

DETAILS OF ROOF TRUSS CONNECTIONS - SHEET 4 OF 8
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.10: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF TRUSS SURVEYED NOT TO SCALE

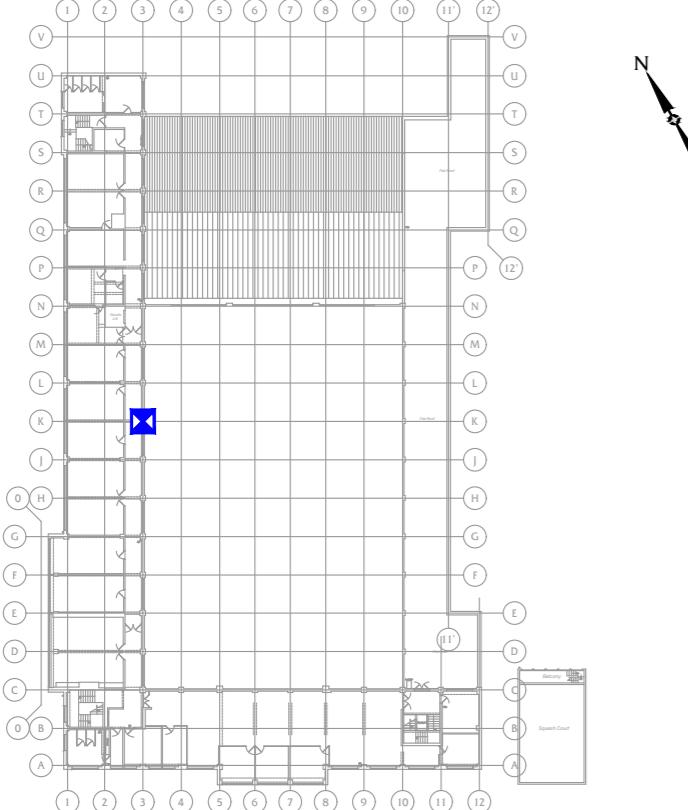


FIG.12: PART ELEVATION LOOKING WEST SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS END CONNECTION - SURVEY AREA K3 SCALE 1:10

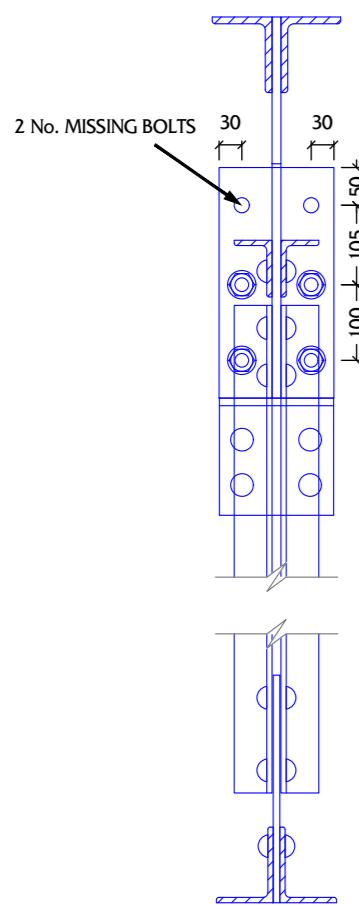
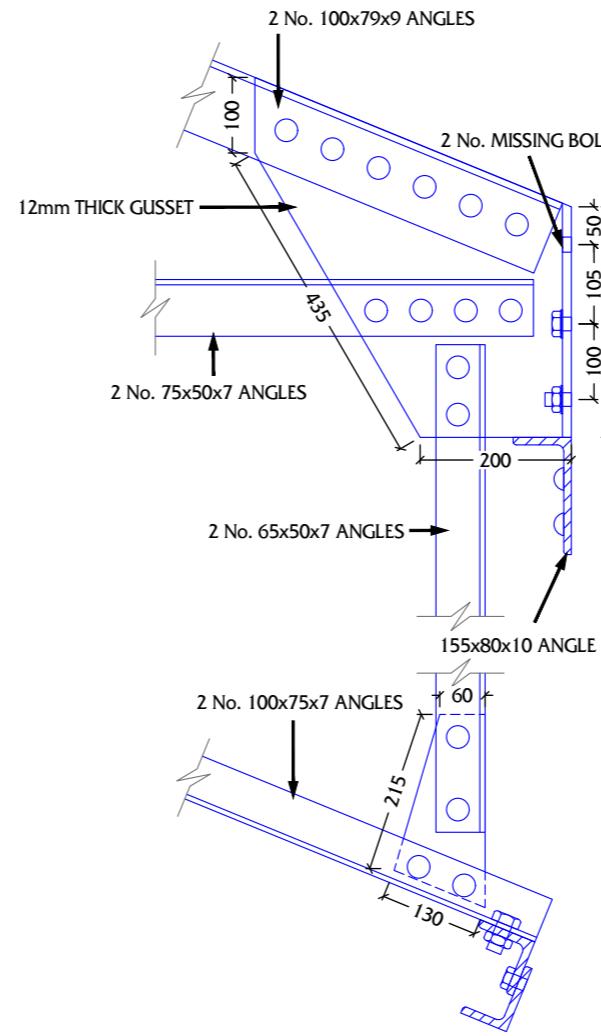


FIG.11: PART ELEVATION LOOKING SOUTH SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS END CONNECTION - SURVEY AREA K3 SCALE 1:10



NOTES

STEELWORK GENERALLY EXHIBITS LIGHT SURFACE CORROSION WHERE EXPOSED.
GUSSET PLATE BELOW TOP CHORD EXHIBITS MODERATE SURFACE CORROSION WHERE EXPOSED.
RIVETS APPEAR TO BE IN POOR CONDITION COMPARED TO ELSEWHERE.
LOSS OF SECTION TO ANGLE SUPPORTING TOP GUSSET.
LOTS OF VEGETATION GROWING THROUGH BRICKWORK.
BRICKWORK MORTAR IS SOFT AND EASILY BROKEN OUT.



P11a: BOTTOM CONNECTION OF TRUSS K3



P11b: TOP CONNECTION AT TRUSS K3

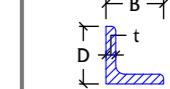
AERIAL VIEW OF SITE



SYMBOLS USED

	MATERIAL TYPES
PLAN EXTENT OF BUILDING SURVEYED	STEELWORK
ROOF TRUSS INVESTIGATED	
STEELWORK	

STEEL MEASUREMENT DETAILS (ANGLE)



PROJECT DETAILS
GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)



ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF ROOF TRUSS CONNECTIONS
SHEET 4 OF 8

Drawn HW Date SEP 20 Scale AS SHOWN
CAD PM APP

Dwg. No. 4689-TR4



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DETAILS OF ROOF TRUSS CONNECTIONS - SHEET 5 OF 8
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.13: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF TRUSS SURVEYED NOT TO SCALE

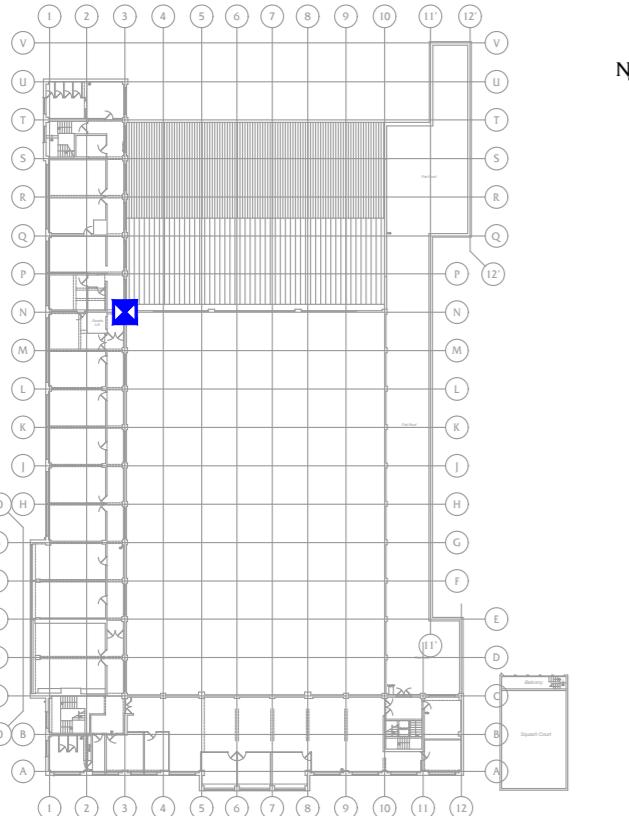


FIG.14: SCHEMATIC ELEVATION SHOWING BEAM / CHANNEL LAYOUT - SURVEY AREA N3 NOT TO SCALE

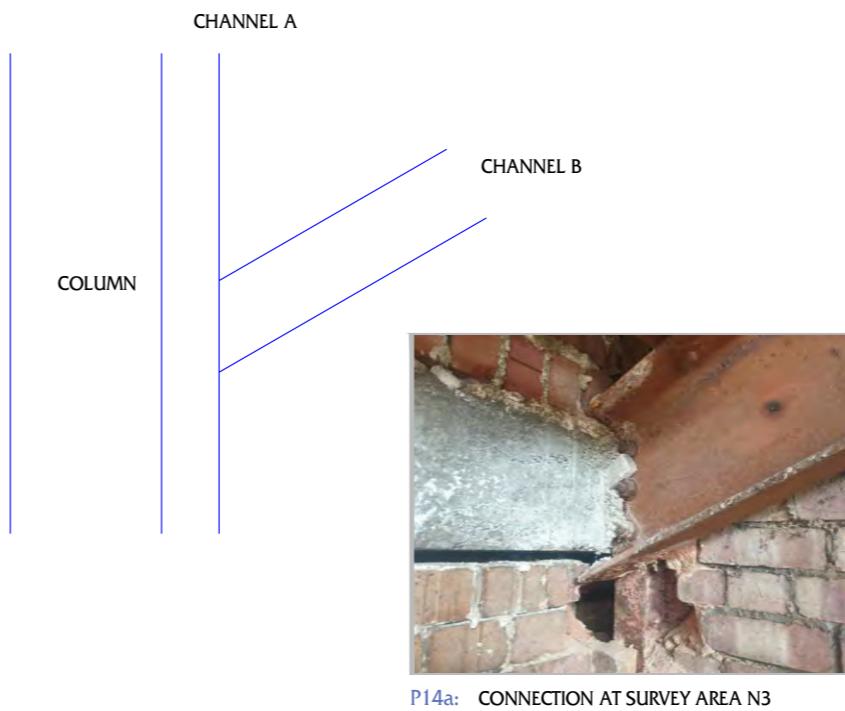


FIG.15: PART PLAN SHOWING SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS ELEMENTS SURVEYED - SURVEY AREA N3 SCALE 1:10

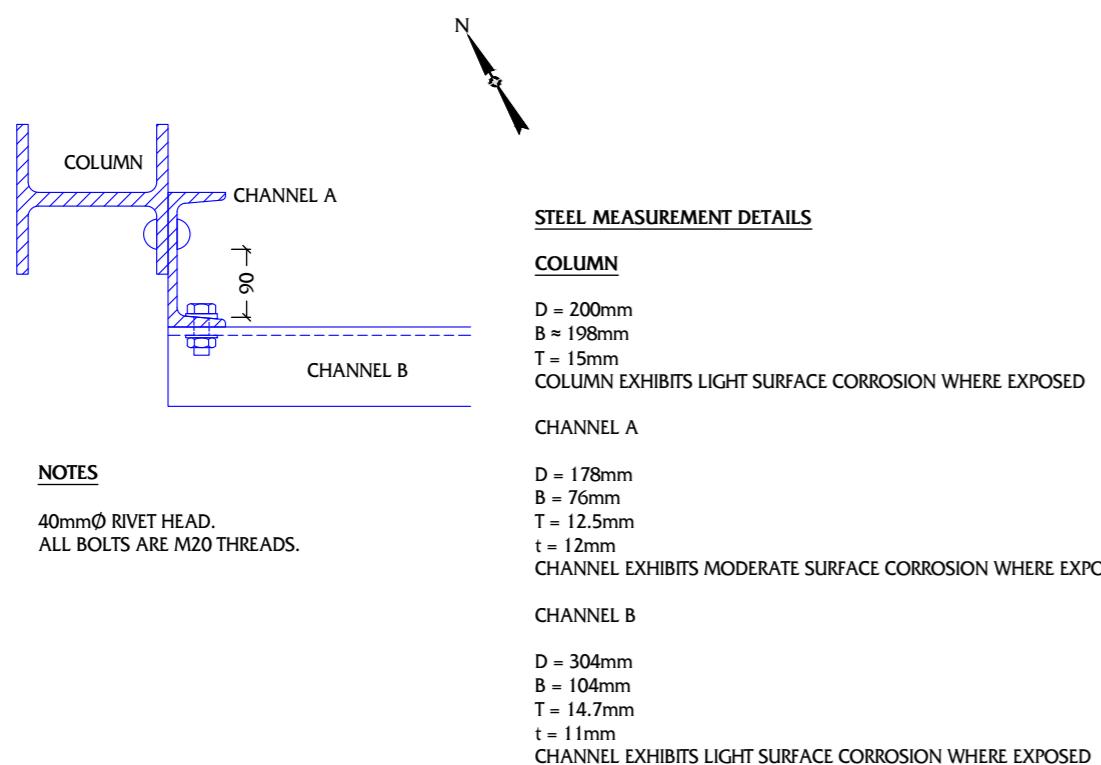
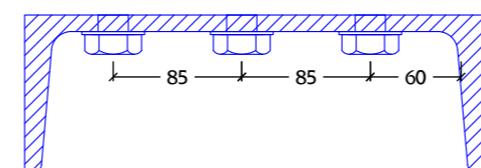


