when the oven was repainted titanium white. The existing titanium white painted decoration followed.

The second white painted area did not fare as well and retained only one white limewash and two titanium white painted decorations over orange-red brickwork. It is interesting to observe that both red and orange-red bricks were used in the construction of the oven, echoing the use of the two slightly different shades of red brickwork on the walls.

The red painted lintel retained ten separate phases of decoration over a red brick substrate. Commencing from Scheme 1, it was initially limewashed white twice. A blued lithopone white paint with French ultramarine inclusions and two white limewash coatings followed.

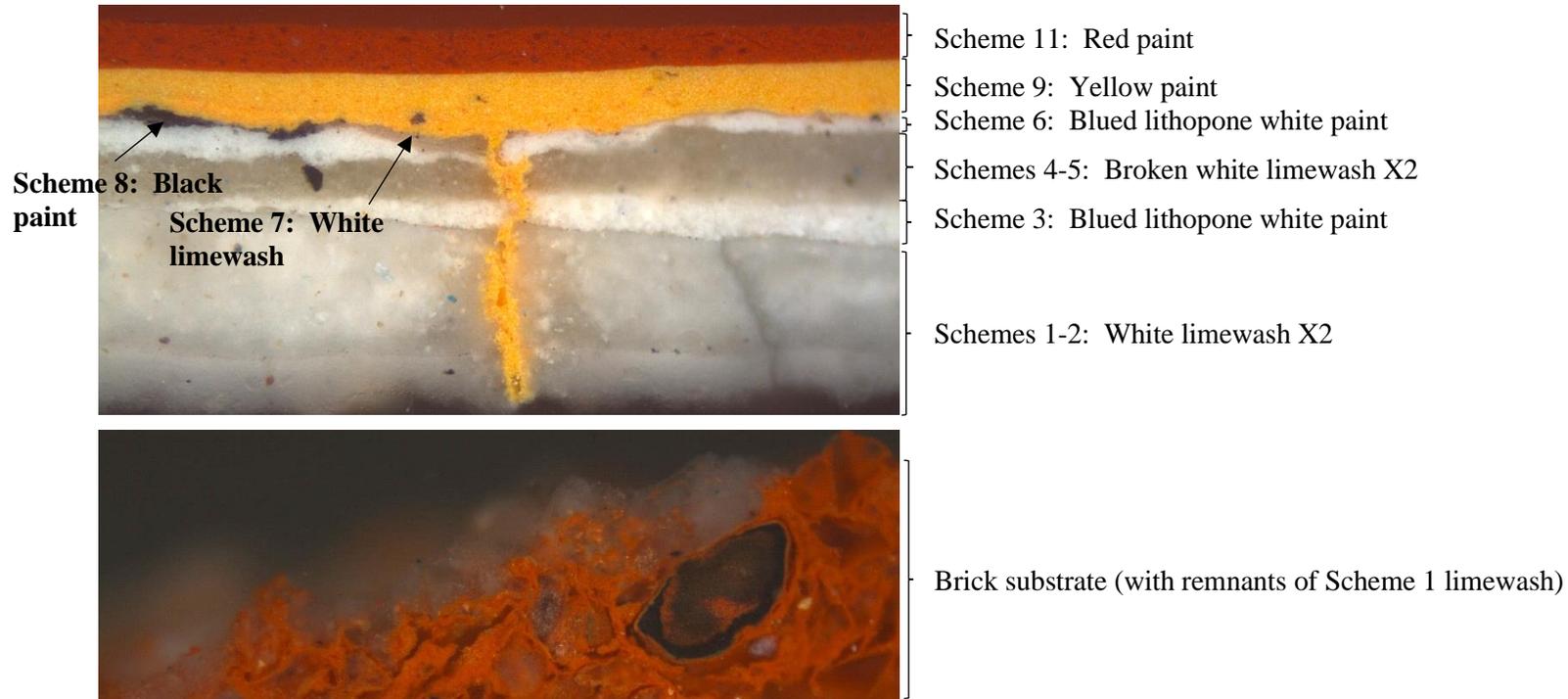
In Scheme 6, the lintel was repainted lithopone white, blued a more brilliant shade once more with French ultramarine particles. The fragmented remains of a white limewash decoration can then be seen.

