

Historic Brickwork in East Anglia: recording jointing and pointing finishes. Pilot Study.



Simon Swann Associates Ltd.

Participants:

- Simon Swann
- Gráinne Swann
- Mark Wilson

Funding:

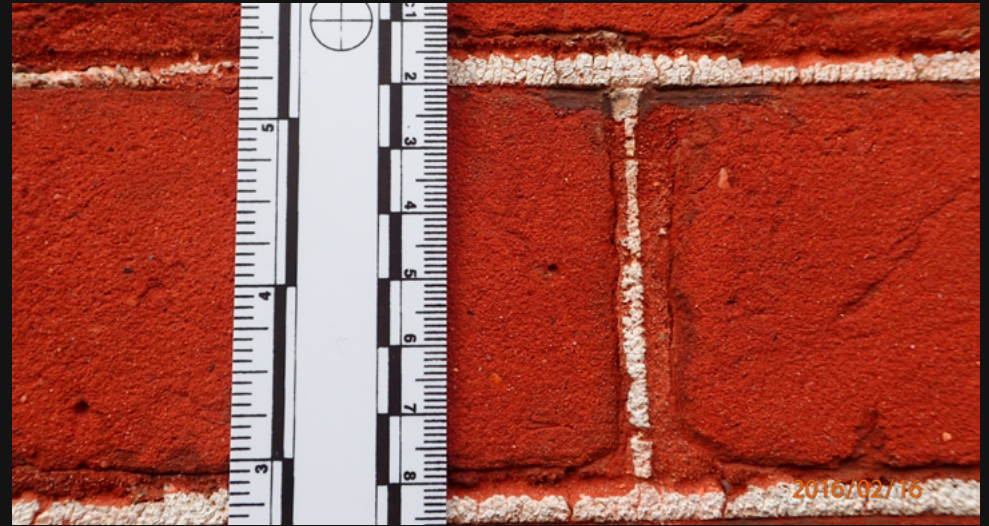
- Historic England





Aims and objectives

- Accurately record jointing and pointing finishes and associated surface treatments which are subject to attrition from processes such as weathering, building alteration and re-pointing.
- Literature search.
- To develop a methodology and protocol for recording these finishes.
- To provide an illustrated glossary of the types of joint finish.
- To explore options for analysis of these mortars and colour washes, from highly technical analysis through to simple observation.
- Provide a final report and disseminate the results.