FIG.16: PART SECTION THROUGH CHANNEL B SHOWING BOLT SPACINGS - SURVEY AREA N3 SCALE 1:5



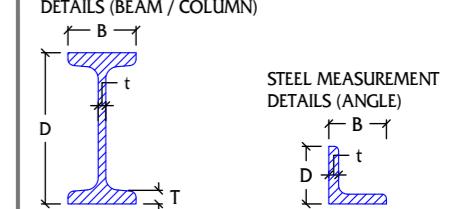
AERIAL VIEW OF SITE



SYMBOLS USED

MATERIAL TYPES	
PLAN EXTENT OF BUILDING SURVEYED	STEELWORK
ROOF TRUSS INVESTIGATED	
STEELWORK	

STEEL MEASUREMENT DETAILS (BEAM / COLUMN)



STEEL MEASUREMENT DETAILS (ANGLE)



PROJECT DETAILS

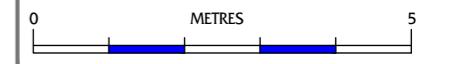
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LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

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AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)



ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF ROOF TRUSS CONNECTIONS SHEET 5 OF 8

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DETAILS OF ROOF TRUSS CONNECTIONS - SHEET 6 OF 8
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.17: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF TRUSS SURVEYED NOT TO SCALE

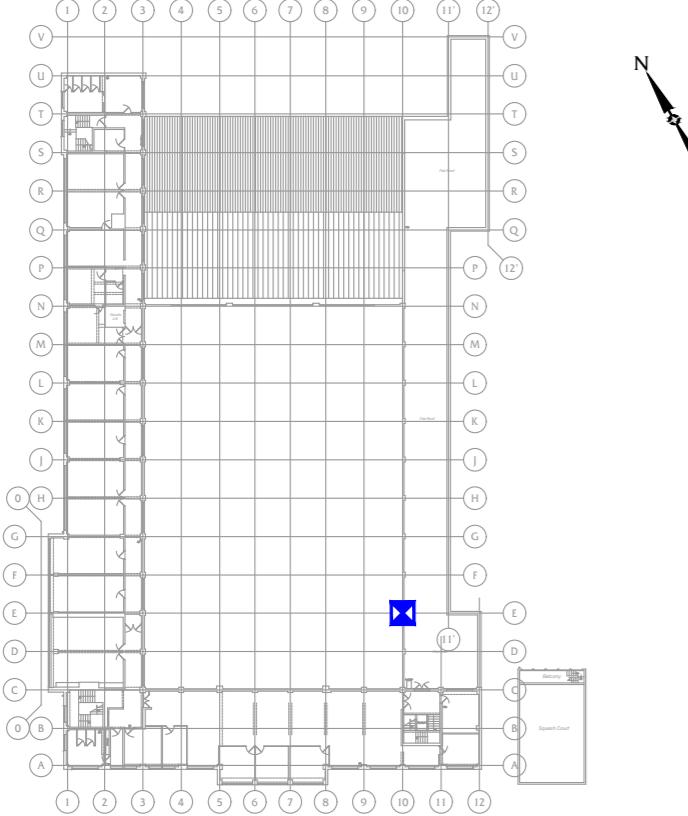


FIG.18: PART ELEVATION LOOKING SOUTH SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS END CONNECTION - SURVEY AREA E10 SCALE 1:10

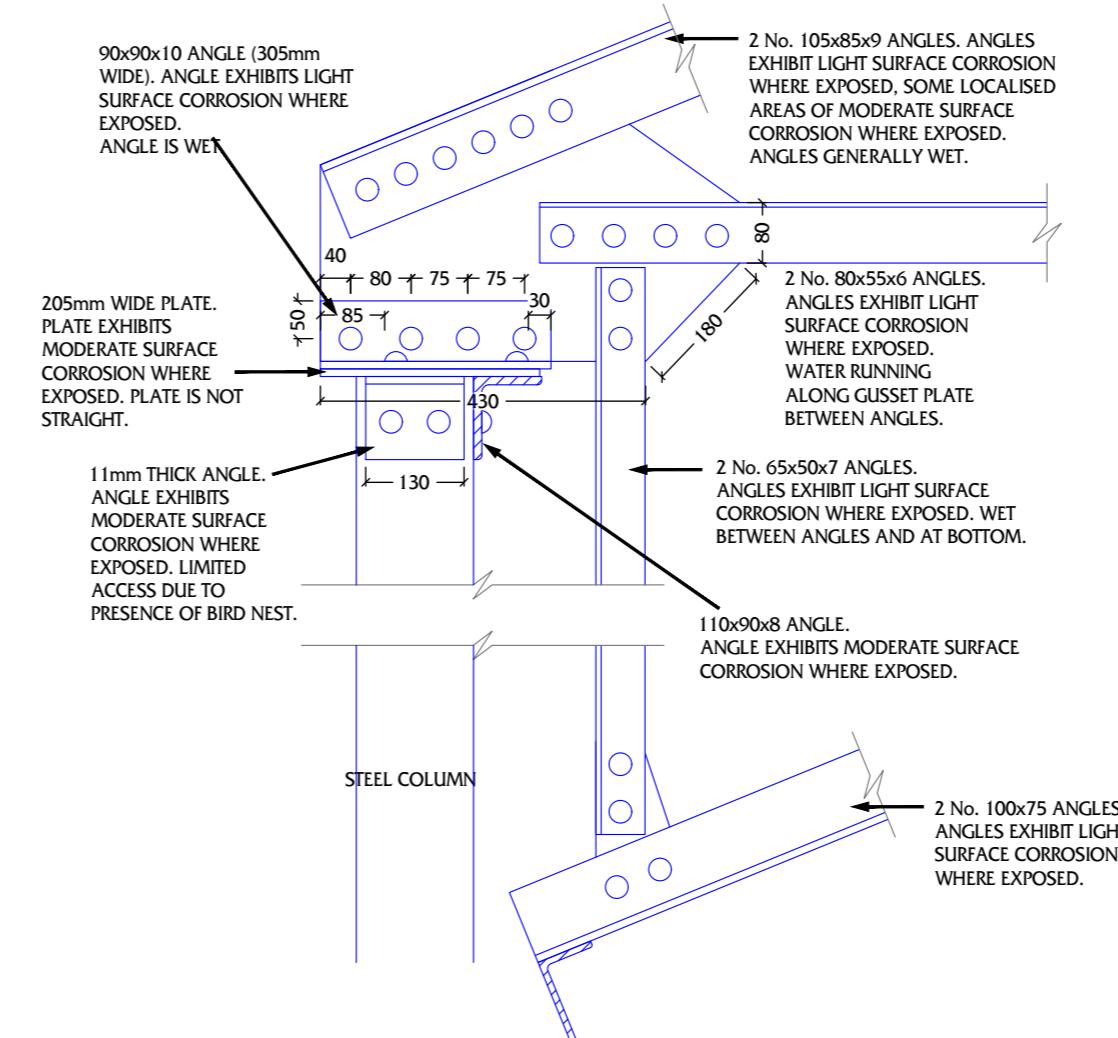
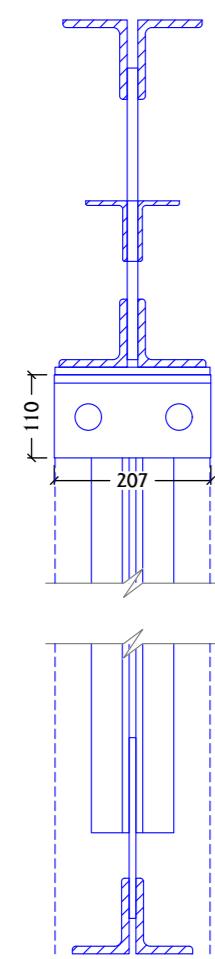


FIG.19: PART ELEVATION LOOKING EAST SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS END CONNECTION - SURVEY AREA E10 SCALE 1:10



P18a: TRUSS E10



P18b: BOTTOM CONNECTION OF TRUSS E10



P18c: TOP CONNECTION AT TRUSS E10

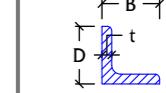
AERIAL VIEW OF SITE



SYMBOLS USED

	MATERIAL TYPES
PLAN EXTENT OF BUILDING SURVEYED	STEELWORK
ROOF TRUSS INVESTIGATED	
STEELWORK	

STEEL MEASUREMENT DETAILS (ANGLE)



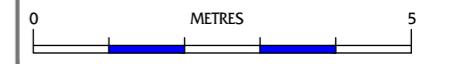
PROJECT DETAILS
GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

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AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)



REF. REVISION DATE
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Client: BARRATT LONDON

Title: DETAILS OF ROOF TRUSS CONNECTIONS
SHEET 6 OF 8

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DETAILS OF ROOF TRUSS CONNECTIONS - SHEET 7 OF 8
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.20: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF TRUSS SURVEYED NOT TO SCALE

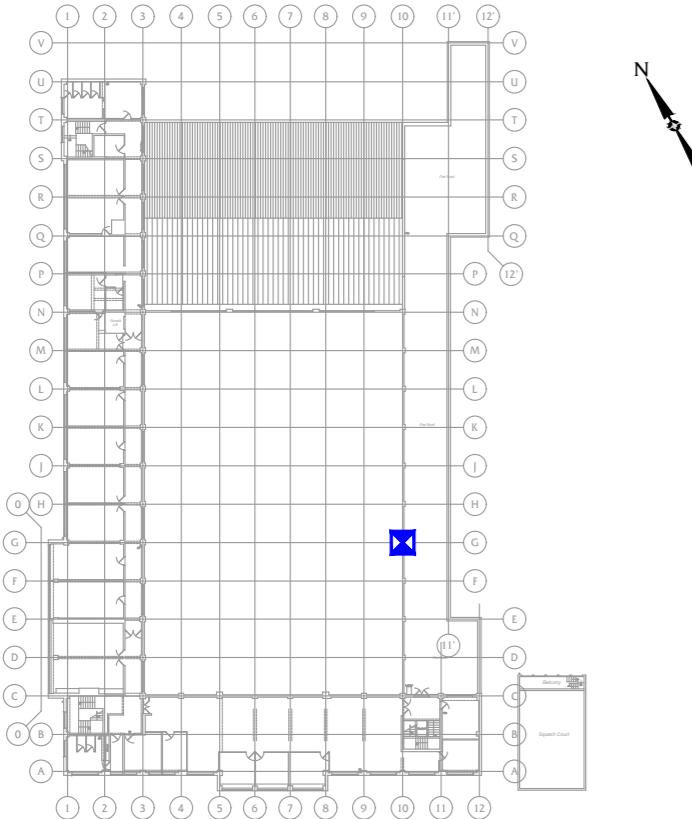


FIG.22: PART ELEVATION LOOKING EAST SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS END CONNECTION - SURVEY AREA G10 SCALE 1:10

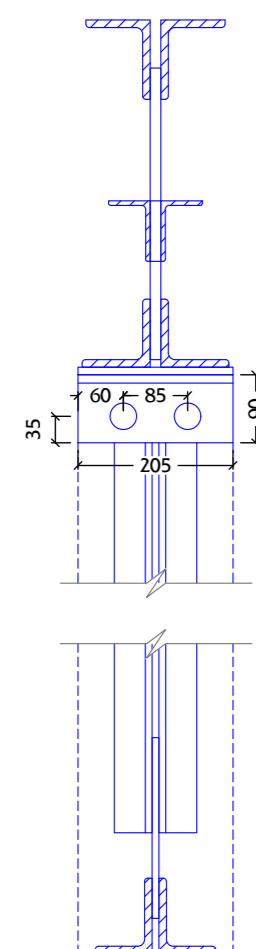
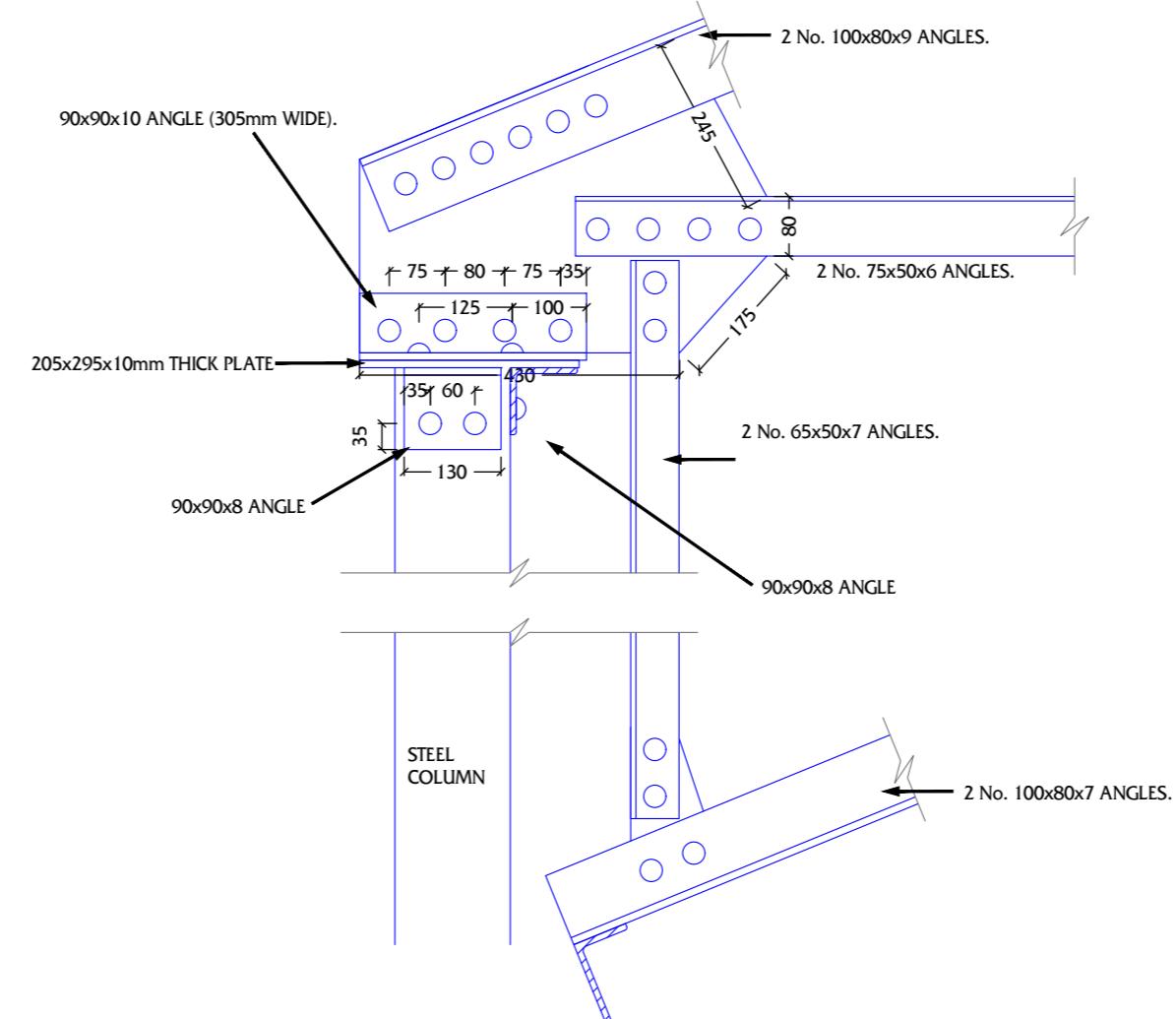


FIG.21: PART ELEVATION LOOKING SOUTH SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS END CONNECTION - SURVEY AREA G10 SCALE 1:10



NOTES

STEELWORK GENERALLY EXHIBITS LIGHT SURFACE CORROSION WHERE EXPOSED.
EVIDENCE OF WATER INGRESS.
CORROSION WHERE EXPOSED IS HEAVIER ALONG TOP OF TOP CHORD AND EDGES OF GUSSET.
EVIDENCE OF PREVIOUS BOLT WITH CORROSION WHERE EXPOSED AROUND WASHER.