In Scheme 8 the lintel was repainted black followed by a yellow and then the existing red paint mixture. Whilst the finely ground nature of these coatings makes the identification of individual pigment particles difficult to discern, it does strongly suggest that titanium-based paints were employed during this final period.

Analysis indicated that the bread oven lintel was either painted or limewashed white in tandem with the surrounding oven and walls for most of its decorative history, only being differentiated through a use of contrasting colour from Scheme 8, executed at some point after c. 1960.

Bread Oven

Photomicrograph illustrating sample 3 taken from the red painted oven lintel, showing its painted history. Photographed in cross-section in incident light using a 20X lens. Printed magnification not calculated.



Bread Oven Room entrance door

Sample 15 was removed from the inner face of the Bread Oven Room entrance door.

Commencing from Scheme 2, eight separate phases of decoration were recorded over a softwood timber substrate. Initially the door was grained in imitation of timber using a series of lead-based light brown, cream and white oil paint mixtures, a brown meglip glaze and a finishing coat of varnish. It would be necessary to uncover later layers of paint to assess the pattern of the graining and the type of timber it intended to emulate.

The door was painted a cream colour and then white in the following two phases using lead-based paints. Flecks of iron oxide earth and carbon black can be seen in the cream coating.

In Scheme 5 a similarly pigmented light brown zinc-based oil paint mixture was applied. A light brown zinc-based paint relating to this phase was previously noted on the west elevation inner door lintel.

Next, a dark cream coloured decoration formulated from a lead-based oil paint pigmented with chunks of iron oxide earth and carbon black can be seen resting over a lead white undercoat. This was followed by another application of light brown zinc-based paint.

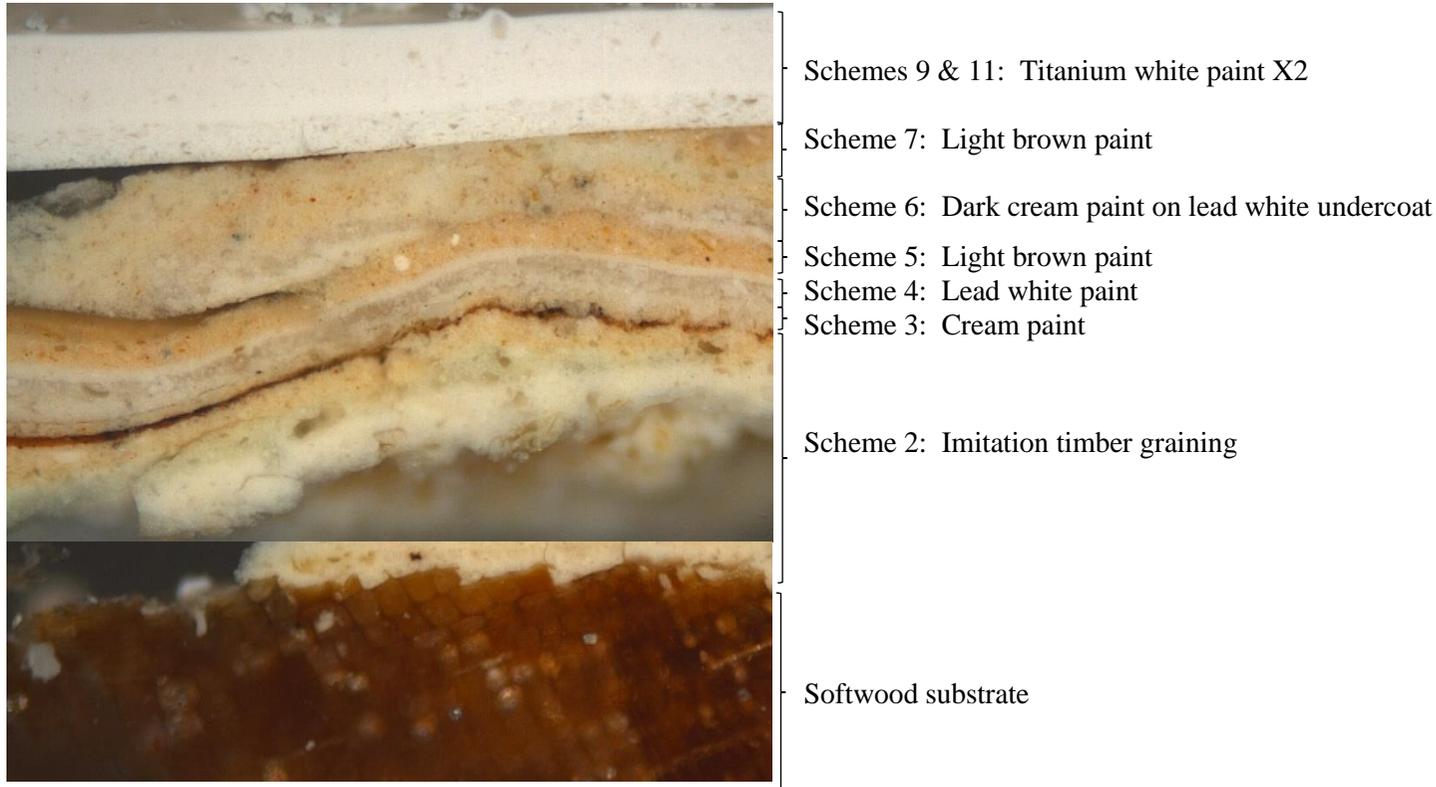
In the final two schemes the door was plainly decorated white with modern titanium-based paints.