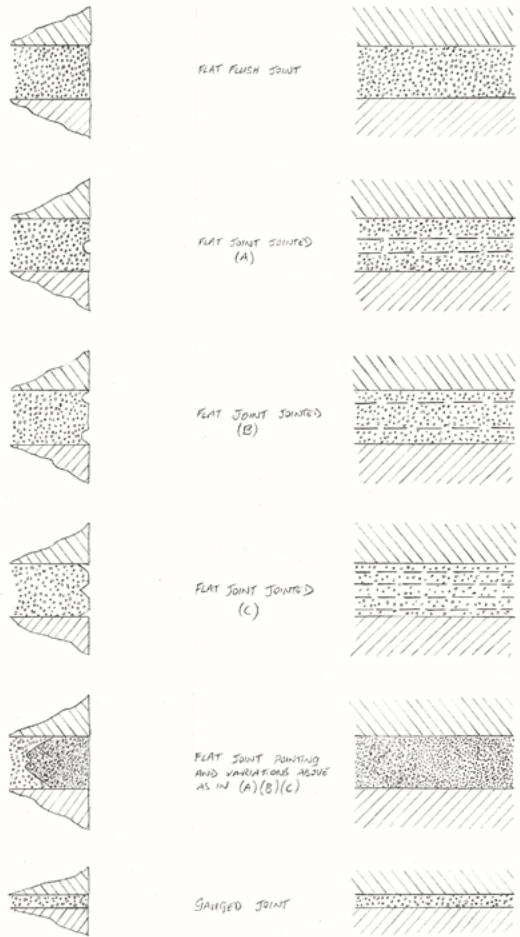




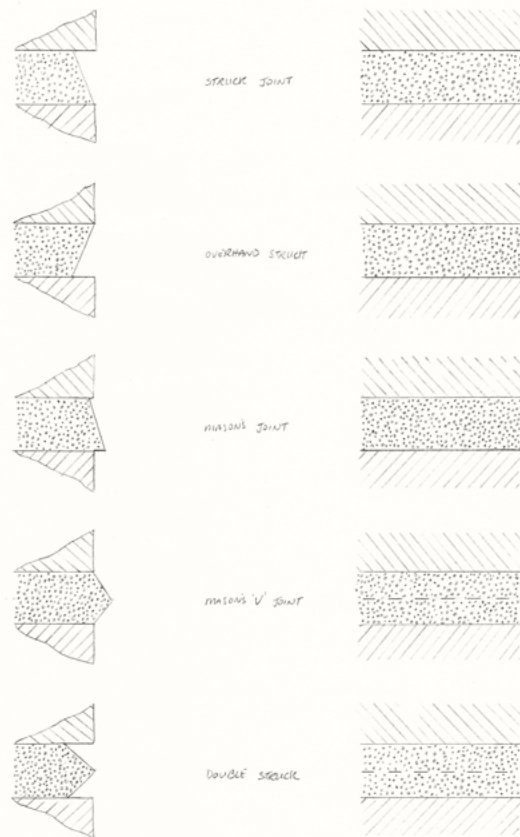
2017/08/24

Jointing Glossary

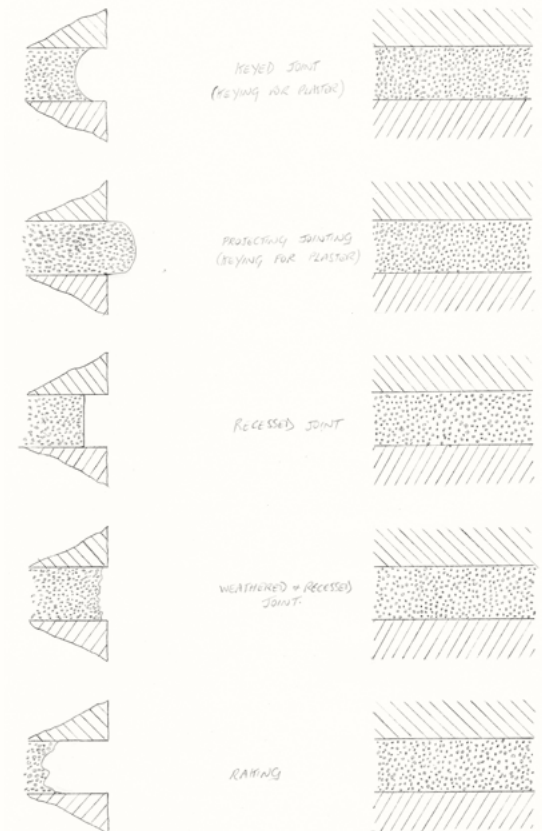
FLUSH JOINTS AND FLUSH JOINTS STRUCK AND VARIATIONS



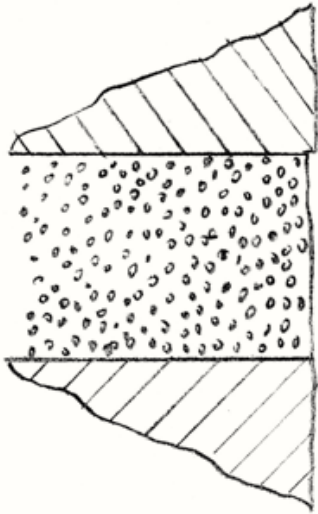
STRUCK JOINTS



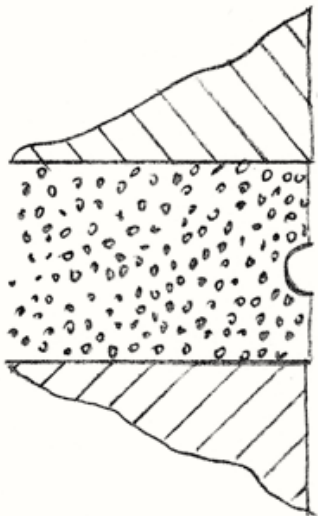
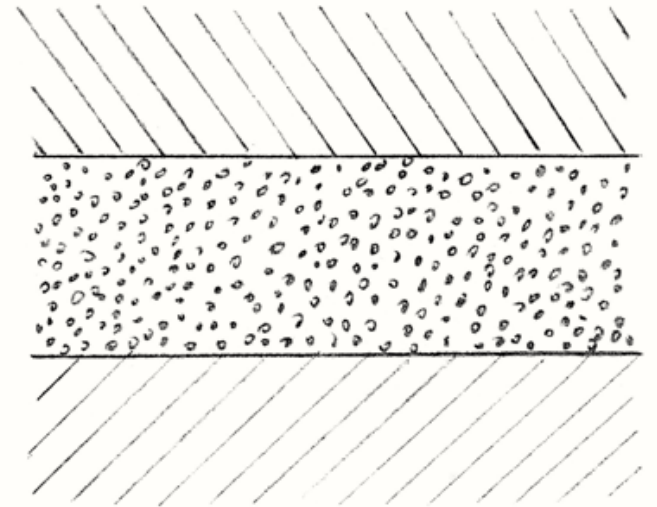
KEYED, RECESSED AND OTHER JOINTS.