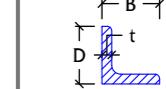
AERIAL VIEW OF SITE



SYMBOLS USED

	MATERIAL TYPES
PLAN EXTENT OF BUILDING SURVEYED	STEELWORK
ROOF TRUSS INVESTIGATED	
STEELWORK	

STEEL MEASUREMENT DETAILS (ANGLE)



PROJECT DETAILS
GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

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REF.	REVISION	DATE
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Client: BARRATT LONDON

Title: DETAILS OF ROOF TRUSS CONNECTIONS
SHEET 7 OF 8

Drawn HW CAD Date SEP 20 PM Scale AS SHOWN APP Dwg. No. 4689-TR7



P21a: TRUSS G10



P21b: BOTTOM CONNECTION OF TRUSS G10



P21c: TOP CONNECTION AT TRUSS G10

DETAILS OF ROOF TRUSS CONNECTIONS - SHEET 8 OF 8
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.23: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF TRUSS SURVEYED NOT TO SCALE

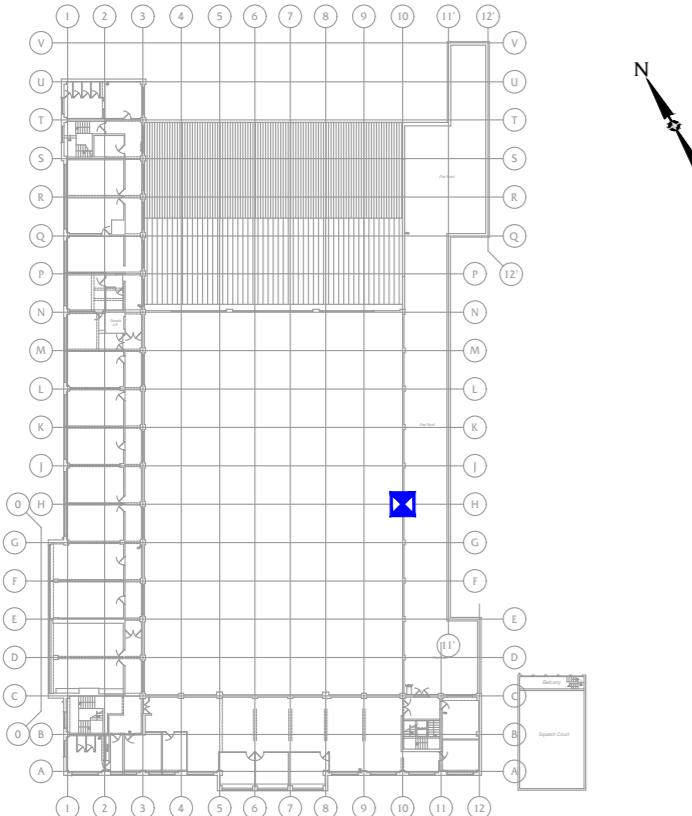


FIG.25: PART ELEVATION LOOKING EAST SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS END CONNECTION - SURVEY AREA H10 SCALE 1:10

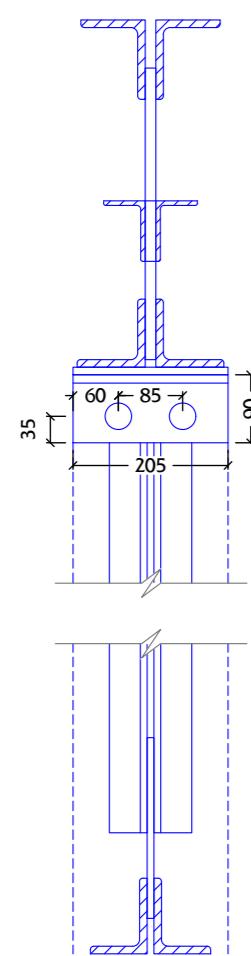
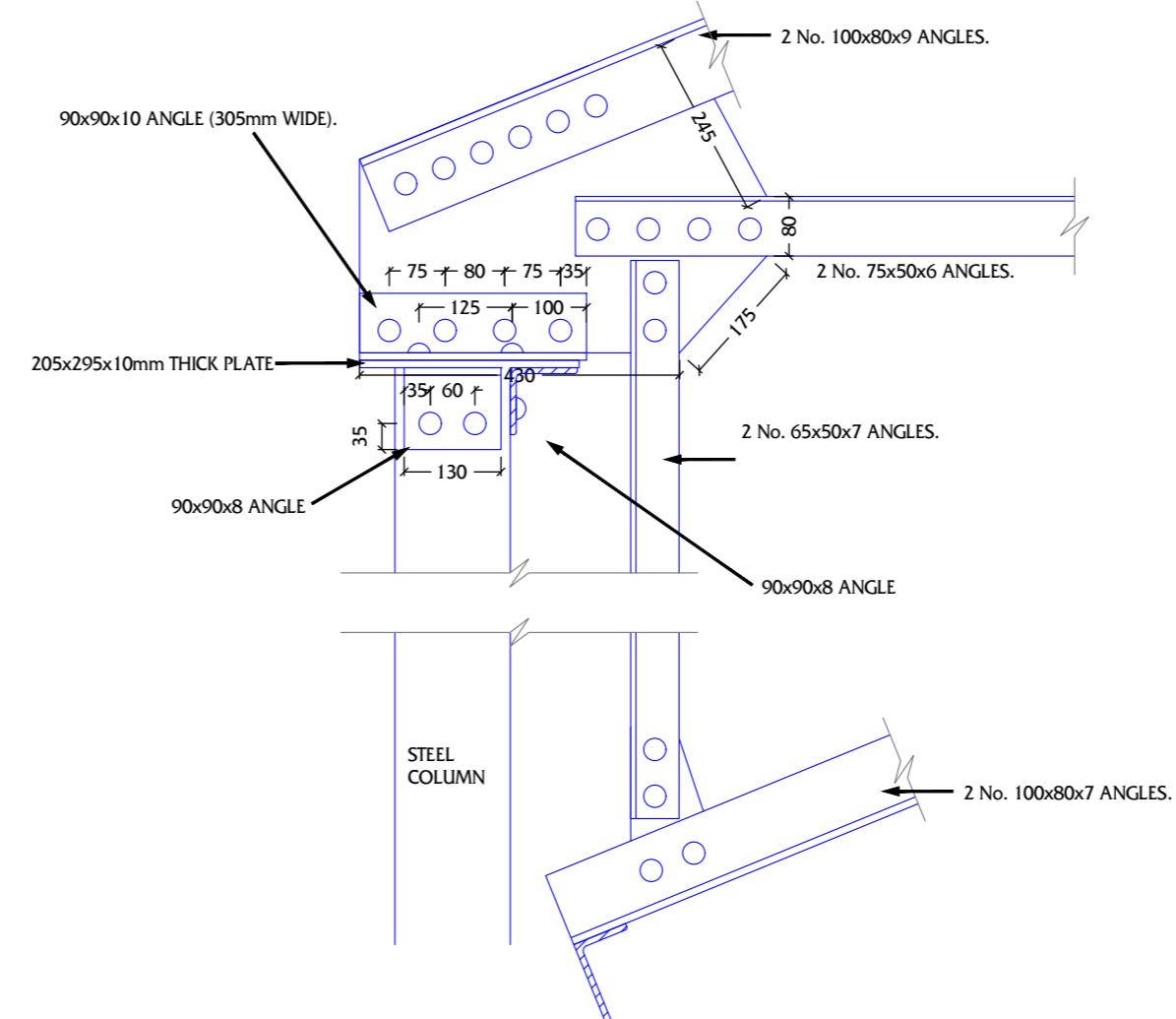
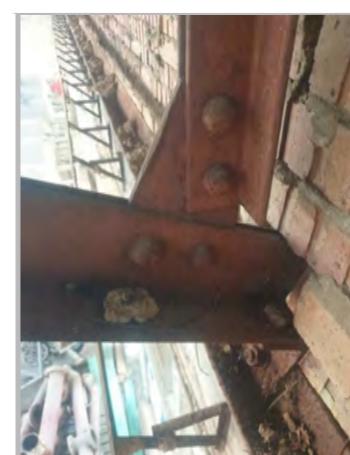


FIG.24: PART ELEVATION LOOKING SOUTH SHOWING DETAILS OF PARTIALLY EXPOSED ROOF TRUSS END CONNECTION - SURVEY AREA H10 SCALE 1:10



NOTES

STEELWORK GENERALLY EXHIBITS LIGHT SURFACE CORROSION WHERE EXPOSED. SOME AREAS OF ORIGINAL PAINT STILL PRESENT.



P24a: BOTTOM CONNECTION OF TRUSS H10



P24c: TOP CONNECTION AT TRUSS H10

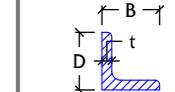
AERIAL VIEW OF SITE



SYMBOLS USED

	MATERIAL TYPES
PLAN EXTENT OF BUILDING SURVEYED	STEELWORK
ROOF TRUSS INVESTIGATED	
STEELWORK	

STEEL MEASUREMENT DETAILS (ANGLE)



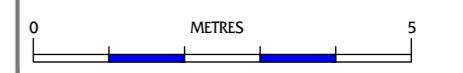
PROJECT DETAILS
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STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

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AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)



ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF ROOF TRUSS CONNECTIONS
SHEET 8 OF 8

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DETAILS OF 1ST FLOOR SLAB CONSTRUCTION - SHEET 1 OF 6
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.1: PLAN OF 1ST FLOOR SHOWING LOCATION OF SLAB AND BEAM SURVEYED NOT TO SCALE

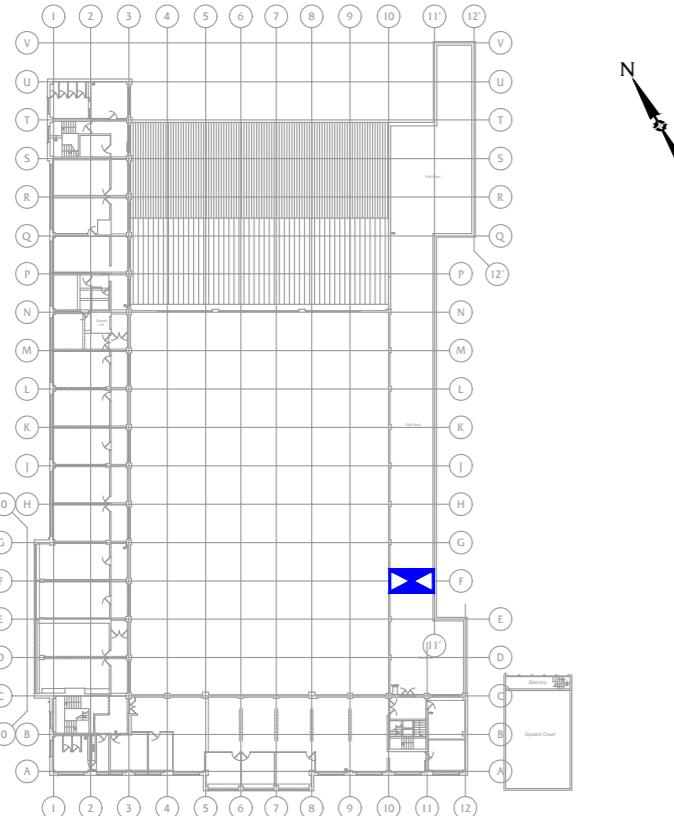


FIG.2: PART REFLECTED 1ST FLOOR SLAB SOFFIT PLAN SHOWING DETAILS OF BEAM AND PRECAST CONCRETE PLANK - SURVEY AREA F/10-11 SCALE 1:10