Table 3: Bread Oven and Entrance Door

	Sample 1 Bread oven White painted brickwork	Sample 2 Bread oven White painted brickwork	Sample 3 Bread oven Red painted lintel	Sample 15 Entrance door, upper rail Bread Oven Room elevation
11	Titanium white paint	Titanium white paint	Red paint	Titanium white paint
10				
9	Titanium white paint	Titanium white paint	Yellow paint	Titanium white paint
8 Post 1960			Black paint (fragment only)	
7	Broken white limewash		Broken white limewash	Light brown paint
6		Blued lithopone white paint	Blued lithopone white paint	Dark cream paint on lead white undercoat
5		Broken white limewash	Broken white limewash	Light brown paint
4		Broken white limewash	Broken white limewash	Lead white paint
3			Blued lithopone white paint	Cream paint
2		White limewash	White limewash	<i>Varnish Dark brown meglip glaze Light brown base paint on white and light cream undercoats Imitation timber graining</i>
1 c. 1895-98			White limewash	
Substrate	Orange-red brick	Red brick	Red brickwork	Softwood substrate

Bread Oven Room Entrance Door

Photomicrograph illustrating sample 15 taken from the upper rail of the Bread Oven Room entrance door, showing its painted history. Photographed in cross-section in incident light using a 10X lens. Printed magnification not calculated.



3.2 Toilet Passage

Wall surface

Sample 8 was removed from the south elevation painted brick wall.

Five separate decorations were recorded over a red brick substrate. In the initial two phases, believed to relate to Schemes 4-5, the wall was limewashed white. The second of these schemes was blued a more brilliant shade of white through the inclusion of particles of French ultramarine.

In Scheme 6 the wall was redecorated white, this time using a lithopone-based oil paint. It was subsequently limewashed blued white once more. No further strata were recorded before the existing titanium-white painted decoration was applied.

It is apparent from these findings that the wall experienced significant paint loss in its early and later phases of development. However, during its surviving paint history it followed the stratigraphy pattern established on the Bread Oven Room walls.

3.3 Toilet Cubicle

Wall surface

Sample 9 was taken from the south elevation plastered wall.

Two titanium white painted decorations relating to Schemes 9 and 11 were visible above a plaster substrate. These results suggest that the walls of the Toilet Cubicle were plastered during the late 20th century.

Table 4: Toilet Passage and Cubicle

	Sample 8 Wall, white painted brickwork South elevation Toilet Passage	Sample 9 Plaster wall, South elevation Toilet Cubicle
11	Titanium white paint	Titanium white paint
10		
9		Titanium white paint
8 Post 1960		
7	Blued white limewash	
6	Lithopone white paint	
5	Blued white limewash	
4	White limewash	
3		
2		
1 c. 1895-98		
Substrate	Red brick	White plaster

4. CONCLUSIONS

The south elevation Bread Oven Room wall retained the most extensive paint history, a total of 11 separate phases of decoration over a red brick substrate. This is considered a sufficient number of decoration schemes to date back to the construction of the room between 1895-1898 and indicates that the space was painted in decorative cycles of every 10-15 years.

Although the pigments identified in the paint strata were in common use prior to the construction of the Bread Oven Room and therefore not helpful in dating the introduction of individual schemes, the use of lead, zinc and titanium-based paints assisted in pinpointing when specific decorations were applied. In particular the use of titanium-based paints from Scheme 8 helped identify those phases which were executed from the second half of the 20th century onwards.