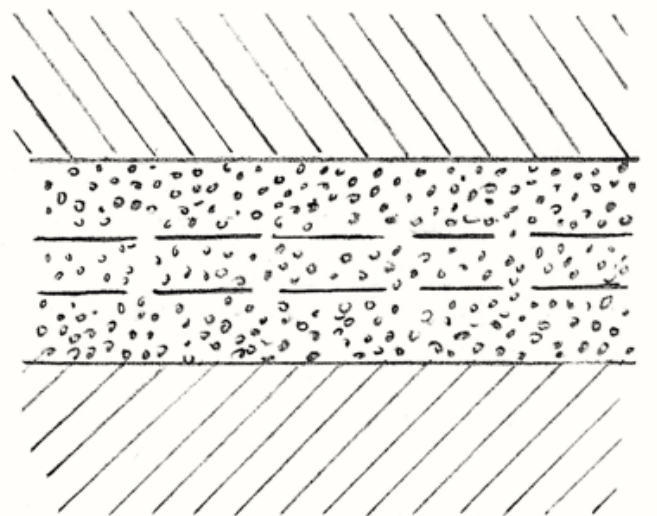
FLUSH JOINTS AND FLUSH JOINTS STRUCK AND VARIATIONS



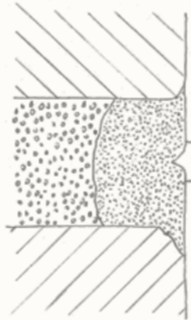
FLAT FLUSH JOINT



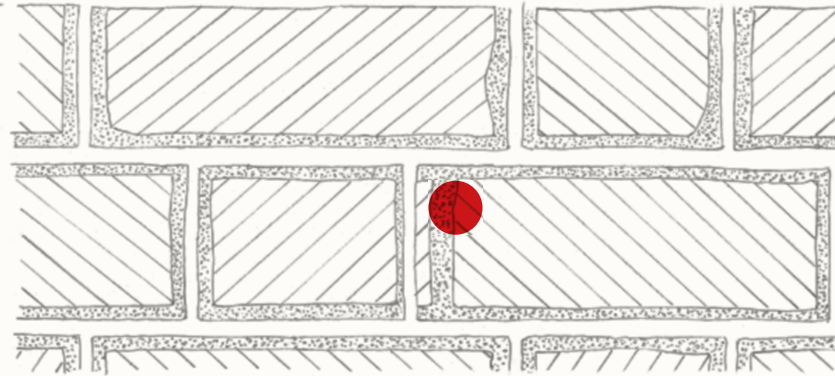
FLAT JOINT JOINTED
(A)



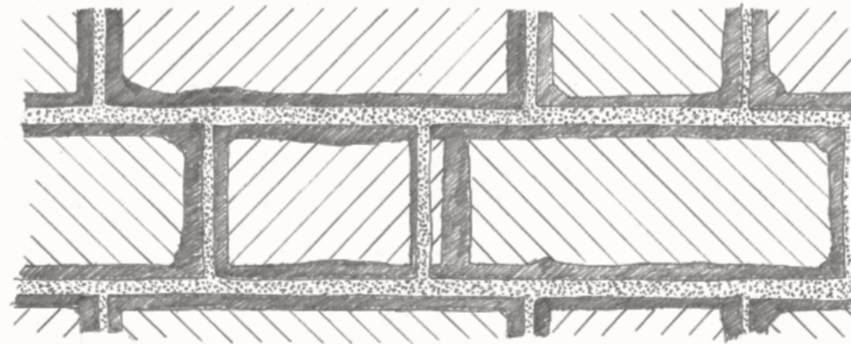
Pointing Glossary Tuck pointing, wiggging and bastard tuck



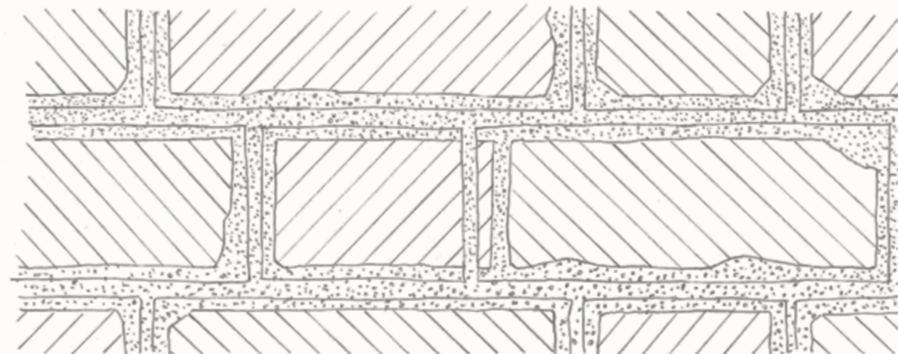
TUCK POINTING



WIGGING



BASTARD OR HALF
TUCK POINTING



Survey Forms Interior, elevation, 'walk-round'

7491 Historic Brickwork in East Anglia

Document 3: Detailed Recording Summary sheet:

Summary record sheet for detailed recording of jointing and Pointing finishes; suitable for both exterior elevations. (Used in conjunction with detailed record sheets).