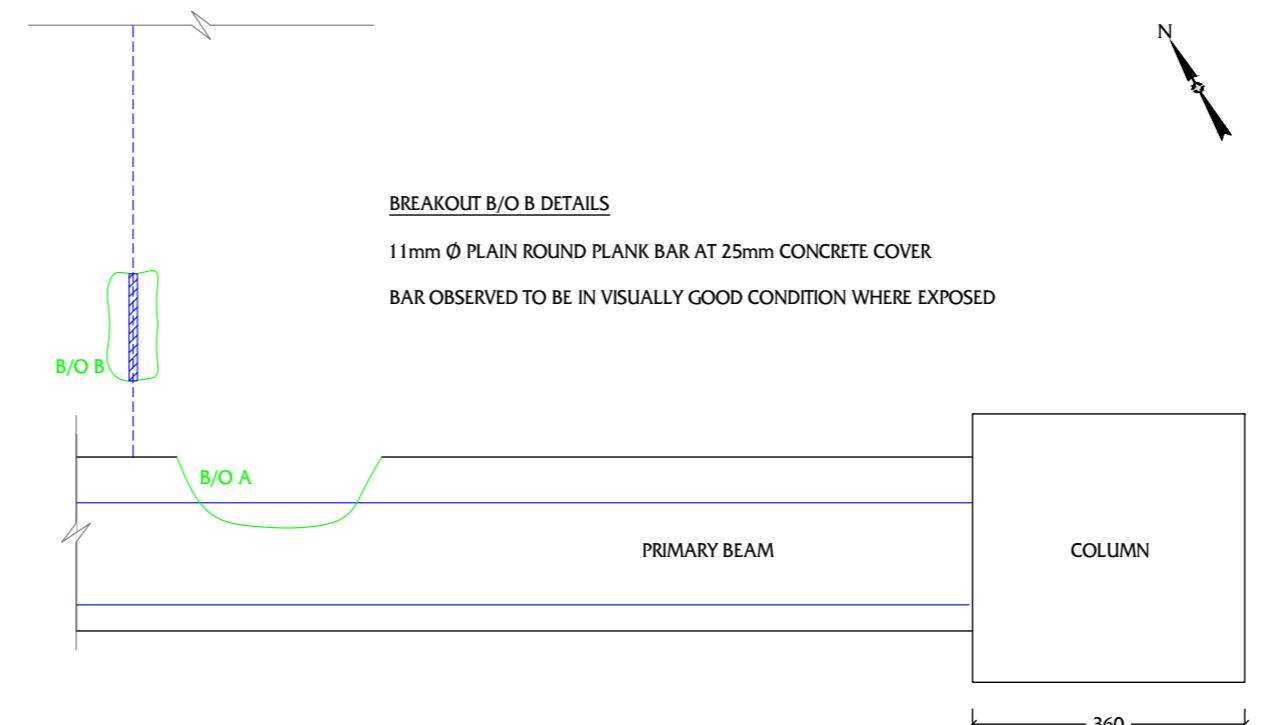
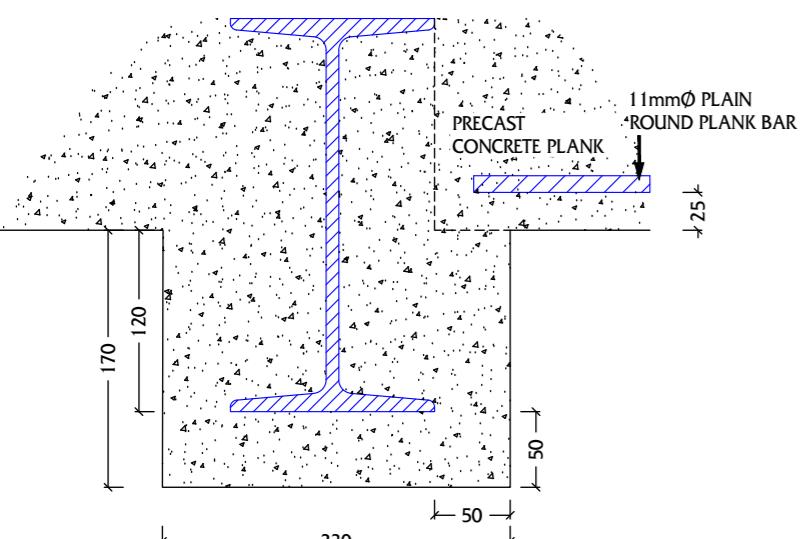


FIG.3: PART SECTION LOOKING WEST THROUGH 1ST FLOOR PRIMARY BEAM - SURVEY AREA F/10-11 SCALE 1:5



BEAM DETAILS

D = 260mm
B = 135mm
T = 10mm
t = 8.4mm

STEELWORK EXHIBITS LIGHT SURFACE CORROSION WHERE EXPOSED

NOTES

FINISHES OMITTED FROM SKETCH FOR CLARITY



P2a: SURVEY AREA F/10-11



P2b: CLOSE UP VIEW OF BREAKOUT B/O A TO SURVEY AREA F/10-11

AERIAL VIEW OF SITE



SYMBOLS USED

	MATERIAL TYPES
PLAN EXTENT OF BUILDING SURVEYED	CONCRETE
SLAB INVESTIGATED	STEELWORK
APPROXIMATE EXTENT OF BREAKOUT	
STEELWORK	
REINFORCEMENT	
EXPOSED REINFORCEMENT	
STEEL MEASUREMENT DETAILS (BEAM / COLUMN)	

PROJECT DETAILS
GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

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0 METRES 5

AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF. REVISION DATE

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Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF 1ST FLOOR SLAB CONSTRUCTION SHEET 1 OF 6

Drawn Date Scale
HW SEP 20 AS SHOWN
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Dwg. No. 4689-FS1

DETAILS OF 1ST FLOOR SLAB CONSTRUCTION - SHEET 2 OF 6
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.4: PLAN OF 1ST FLOOR SHOWING LOCATION OF SLAB AND BEAM SURVEYED NOT TO SCALE

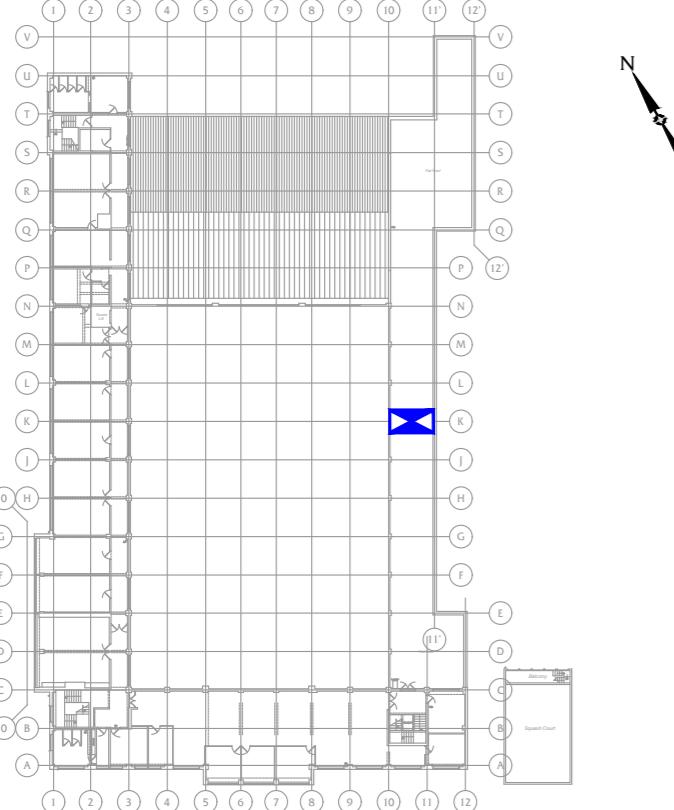


FIG.5: PART REFLECTED 1ST FLOOR SLAB SOFFIT PLAN SHOWING DETAILS OF BEAM AND PRECAST CONCRETE PLANK - SURVEY AREA K/10-11 SCALE 1:10

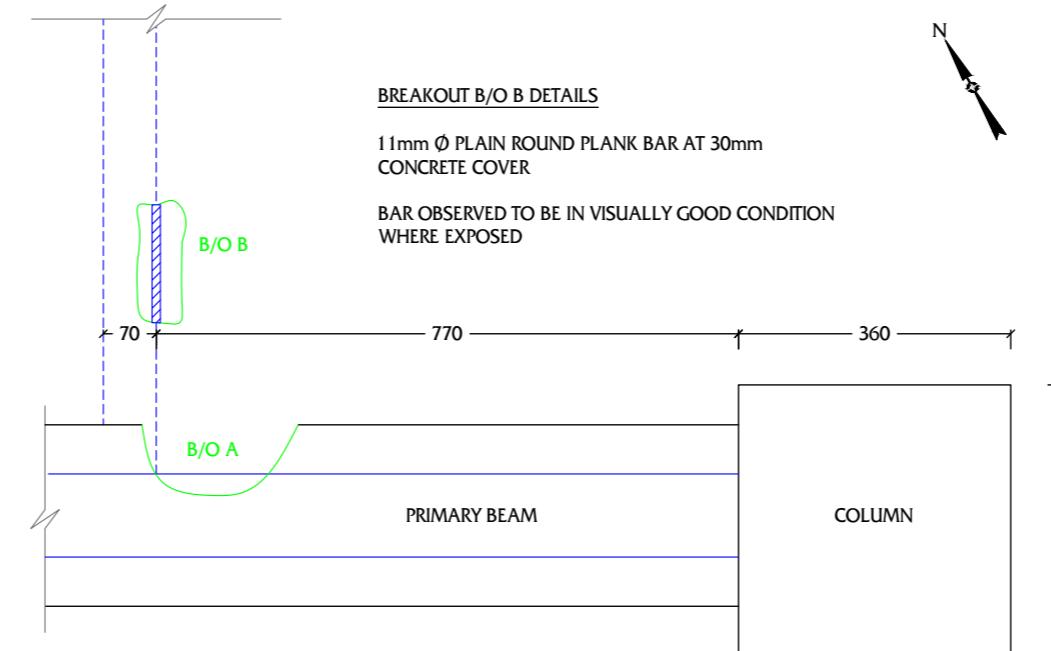
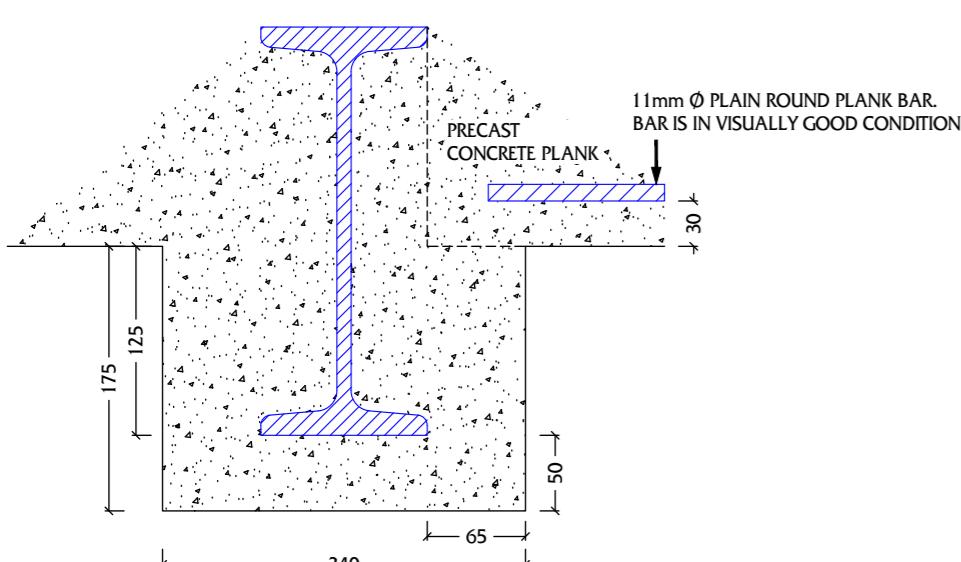


FIG.6: PART SECTION LOOKING WEST THROUGH 1ST FLOOR PRIMARY BEAM - SURVEY AREA K/10-11 SCALE 1:5



AERIAL VIEW OF SITE



SYMBOLS USED

MATERIAL TYPES

PLAN EXTENT OF BUILDING SURVEYED	CONCRETE
SLAB INVESTIGATED	STEELWORK
APPROXIMATE EXTENT OF BREAKOUT	
STEELWORK	
REINFORCEMENT	
EXPOSED REINFORCEMENT	
STEEL MEASUREMENT DETAILS (BEAM / COLUMN)	

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

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0 METRES 5

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Client: BARRATT LONDON

Title: DETAILS OF 1ST FLOOR SLAB CONSTRUCTION SHEET 2 OF 6

Drawn HW CAD Date SEP 20 PM Scale AS SHOWN APP

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DETAILS OF 1ST FLOOR SLAB CONSTRUCTION - SHEET 3 OF 6
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.7: PLAN OF 1ST FLOOR SHOWING LOCATION OF SLAB AND BEAM SURVEYED NOT TO SCALE

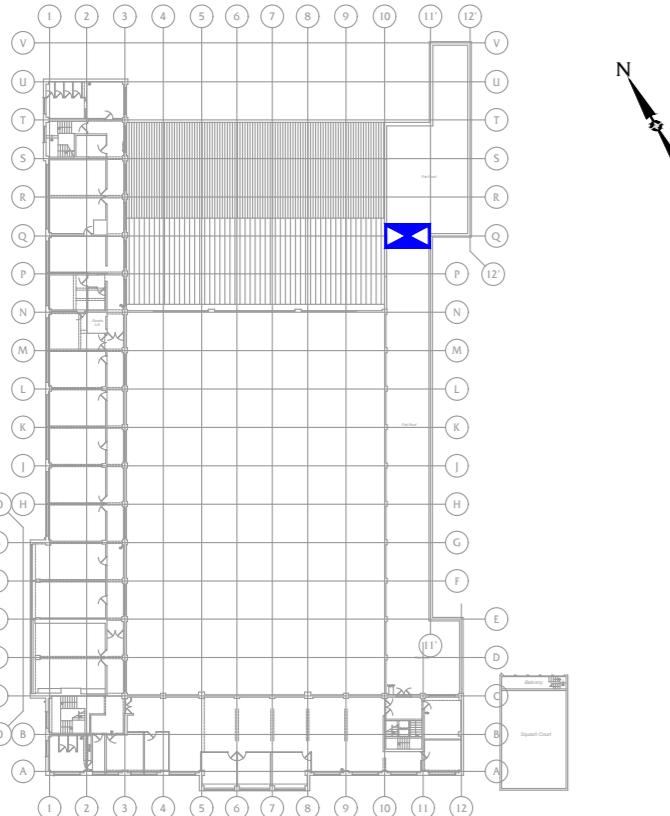


FIG.8: PART REFLECTED 1ST FLOOR SLAB SOFFIT PLAN SHOWING DETAILS OF BEAM AND PRECAST CONCRETE PLANK - SURVEY AREA Q/10-11 SCALE 1:10