When first constructed the walls and oven in the Brick Oven Room were plainly limewashed white and in subsequent phases white coatings, either in the form of limewash or paint, continued to dominate the decoration. Analysis indicates that the presently red painted bread oven lintel was either painted or limewashed white in tandem with the surrounding brickwork for most of its decorative history, only being visually differentiated in Scheme 8, executed at some point after c. 1960. Similarly, the east elevation wall at skirting level – although only retaining strata from Scheme 7 onwards - was also painted white until the existing grey scheme was applied, although one attempt at protection in the form of a shellac coating was noted.

The entrance door into the Bread Oven Room did not display decoration until Scheme 2. This corresponds with documentary evidence which indicates that it was erected by Philip Webb as part of his alterations at Warrens at the turn of the 20th century. In contrast to the plain white decorative treatment on the surrounding surfaces, the door was grained in imitation of timber. In subsequent years the door was more simply painted in uniform cream or brown colours before eventually falling into line with the room's white colourway at the end of the 20th century.

Research established that both red and orange-red coloured bricks were employed in the erection of the Bread Oven Room and the oven whilst a more limited survey of the Toilet Passage wall identified red brick. This slight variation in colour was obviously deemed acceptable and supports the theory that the brickwork surfaces were originally intended to be limewashed.

The findings relating to the east elevation wall below the embedded timber lintel are interesting. Instead of a red or orange-red brick substrate, a yellow stock brick was identified. Furthermore, only the penultimate warm white limewash and the existing white paint finishes were present on

the sample. These results indicate that disturbance occurred at the end of the 20th century which most likely involved the infilling of an opening. This contradicts documentary evidence which suggests that Webb was responsible for the blocking up a doorway in this location. However, the use of such an obvious contrast in brick colour would have been unusual for Webb, particularly when his nearby new service wing was being constructed with red bricks and therefore readily available.

Above and to the north of the lintel embedded in the east elevation wall, both the skirting and upper sections of the wall were constructed of red brick. However, neither retained decoration prior to Scheme 7, possibly indicating that this area was either paint stripped or that an original structure such as a piece of built-in furniture was removed at this time.

One physical feature of the Bread Oven Room are the two skins of brickwork, one of which is recessed, forming the west elevation wall adjacent to the bread oven. Analysis identified a hardwood lintel fixed into the front layer of brickwork, whilst the rear skin relied on a brick lintel for support. Floor plans executed by Webb show a door erected in this position, presumably with a door frame fitting into the recess. However, paint research indicates that the inner skin was exposed and decorated from the original construction phase onwards, bringing into doubt whether a door was ever inserted. Furthermore, the hardwood lintel did not record decoration until Scheme 3 suggesting that it was either paint stripped at this point, introduced at a later date to improve on the structural integrity of the front skin of brickwork or simply not painted for its initial two phases of development, as it may not have been considered appropriate or visually desirable to limewash this element in unison with the surrounding brickwork.

The Toilet Passage wall was similarly decorated to the adjacent Bread Oven Room, although it is evident that it experienced significant paint loss in its early and later phases of development. Furthermore, in the adjacent Toilet Cubicle the brick walls were plastered over in the late 20th century.

Paint research indicates that the Bread Oven Room and the Toilet Cubicle underwent a series of alterations in the 19th and 20th centuries. Whilst documentary evidence strongly suggests that Philip Webb introduced new windows and an entrance door shortly after the construction of this service wing, analysis has pinpointed further changes. It is feasible that during the inter-war period a hardwood lintel was incorporated into the west elevation opening and at the end of the 20th century a doorway between the Bread Oven Room and the room to the east was blocked up and the Toilet Cubicle brick walls were plastered.