Survey date: dd/mm/yy	Surveyor's name
House/building Name and full address	
Building type or purpose: i.e. terraced house, church, chapel, industrial building, timber framed house.	
Date of building if known, or approximate date.	
Has a "Detailed Record Sheet A" or a Tuck, Wig or Bastard Tuck record sheet been completed?	
Please give details of type of sheet and number of sheets.	
Has a photo record been completed? Tick where appropriate in adjacent box.	General elevation or building exterior (if an interior area is being recorded). General photo of area/elevation being recorded (if different from above)
Photo specification: 10 megapixel camera or greater (DSLR if possible), set on maximum definition, and saved in jpeg or tiff format	Close up detail of pointing with scale rule. Close up detail of colour wash/pigments or other details. Image of any relevant detailing.
Further information on building or area being recorded.	
a. Is the building listed or have other designation?	
b. Are you aware of any of sources of information on the building, reports, surveys or references?	
c. Please add any other relevant information.	

7491 Historic Brickwork Jointing and Pointing Survey Document 2: General Record Sheet for Exterior Elevation Survey.

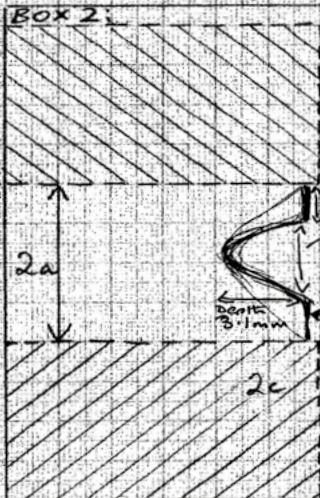
Survey Date: dd/mm/yy	Surveyor's name:
House/building name, number, full postal address and national grid reference:	
Building type i.e. terraced house, number of storeys (2 storey means groups and first floor) industrial, ecclesiastical, chapel, other etc.	
Date of building (give approximate date if known):	
Identify the area surveyed with orientation: i.e. principal south elevation etc.	
Give a simple description of the elevation including principle masonry materials, any surface patterning (dark headers or colour variations), polychrome brickwork etc. Or the range of bricks used such as gauged bricks, voussoirs or quoins. Stone dressings etc.	
Identify principle brick joint finishes from the illustrated glossary and include more than one if appropriate.	
Note where these are located:	
Are there un-weathered examples? If yes where are these located?	
Is there evidence of colour wash or other treatments? If yes describe this giving colour and details:	
Has an area of un-weathered surface/joints been inspected? If yes where describe:	
Brick bond and any variation: Brick type and any variation:	

Walk Round Survey Sheet

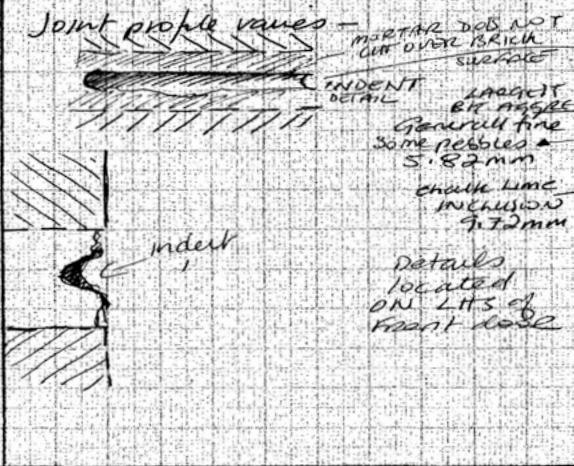
Name of Town/Village:	Date:	Name of recorder:	
Address	Type of Pointing	Notes: Date of bldg./brick colour/type of bldg. etc	Photos taken

DETAILED RECORD SHEET A
SCAN A

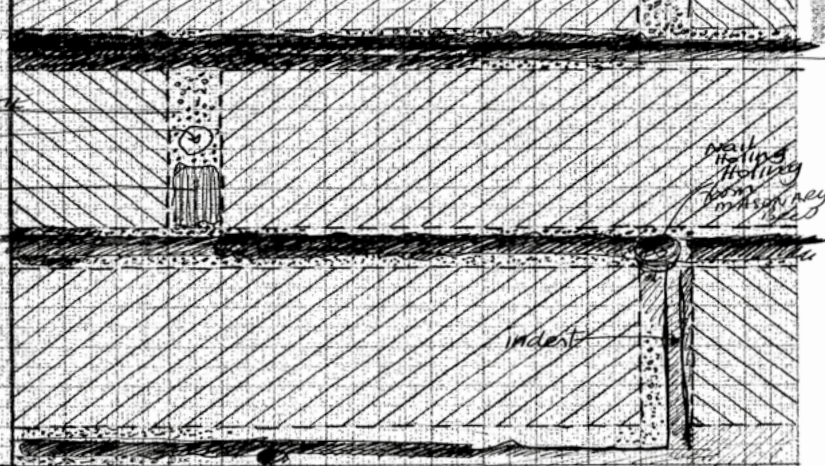
BOX 1: JOINT TYPE:



BOX 3: REFER TO DETAILED RECORDING NOTES



BOX 4:

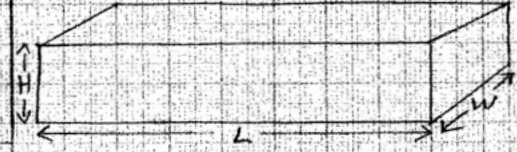


SURVEY DETAILS: SEE APPROPRIATE RECORDING NOTES INCLUDING RECOMMENDATIONS FOR PHOTOGRAPHIC RECORDING

BUILDING IDENTIFICATION
 *SITE NAME / ADDRESS;
 RAVERSMERE HOUSE
 OLD MARKET / HONGATE
 WCCLEYS
 NE34 9DZ
 *LOCATION OF DETAILED RECORD
 WEST ELEVATION
 LEFT SIDE OF DOOR CASE
 *NAME OF RECORDER
 G. SWANN
 M. WILSON
 S. SWANN
 *DATE OF RECORD
 (DATE / MONTH / YEAR)
 21st August 2017

BOX 2: 2: PROVIDE DETAILED SKETCH WITH MEASUREMENTS IN MMS OF JOINT PROFILE.
 2a: RECORD HEIGHT OF BED JOINT = 9.21mm
 2b: MEASURE AND RECORD PROJECTIONS AND INDENTS - indent = 3.1mm - indent varies - 5.15mm
 2c: DRAW IN THE APPROPRIATE PROFILE OF THE BRICK. NOTE ANY "BUTTORING" OVER OF DAMAGED BRICKS WITH MORTAR.
 BOX 3: REFER TO DETAILED RECORD NOTES FOR JOINT TYPE
 BOX 4: RECORD WIDTH OF PERPEND JOINTS (AVERAGE).
 * SKETCH DETAILS OF THE BED AND PERPEND JUNCTIONS.
 * NOTE TREATMENT TO BRICK PARISES (VISIBLE OR BUTTORRED OVER).
 * INDICATE REGULARITY OF JOINT TREATMENTS. ARE LINES RULED OR IRREGULAR.
 * LOCATION TYPE AND COLOUR OF COLOUR WASHES AND PENCILING. Remnants of a white colouring evident - possibly lime wash - chalk / lime inclusions.
 * NOTE SURFACE TEXTURE AND COLOUR OF JOINTING MORTAR. Lumps - but generally fine mortar.
 * NOTE COLOUR OF CONSTRUCTION MORTAR IF DIFFERENT FROM SURFACE JOINTING (IF VISIBLE). Colours same as pointing mortar - chalky white.

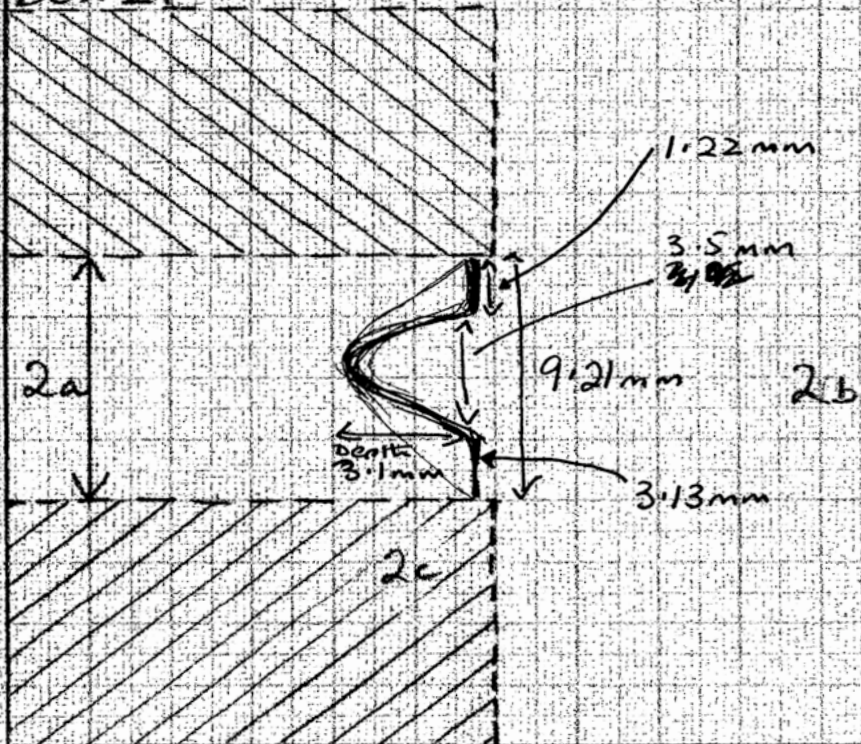
BOX 5: BRICK DETAILS



BRICK DIMENSION: L = 8.9"
 W = Difficult to record approx. 4"
 H = 2.14"
 BRICK COLOUR: Polychrome brick - all headers are dark faced. STRETCHERS ARE ORANGE BRICK with general meaner accent at lower levels.
 BRICK GAUGE: 270mm
 BRICK BOND: FLEMISH
 BRICK TYPE: ORANGE COLOUR - STRETCHERS
 vitrified BRICK