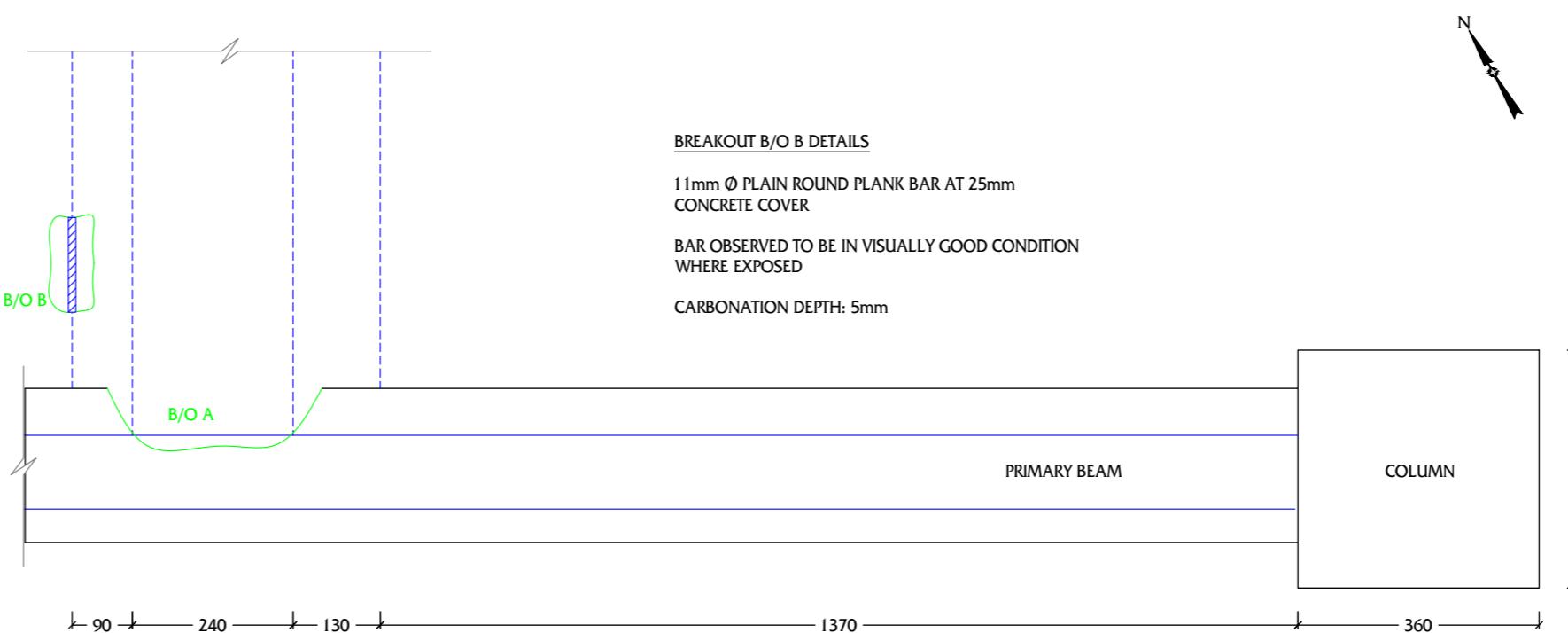
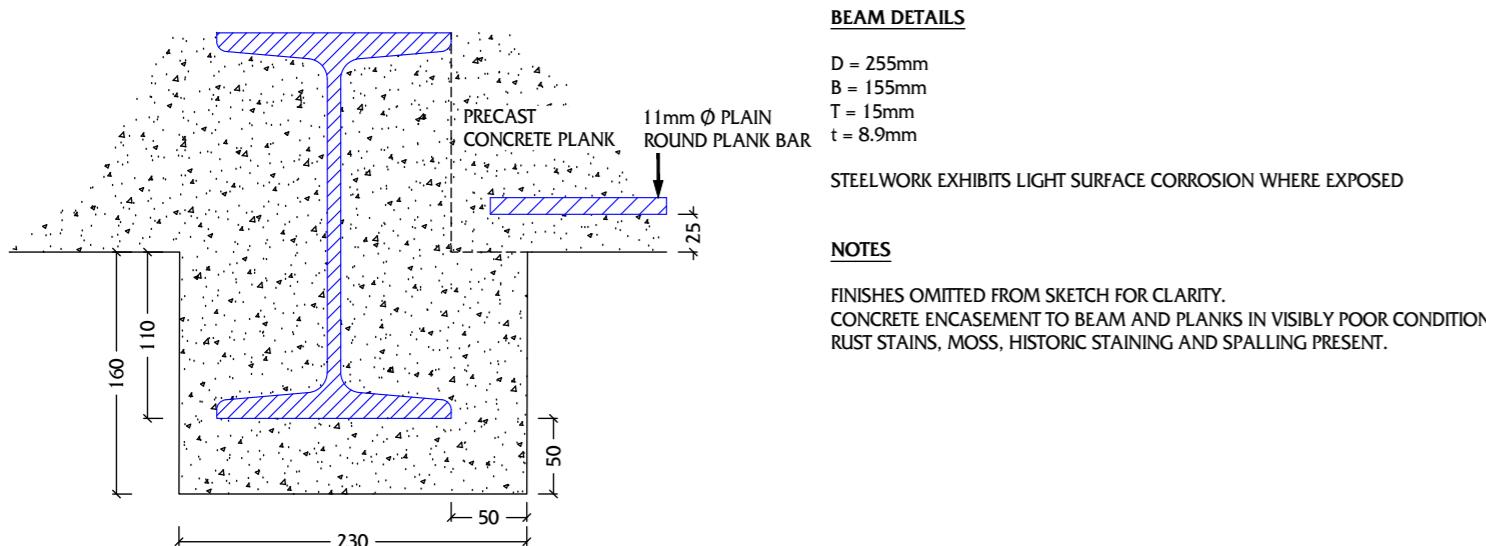
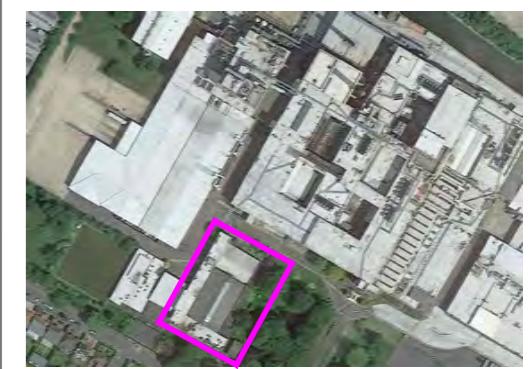


FIG.9: PART SECTION LOOKING WEST THROUGH 1ST FLOOR PRIMARY BEAM - SURVEY AREA Q/10-11 SCALE 1:5



AERIAL VIEW OF SITE



SYMBOLS USED

MATERIAL TYPES

PLAN EXTENT OF BUILDING SURVEYED	CONCRETE
SLAB INVESTIGATED	STEELWORK
APPROXIMATE EXTENT OF BREAKOUT	
STEELWORK	
REINFORCEMENT	
EXPOSED REINFORCEMENT	

STEEL MEASUREMENT DETAILS (BEAM / COLUMN)



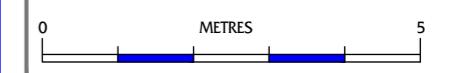
PROJECT DETAILS
GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)



ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF 1ST FLOOR SLAB CONSTRUCTION SHEET 3 OF 6

Drawn HW Date SEP 20 Scale AS SHOWN
CAD PM APP

Dwg. No. 4689-FS3



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DETAILS OF 1ST FLOOR SLAB CONSTRUCTION - SHEET 4 OF 6
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.10: PLAN OF 1ST FLOOR SHOWING LOCATION OF SLAB AND BEAM SURVEYED NOT TO SCALE

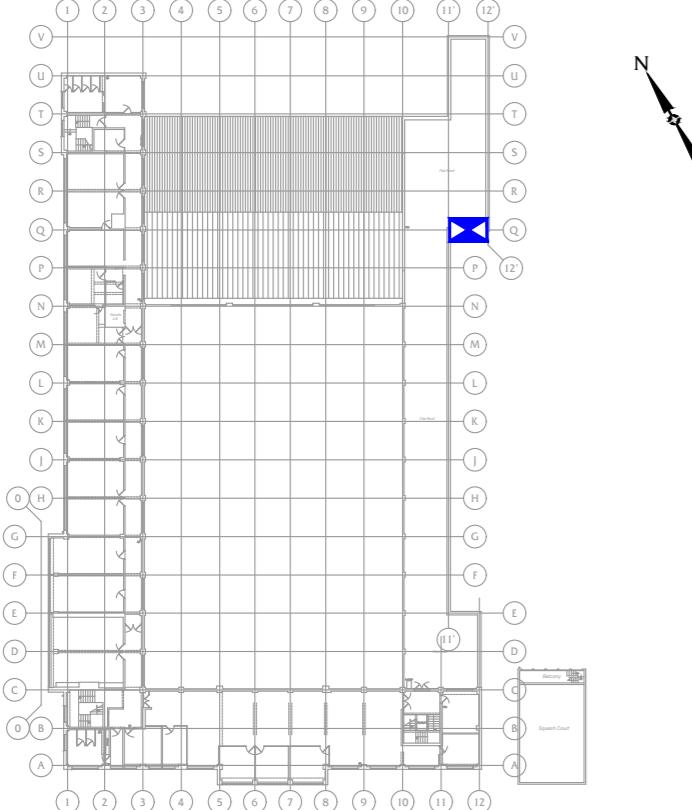


FIG.11: PART REFLECTED 1ST FLOOR SLAB SOFFIT PLAN SHOWING DETAILS OF BEAM AND PRECAST CONCRETE PLANK - SURVEY AREA Q/11-12 SCALE 1:10

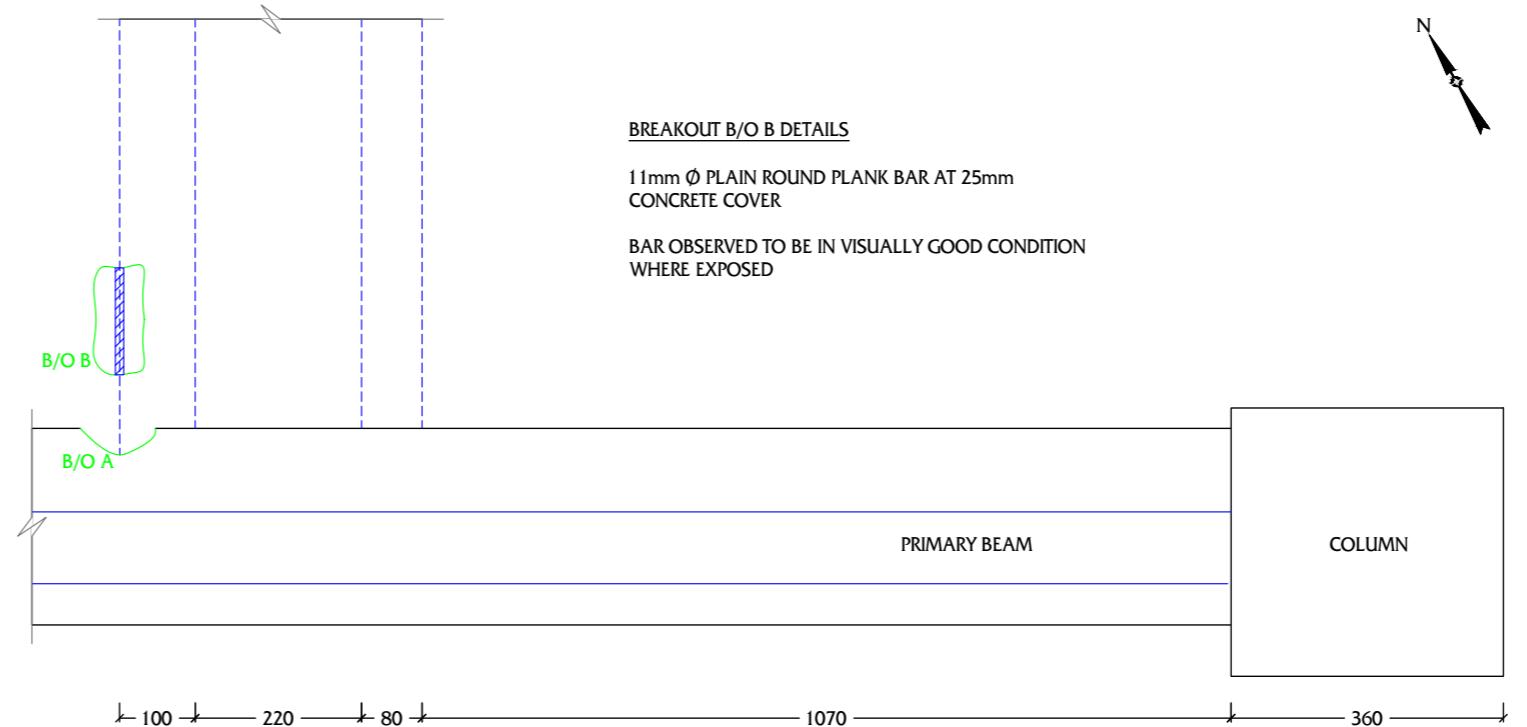
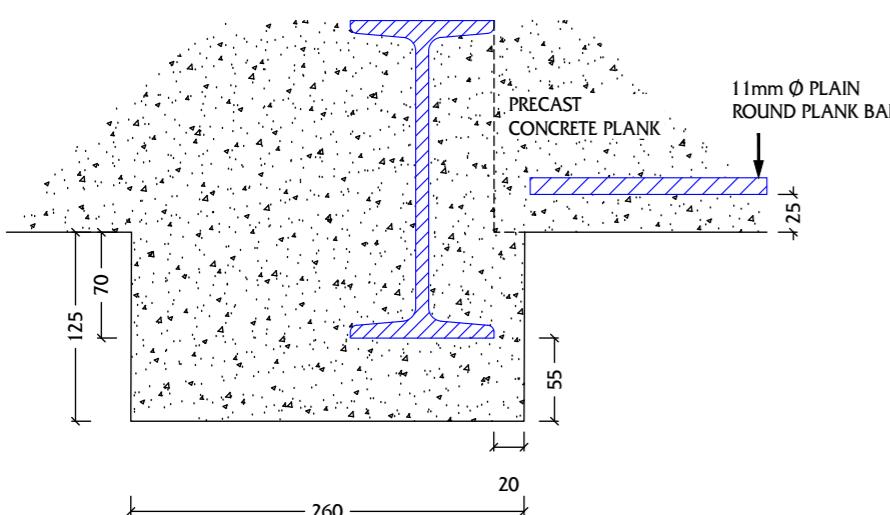