Table 5: Decorative History Bread Oven Room, Toilet Passage and Toilet Cubicle

Scheme	Documentary and Physical Evidence	Description
1	<i>c. 1895-98</i> Documentary evidence suggests that the service wing in which the Bread Oven Room, Toilet Passage and Cubicle are sited was constructed at some point between 1895-98. Limewash coatings were identified.	The brickwork walls and bread oven in the Bread Oven Room were plainly limewashed white. No evidence from this period survived on the entrance door or the walls in the Toilet Passage or Cubicle.
2	<i>c. 1900</i> Documentary evidence indicates that the architect Philip Webb undertook minor alterations in the Bread Oven Room and associated toilet spaces which included the insertion of a new entrance door and windows. Lead and oil paints and limewash coatings were identified.	The brickwork walls and bread oven in the Bread Oven Room were re-limewashed white whilst the newly inserted softwood entrance door was grained in imitation of timber. No evidence from this period survived on the walls in the Toilet Passage or Cubicle.
3	Lead and lithopone-based oil paints were identified.	The brickwork walls and bread oven in the Bread Oven Room were painted a brilliant shade of white and contrasted with a cream coloured entrance door. No evidence from this period survived on the walls in the Toilet Passage or Cubicle.
4	Lead-based oil paints and limewash coatings were identified.	The brickwork walls and bread oven in the Bread Oven Room as well as the Toilet Passage walls were limewashed white. The Bread Oven Room entrance door was painted white. No decoration relating to this phase survived on the Toilet Cubicle walls.
5	Zinc-based oil paints and limewash coatings were identified.	The brickwork walls and oven in the Bread Oven Room were re-limewashed white. The lintel embedded within the inner west elevation wall and the entrance door were accented a light shade of brown. The Toilet Passage walls were also limewashed white.
6	Lead and lithopone-based oil paints were identified.	The brickwork walls in the Bread Oven Room and Toilet Passage, as well as the bread oven were painted white. The entrance door into the Bread Oven Room was decorated dark cream whilst the inner west elevation lintel was accented a lighter shade of cream. No evidence from this period survived on the walls in the Toilet Cubicle.

Table 5: Decorative History Bread Oven Room, Toilet Passage and Toilet Cubicle (continued)

Scheme	Documentary and Physical Evidence	Description
7	Zinc-based paints and limewash coatings were identified.	The brickwork walls in the Bread Oven Room and Toilet Passage and the bread oven were limewashed white. In contrast, the entrance door was painted a light shade of brown. No evidence survived on the Toilet Cubicle walls.
8	<i>Post c. 1960</i> Titanium-based paints were identified.	The Bread Oven Room walls were plainly painted white. The oven was also painted white with black accents. The skirting section of the walls were protected from wear and tear with a clear coat of shellac. No other features retained strata from this phase.
9	Titanium-based paints were identified.	The Brick Oven Room walls and entrance door were repainted white. The bread oven was similarly decorated and enhanced with a yellow lintel above the oven opening. Analysis indicates that the Toilet Cubicle walls were plastered as part of this phase and also painted white.
10	Limewash coatings were identified.	There is evidence to suggest that an opening in the east elevation wall was bricked up at this time. The Bread Oven Room walls were then limewashed a warm shade of white. No other features retained decoration from this period.
11	Titanium-based paints were identified.	In the existing scheme the wall surfaces in all three rooms were plainly painted white. The bread oven was also decorated white but with red painted accents. The skirting section of the Bread Oven Room walls was differentiated for the first time and painted grey.

Appendix 5.1 Sample list

Sample number	Element	Area	Number of fragments	Block number
1	Bread oven, white painted brickwork	Bread Oven Room	(2)	WAR.BOR.1
2	Bread oven, white painted brickwork	Bread Oven Room	(2)	
3	Bread oven, red painted lintel	Bread Oven Room	(2)	
4	Timber lintel, wall opening, outer skin, west elevation wall	Bread Oven Room	(2)	WAR.BOR.2
5	Wall, outer skin, white painted brickwork, west elevation	Bread Oven Room	(2)	
6	Door lintel, inner skin, white painted brickwork, west elevation	Bread Oven Room	(2)	
9	Wall, painted plaster, south elevation	Toilet Cubicle		
7	Wall, inner skin, white painted brickwork, west elevation	Bread Oven Room		WAR.BOR.3
8	Wall, white painted brickwork, south elevation	Toilet Passage	(2)	
10	Wall, white painted brickwork, south elevation	Bread Oven Room	(2)	
11	Wall, white painted brickwork, east elevation	Bread Oven Room		
12	Wall, white painted brickwork, above timber lintel, east elevation	Bread Oven Room		WAR.BOR.4
14	Skirting, grey painted brickwork, east elevation	Bread Oven Room	(2)	
15	Entrance door, upper rail	Bread Oven Room	(2)	

Appendix 5.2

Sample Location Photographs