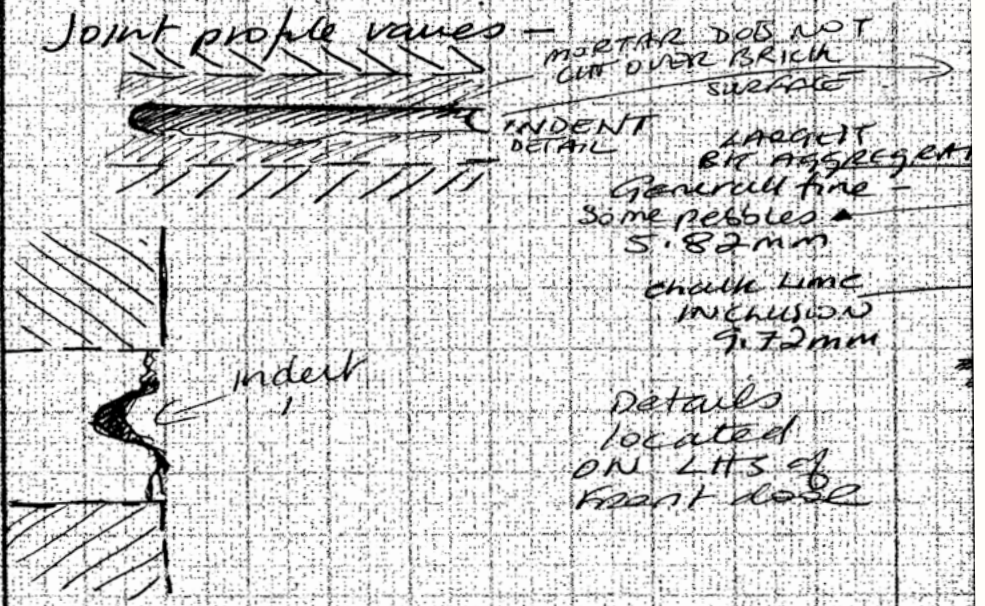
DETAILED RECORD SHEET A
SCAN A

BOX 2:



BOX 1: JOINT TYPE:

BOX 3: REFER TO DETAILED RECORDING NOTES



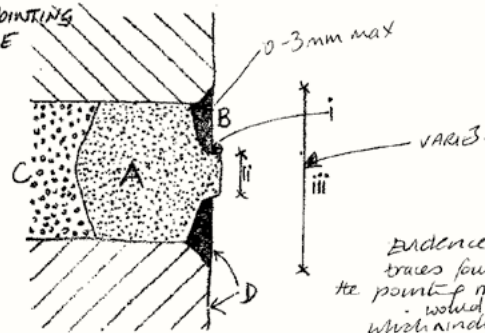
Details located ON LHS of front face



SCAN C

WIG POINTING RECORD SURVEY SHEET 7491 HISTORIC BRICKWORK EAST ANGLIA.

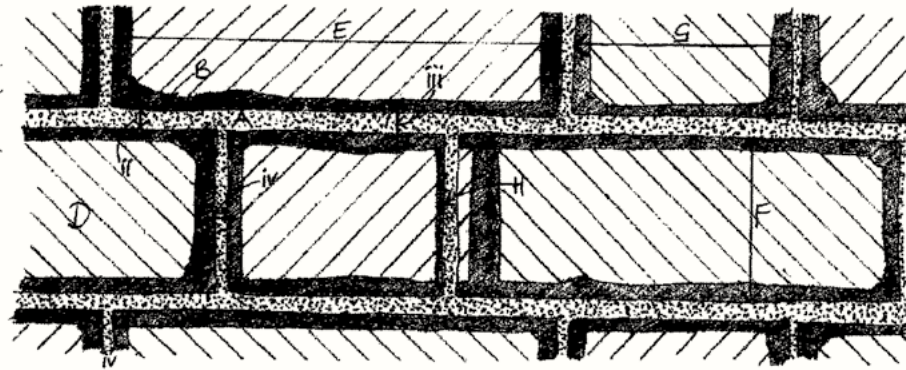
WIG POINTING PROFILE



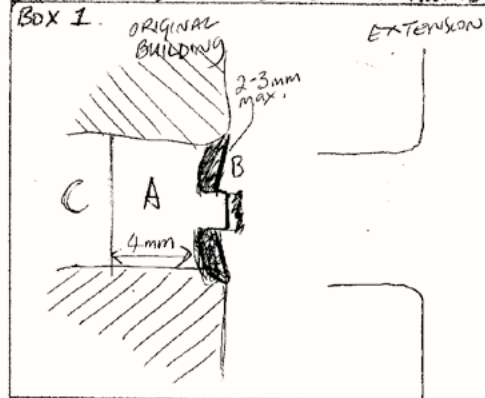
Evidence of pigment traces found behind the pointing mortar which indicates a red wash was on the surface before the wig pointing with wire.