FIG.12: PART SECTION LOOKING WEST THROUGH 1ST FLOOR PRIMARY BEAM - SURVEY AREA Q/11-12 SCALE 1:5



AERIAL VIEW OF SITE



SYMBOLS USED

PLAN EXTENT OF BUILDING SURVEYED	CONCRETE
SLAB INVESTIGATED	STEELWORK
APPROXIMATE EXTENT OF BREAKOUT	
STEELWORK	
REINFORCEMENT	
EXPOSED REINFORCEMENT	
STEEL MEASUREMENT DETAILS (BEAM / COLUMN)	

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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0 METRES 5

AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF. REVISION DATE

ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF 1ST FLOOR SLAB CONSTRUCTION SHEET 4 OF 6

Drawn HW Date SEP 20 Scale AS SHOWN Dwg. No. 4689-FS4
CAD PM APP



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DETAILS OF 1ST FLOOR SLAB CONSTRUCTION - SHEET 5 OF 6
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.1: PLAN OF 1ST FLOOR SHOWING LOCATION OF SLAB AND BEAM SURVEYED

NOT TO SCALE

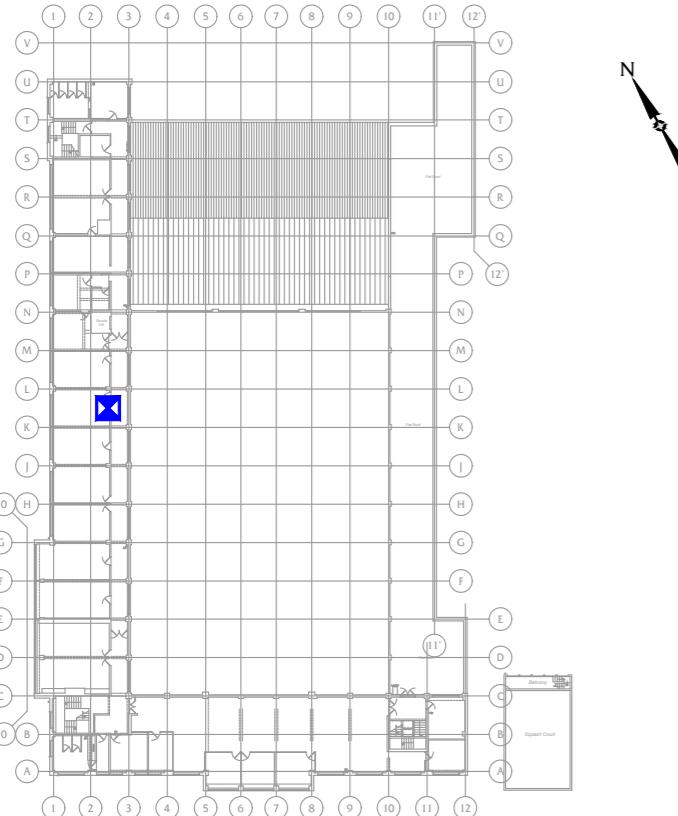
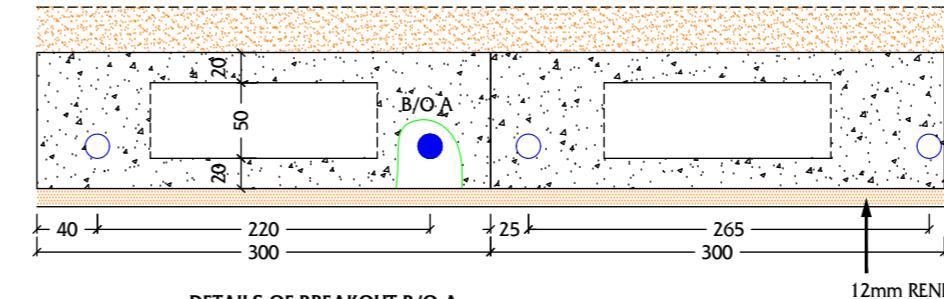


FIG.2: PART SECTION LOOKING SOUTH THROUGH 1ST FLOOR SLAB SHOWING
PRECAST CONCRETE PLANK CONSTRUCTION DETAIL - SURVEY AREA L-K/2-3

SCALE 1:20



DETAILS OF BREAKOUT B/O A

16mmØ PLAIN ROUND BAR AT 20mm CONCRETE COVER.
BAR IS IN VISIBLY GOOD CONDITION WHERE EXPOSED.

NOTES

CRACKING BETWEEN PLANKS (AT PLANK JOINTS) THROUGH RENDER ONLY

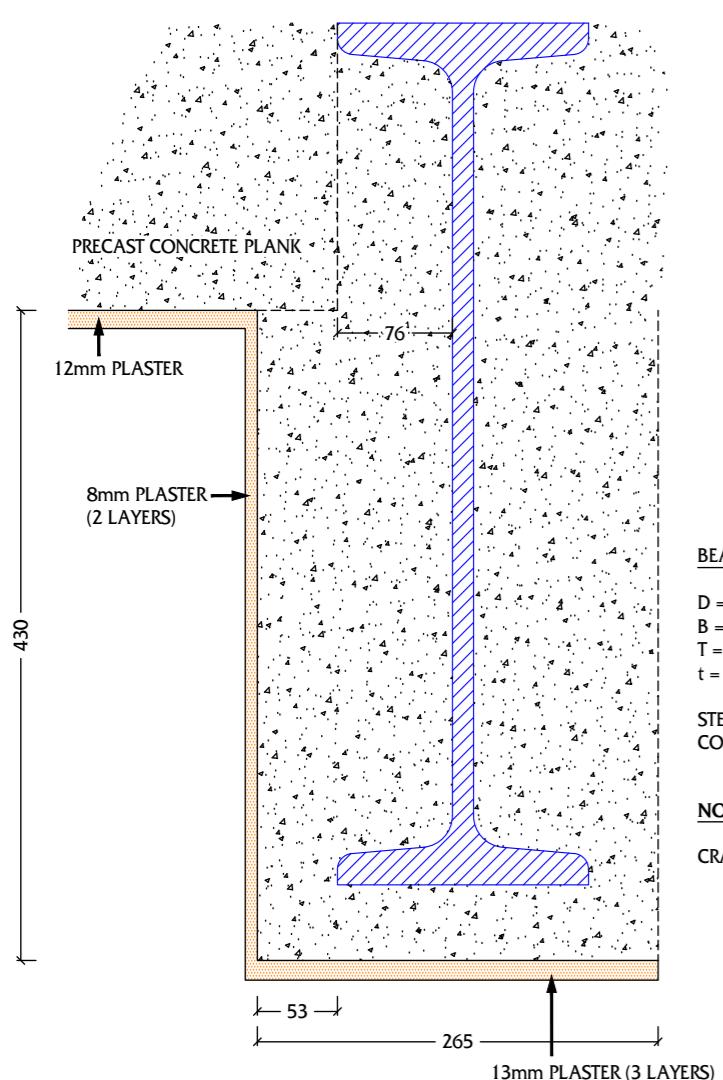


P2a: SURVEY AREA L-K/2-3

FIG.3: PART SECTION LOOKING EAST THROUGH 1ST FLOOR PRIMARY BEAM - SURVEY AREA L-K/2-3



P3a: PRIMARY BEAM AT SURVEY AREA L-K/2-3



BEAM DETAILS

D = 570mm
B = 166mm
T = 23.2mm
t = 14mm

STEELWORK EXHIBITS LIGHT SURFACE CORROSION ONLY WHERE EXPOSED

NOTES

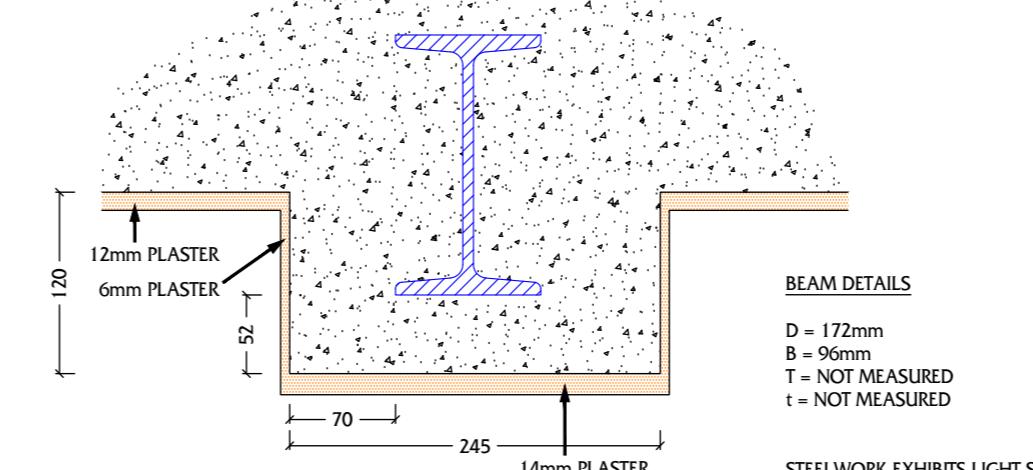
CRACKS DO NOT EXTEND BEYOND RENDER



P3b: CLOSE UP VIEW OF PRIMARY BEAM AT SURVEY AREA L-K/2-3

FIG.4: PART SECTION LOOKING NORTH THROUGH 1ST FLOOR SECONDARY BEAM - SURVEY AREA L-K/2-3

SCALE 1:5



BEAM DETAILS

D = 172mm
B = 96mm
T = NOT MEASURED
t = NOT MEASURED

STEELWORK EXHIBITS LIGHT SURFACE CORROSION ONLY WHERE EXPOSED



P4a: SECONDARY BEAM AT SURVEY AREA L-K/2-3



P4b: CLOSE UP VIEW OF SECONDARY BEAM AT SURVEY AREA L-K/2-3

AERIAL VIEW OF SITE

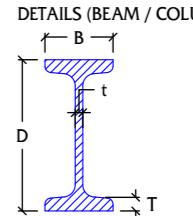


SYMBOLS USED

MATERIAL TYPES

 	PLAN EXTENT OF BUILDING SURVEYED	 	CONCRETE
 	SLAB INVESTIGATED	 	SCREED
 	APPROXIMATE EXTENT OF BREAKOUT	 	RENDER / PLASTER
 	EXPOSED REINFORCEMENT	 	STEELWORK
 	REINFORCEMENT FOUND USING NDT METHODS		

STEEL MEASUREMENT
DETAILS (BEAM / COLUMN)



PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE
INVESTIGATED TWO STOREY STEEL FRAMED FORMER
CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF
INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND
MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S
DESIGN TEAM

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AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF. REVISION DATE
ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF 1ST FLOOR SLAB CONSTRUCTION
SHEET 5 OF 6

Drawn HW Date SEP 20 Scale AS SHOWN
CAD PM APP

Dwg. No. 4689-FS5



INNOVATION IN STRUCTURAL INVESTIGATION

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DETAILS OF 1ST FLOOR SLAB CONSTRUCTION - SHEET 6 OF 6
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.1: PLAN OF 1ST FLOOR SHOWING LOCATION OF SLAB AND BEAM SURVEYED NOT TO SCALE