CROSS SECTION

WIGGING ELEVATION



PROVIDE DETAILED MEASURED SKETCH OF PROFILE



MORTAR COLOUR	MEASUREMENTS IN MM'S:	SETTING OUT: (TAKE 3 MEASUREMENTS FOR EACH DIMENSION)
A. POINTING MORTAR: WHITE	0.87 mm 0.48 mm 1.12 mm 0.90 mm	E. WIDTH BETWEEN STRETCHER PERPEND RIBBONS E1. 220 mm E2. 228 mm E3. 235 mm
B. STOPPING MORTAR: RED	5.79 mm 6.05 mm 5.21 mm	F. HEIGHT BETWEEN "BED" JOINT RIBBONS F1. 58.2 mm F2. 59.8 mm F3. 62.4 mm
C. BEDDING MORTAR (IF VISIBLE) <i>check colour slightly max beige in colour than pointing mortar</i>	7.57 mm 4.62 mm	G. WIDTH BETWEEN HEADER PERPEND RIBBONS G1. 109 mm G2. 110.5 mm G3. 110.6 mm
D. PIGMENT WASH (IF PRESENT) <i>NONE PRESENT</i>	4.7 mm 4.4 mm 3.4 mm	H. ARE FAUX JOINTS PRESENT? <i>definitely present in extension (southern) score lines there are in the brick work to plumb the perpend into the face of the butt-p.</i>
NOTE: BRICK COLOUR: ORANGE/RED	NOTES: measurements vary lime rich with <i>pointing</i> mortar with horizontal cracking & very fine sand aggregate	

SITE NAME / ADDRESS:
32, BLYBURGH GATE
BECCLES

LOCATION OF DETAILED RECORD:
FRONT (ROAD) ELEVATION.
EAST ELEVATION.

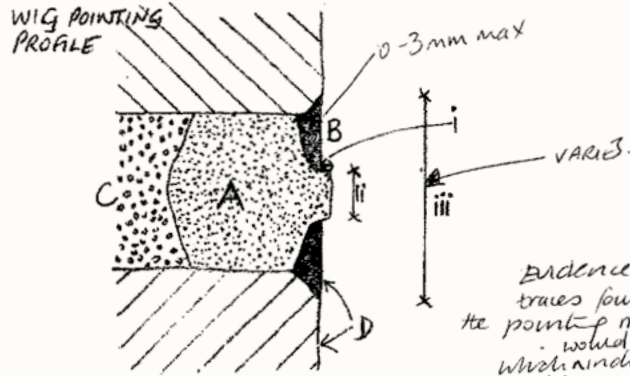
NAME OF RECORDER:
MARK WILSON
SIMON SWANN
GRAEME SWANN

DATE OF RECORD: (DATE / MONTH / YEAR)
21.08.2017

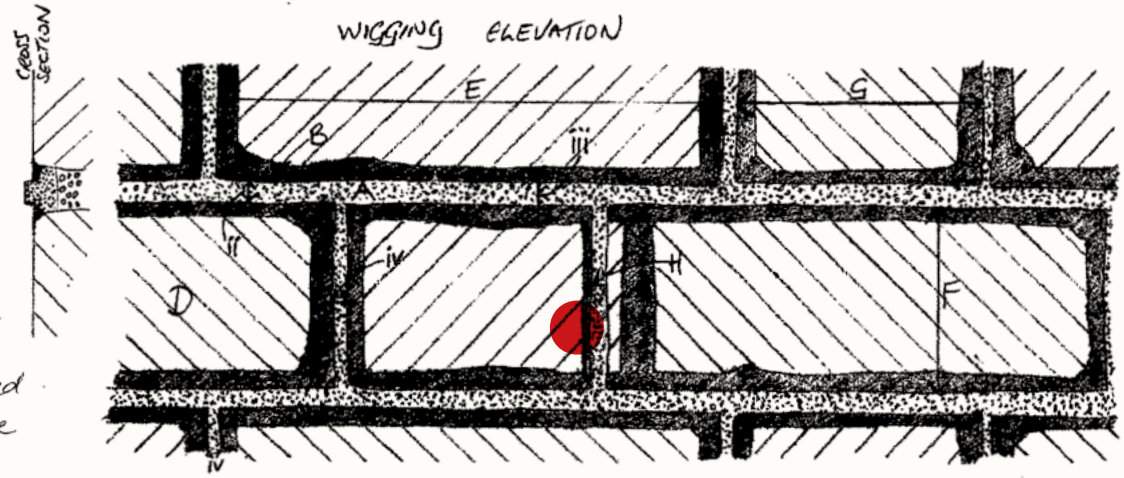
PHOTOGRAPHIC RECORD CHECKLIST:	GENERAL NOTES: RECORD:	BRICK DETAILS:
• GENERAL ELEVATION PHOTO	• DEPTH OF STOPPING MORTAR (B) (IF VISIBLE) AT DEEPEST MEASUREMENT. BOX 1. = 1.2 mm 2.6 mm	DIMENSIONS (IF READABLE) LENGTH: 8 3/4" - 9" HEIGHT: 2 1/4" DEPTH: 4" - 4 1/4"
• CLOSE UP DETAIL OF POINTING WITH SCALE RULE	• EVIDENCE OF EARLIER JOINT FINISH BENEATH STOPPING MORTAR (IF VISIBLE) BOX 1. - NO EVIDENCE of earlier joint	BRICK COLOUR: ORANGE/RED
• CLOSE UP DETAIL OF PIGMENTS AND OTHER DETAILS	• RECORD TREATMENT TO ARCH AND OTHER DETAILING (PHOTO EVIDENCE)	BRICK GAUGE: 1 1/4" (on extension) 1 1/2" (on original building)
• JOINT TREATMENT TO ARCHES AND OTHER DETAILS	• CHECK PLUMBS OF PERPEND AND LEVEL OF BED JOINT RIBBONS. (NOTE BELOW) <i>the reveal between the window frame & face of brick work = 5.6 mm</i>	BRICK BOND: Flemish Flemish
	• Rubbed and gauged brick work. Flat + camber arch with gauged joint joints	BRICK TYPE: HAND MADE (RED) HAND MADE (RED)

SCAN C

WIG POINTING RECORD SURVEY SHEET 7491 HISTORIC BRICKWORK EAST ANGLIA.



Evidence of a pigment wash found behind the pointing mortar which indicates a red wash was on the surface before the wig pointing was done.



PROVIDE DETAILED MEASURED SKETCH OF PROFILE

BOX 1. ORIGINAL BUILDING 	EXTENSION 	MORTAR COLOUR A. POINTING MORTAR: WHITE B. STOPPING MORTAR: RED C. BEDDING MORTAR (IF VISIBLE): CHALK colour slightly max beige in colour than pointing mortar D. PIGMENT WASH (IF PRESENT): NONE PRESENT	MEASUREMENTS IN MM'S: i PROJECTION OF "RIBBON": 0.87mm, 0.148mm, 1.12mm, 0.90mm (VARIES) ii HEIGHT OF "BED RIBBON": 5.79mm, 6.05mm, 5.21mm (VARIES) iii HEIGHT OF BED JOINT: 7.57mm, 4.62mm iv WIDTH OF PERPEND "RIBBON": 4.7mm, 4.4mm, 3.4mm	SETTING OUT: (TAKE 3 MEASUREMENTS FOR EACH DIMENSION) E. WIDTH BETWEEN STRETCHER PERPEND RIBBONS: E1 220mm, E2 228mm, E3 235mm F. HEIGHT BETWEEN "BED" JOINT RIBBONS: F1 58.2mm, F2 59.8mm, F3 62.4mm G. WIDTH BETWEEN HEADER PERPEND RIBBONS: G1 109mm, G2 110.5mm, G3 110.6mm
		NOTE: BRICK COLOUR: ORANGE/RED	NOTES: measurements vary lime rich with strong pointing mortar with horizontal cracking & very fine sand aggregate	H. ARE FAUX JOINTS PRESENT? ^{definitely present in extension} ^(southern extension) evident in the brick work to plumb the building: perpend into the face of the building.
SITE NAME / ADDRESS:		PHOTOGRAPHIC RECORD CHECKLIST:	GENERAL NOTES: RECORD:	BRICK DETAILS:





2016/02/16



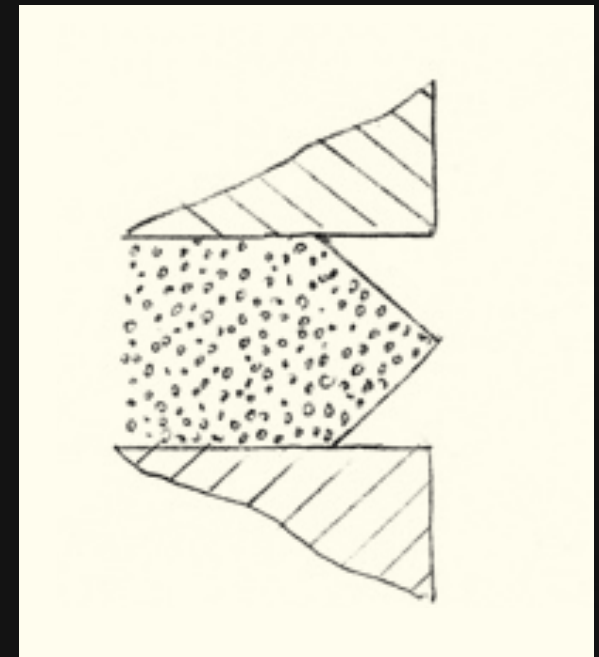
2017





Fireplace in timber-framed building with ruddled brickwork and flush, or under struck, jointing. Probably 16th c.





Sixteenth century porch to Borley church, Essex. Interior double struck jointing, ruddled with surviving thin render 'imitation stone' detailing to window jambs.

Conclusion

- Recording existing survivals from the c16th to the early c20th
- Relating evidence to available historic texts and other research (such as the work of Timothy Easton in East Anglia)
- Understanding materials and colours through analysis
- Starting to understand processes used to replicate joints
- Providing detailed records to inform re-pointing procedures, and some initial comments on conservation approaches
- Disseminating both recording methodology and pilot study findings