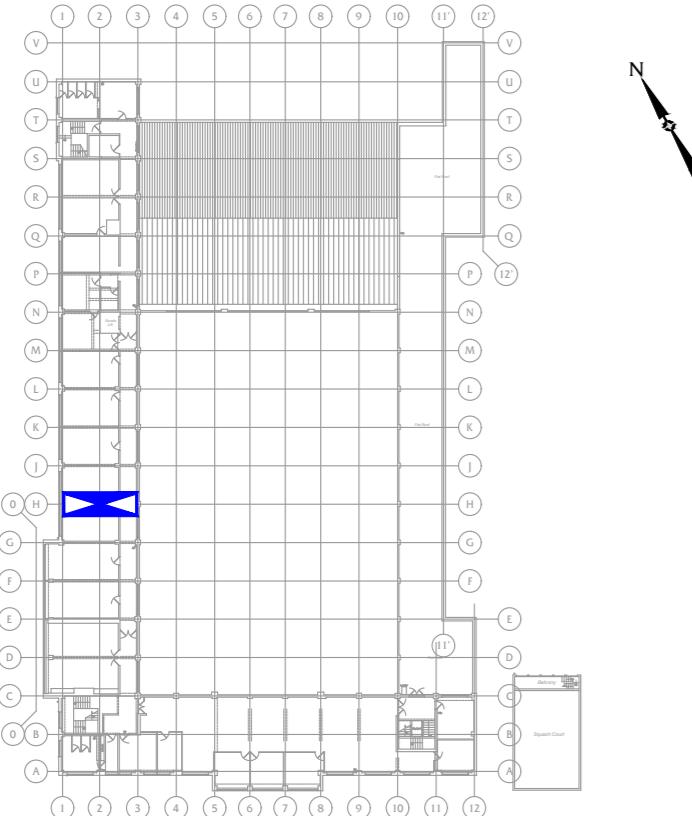
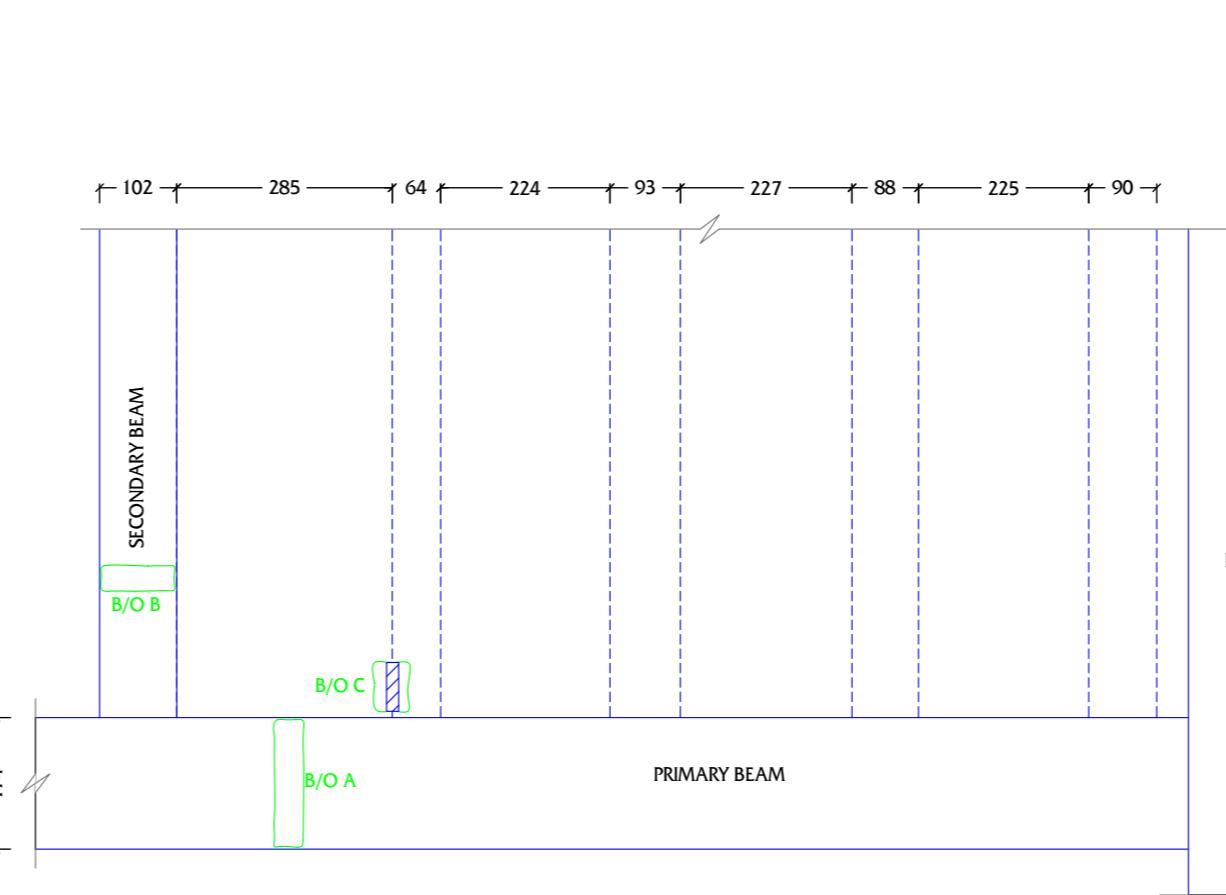


FIG.2: PART REFLECTED 1ST FLOOR SLAB SOFFIT PLAN SHOWING DETAILS OF BEAM AND PRECAST CONCRETE PLANKS - SURVEY AREA H/1-3 SCALE 1:10



PRIMARY BEAM DETAILS (B/O A)

D = 505mm
B = 174mm
T = 16mm
t = 12.8mm

STEELWORK EXHIBITS LIGHT SURFACE CORROSION WHERE EXPOSED

SECONDARY BEAM DETAILS (B/O B)

D = 183mm
B = 102mm
T = 8mm
t = 9.4mm

STEELWORK EXHIBITS LIGHT SURFACE CORROSION WHERE EXPOSED

BREAKOUT B/O C DETAILS

16mm Ø PLAIN ROUND BAR AT 47mm TOTAL COVER
COVERS INCLUDE 1mm PAINT OVER 5mm PLASTER OVER 11mm RENDER FINISHES.

BAR OBSERVED TO BE IN VISUALLY GOOD CONDITION WHERE EXPOSED

AERIAL VIEW OF SITE



SYMBOLS USED

PLAN EXTENT OF BUILDING SURVEYED

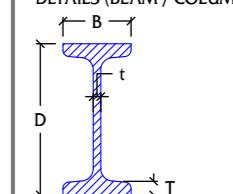
SLAB INVESTIGATED

APPROXIMATE EXTENT OF BREAKOUT

STEELWORK

EXPOSED REINFORCEMENT

STEEL MEASUREMENT DETAILS (BEAM / COLUMN)



PROJECT DETAILS
GB REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF.	REVISION	DATE
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ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF 1ST FLOOR SLAB CONSTRUCTION
SHEET 6 OF 6

Drawn HW CAD Date SEP 20 PM Scale AS SHOWN APP

Dwg. No. 4689-FS6



P2a: PRIMARY BEAM AT SURVEY AREA H/1-3

P2b: CLOSE UP OF PRIMARY BEAM AT SURVEY AREA H/1-3

P2c: SECONDARY BEAM AT SURVEY AREA H/1-3

P2d: CLOSE UP OF SECONDARY BEAM AT SURVEY AREA H/1-3



P2e: PRECAST PLANK AT SURVEY AREA H/1-3



P2f: CLOSE UP OF PRECAST PLANK BAR EXPOSED AT SURVEY AREA H/1-3

DETAILS OF ROOF SLAB CONSTRUCTION - SHEET 1 OF 4
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.1: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF SLAB SURVEYED OVER NOT TO SCALE

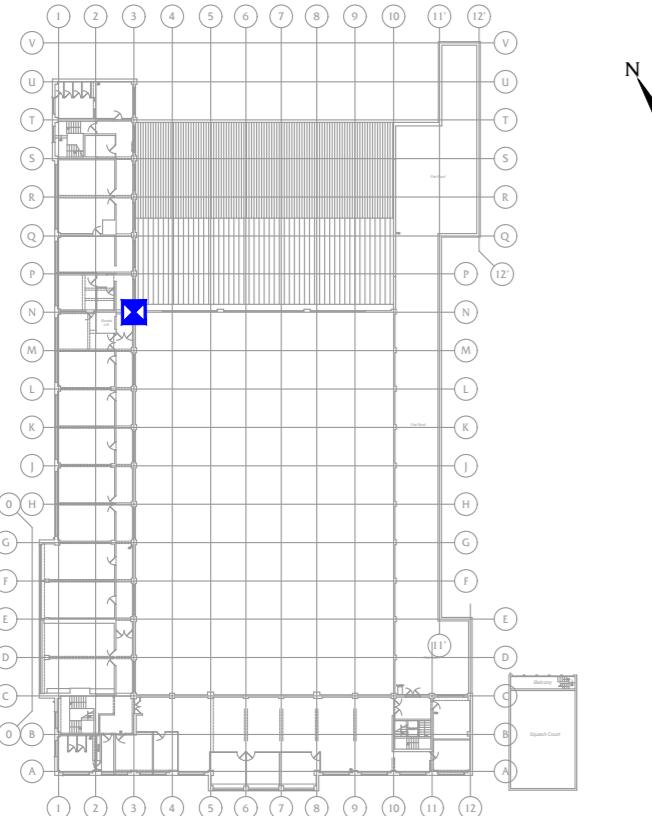
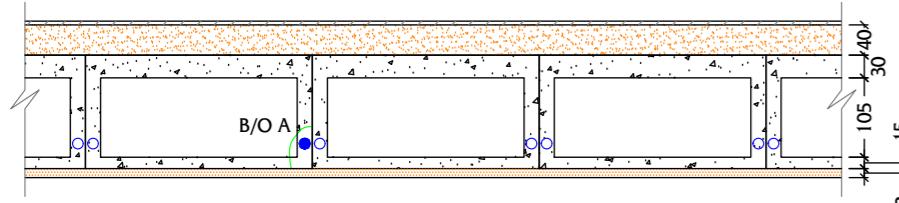


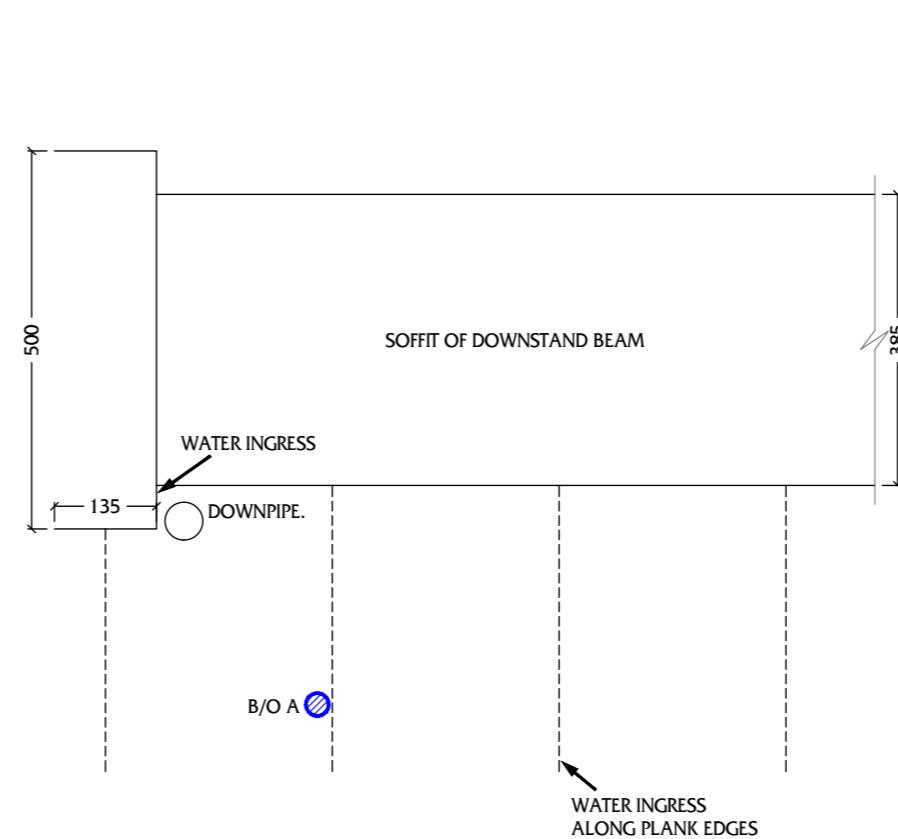
FIG.3: PART SECTION LOOKING SOUTH THROUGH ROOF SLAB SHOWING DETAILS OF PRECAST CONCRETE PLANK - SURVEY AREA RS1 SCALE 1:5



DETAILS OF BREAKOUT B/O A

14mmØ PLAIN ROUND BAR AT 26mm CONCRETE COVER.
BAR EXHIBITS VERY LIGHT SURFACE CORROSION WHERE EXPOSED.

FIG.2: PART REFLECTED SOFFIT PLAN OF ROOF SLAB SHOWING DOWNSTAND BEAM, PRECAST CONCRETE PLANK AND LOCALISED DEFECTS - SURVEY AREA RS1 SCALE 1:20



P2a: SURVEY AREA RS1



P2b: BREAKOUT B/O A

AERIAL VIEW OF SITE



SYMBOLS USED

	MATERIAL TYPES
PLAN EXTENT OF BUILDING SURVEYED	CONCRETE
SLAB INVESTIGATED	SCREED
BREAKOUT LOCATION	RENDER / PLASTER
APPROXIMATE EXTENT OF BREAKOUT	WATERPROOFING
EXPOSED REINFORCEMENT	
ASSUMED REINFORCEMENT	

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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0 METRES 5

AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF.	REVISION	DATE

ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

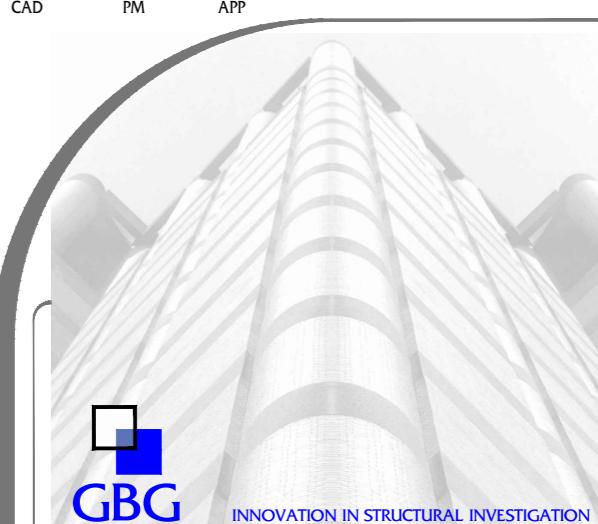
Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF ROOF SLAB CONSTRUCTION
SHEET 1 OF 4

Drawn HW Date SEP 20 Scale AS SHOWN
CAD PM APP

Dwg. No. 4689-RS1



DETAILS OF ROOF SLAB CONSTRUCTION - SHEET 2 OF 4
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.4: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF SLAB SURVEYED OVER NOT TO SCALE

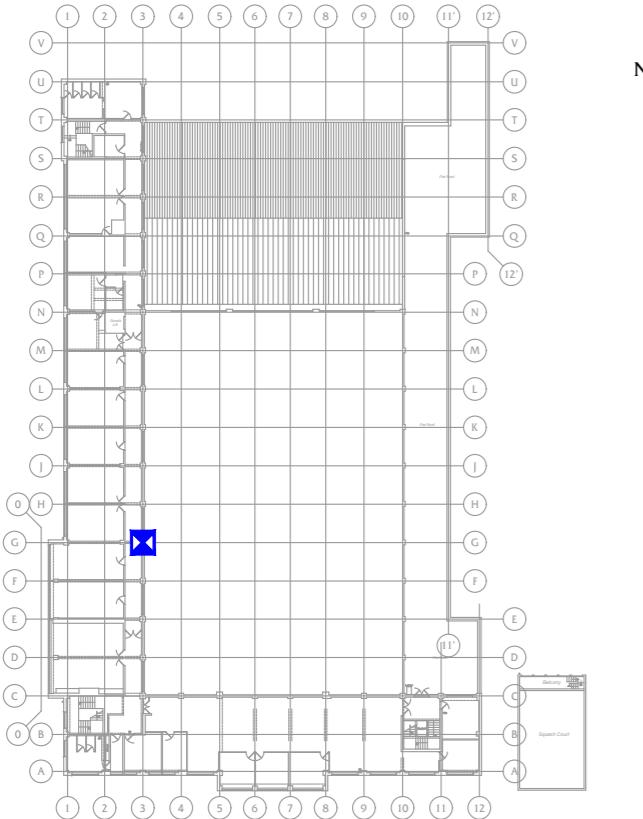
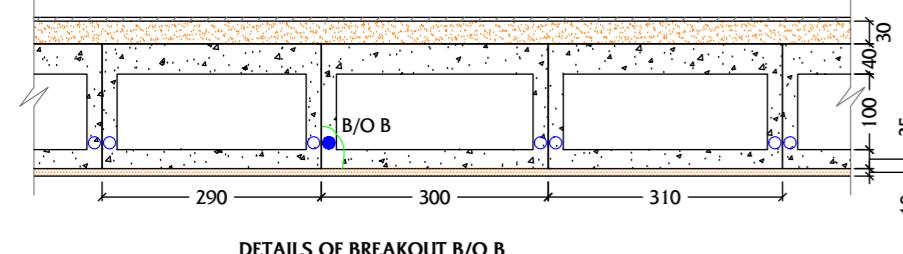


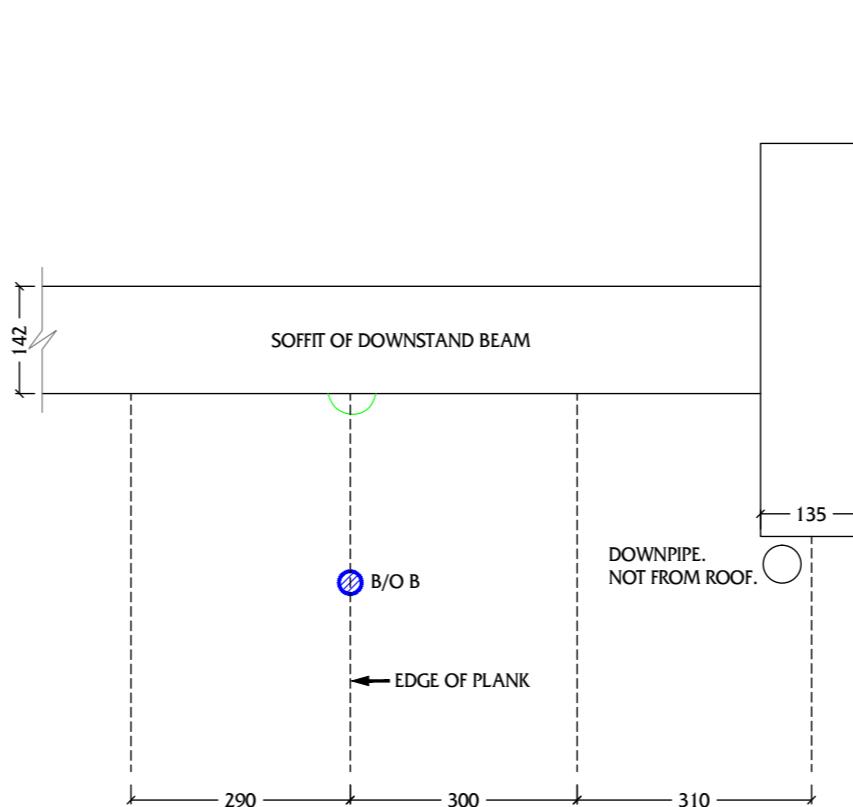
FIG.6: PART SECTION LOOKING EAST THROUGH ROOF SLAB SHOWING DETAILS OF PRECAST CONCRETE PLANK - SURVEY AREA RS2 SCALE 1:5



DETAILS OF BREAKOUT B/O B

16mmØ PLAIN ROUND BAR AT 26mm CONCRETE COVER.
BAR EXHIBITS VERY LIGHT SURFACE CORROSION WHERE EXPOSED.

FIG.5: PART REFLECTED SOFFIT PLAN OF ROOF SLAB SHOWING DOWNSTAND BEAM AND PRECAST CONCRETE PLANK - SURVEY AREA RS2 SCALE 1:20



P5a: SURVEY AREA RS2

P5b: BREAKOUT B/O B

AERIAL VIEW OF SITE



SYMBOLS USED

	MATERIAL TYPES
PLAN EXTENT OF BUILDING SURVEYED	CONCRETE
SLAB INVESTIGATED	SCREED
BREAKOUT LOCATION	RENDER / PLASTER
APPROXIMATE EXTENT OF BREAKOUT	WATERPROOFING
EXPOSED REINFORCEMENT	
ASSUMED REINFORCEMENT	

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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0 METRES 5
AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF. REVISION DATE
ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF ROOF SLAB CONSTRUCTION SHEET 2 OF 4

Drawn HW CAD Date SEP 20 PM Scale AS SHOWN APP

Dwg. No. 4689-RS2



DETAILS OF ROOF SLAB CONSTRUCTION - SHEET 3 OF 4
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.7: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF SLAB SURVEYED OVER NOT TO SCALE

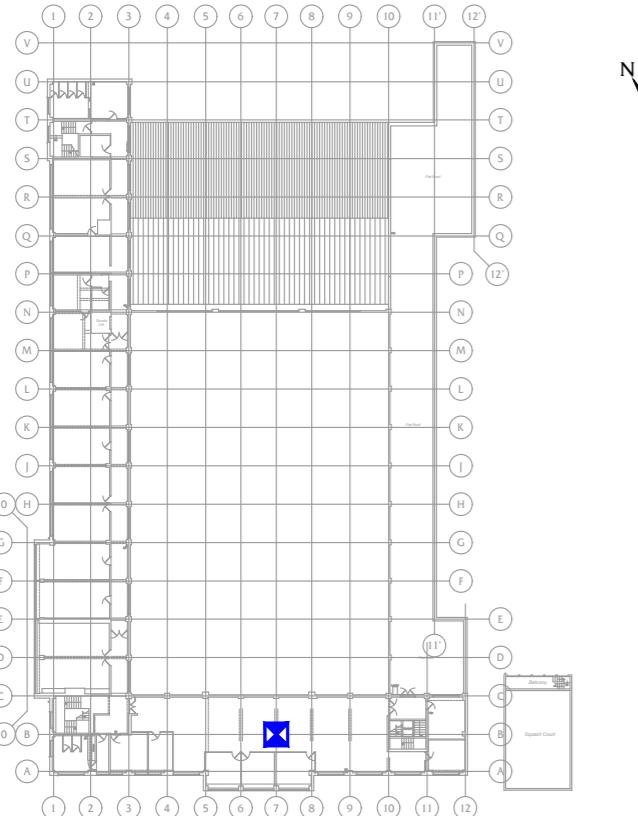
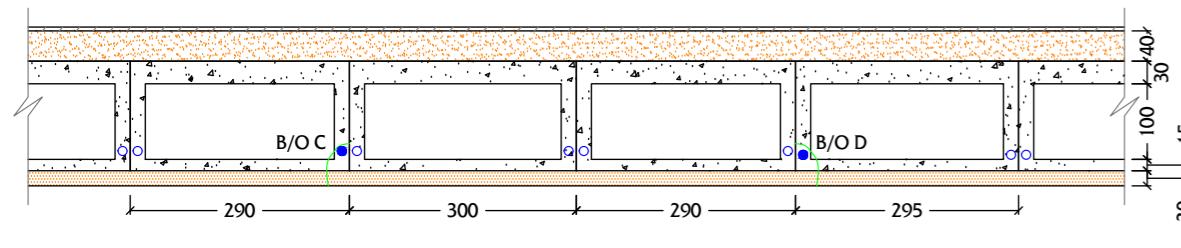


FIG.9: PART SECTION LOOKING EAST THROUGH ROOF SLAB SHOWING DETAILS OF PRECAST CONCRETE PLANK - SURVEY AREA RS3 SCALE 1:5



DETAILS OF BREAKOUTS

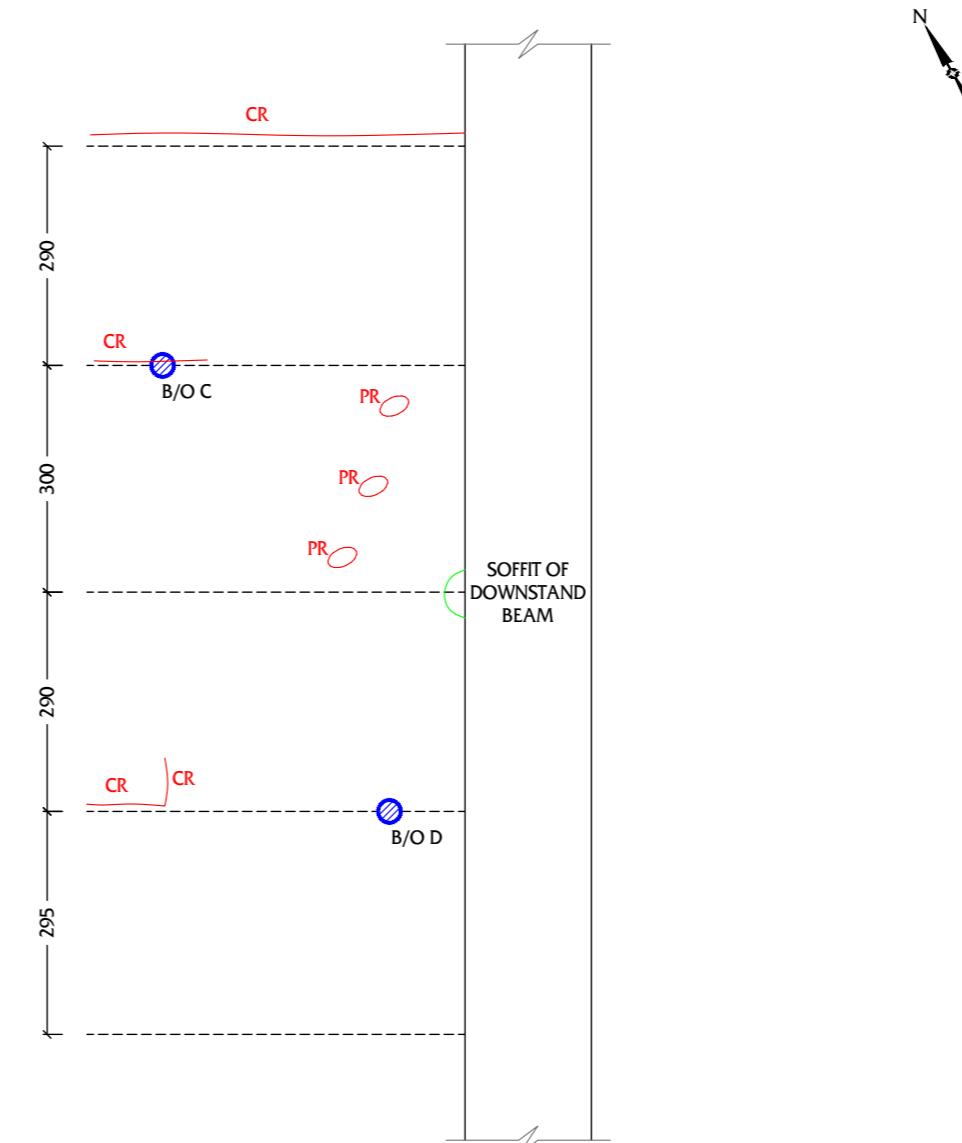
BREAKOUT B/O C

12mmØ PLAIN ROUND BAR AT 20mm CONCRETE COVER.
BAR EXHIBITS MODERATE TO HEAVY SURFACE CORROSION WHERE LOCALLY EXPOSED.

BREAKOUT B/O D

12mmØ PLAIN ROUND BAR AT 15mm CONCRETE COVER.
BAR EXHIBITS LIGHT SURFACE CORROSION WHERE EXPOSED.

FIG.8: PART REFLECTED SOFFIT PLAN OF ROOF SLAB SHOWING DOWNSTAND BEAM, PRECAST CONCRETE PLANK AND LOCALISED DEFECTS - SURVEY AREA RS3 SCALE 1:20



P8a: SURVEY AREA RS3

P8b: BAR EXPOSED AT BREAKOUT B/O C

AERIAL VIEW OF SITE



SYMBOLS USED

	MATERIAL TYPES
PLAN EXTENT OF BUILDING SURVEYED	CONCRETE
SLAB INVESTIGATED	SCREED
BREAKOUT LOCATION	RENDER / PLASTER
APPROXIMATE EXTENT OF BREAKOUT	WATERPROOFING
EXPOSED REINFORCEMENT	
ASSUMED REINFORCEMENT	
DEFECT LOCATION	
CRACK	
PATCH REPAIR	

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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0 METRES 5

AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF.	REVISION	DATE

ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF ROOF SLAB CONSTRUCTION SHEET 3 OF 4

Drawn HW Date SEP 20 Scale AS SHOWN
CAD PM APP

Dwg. No. 4689-RS3



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DETAILS OF ROOF SLAB CONSTRUCTION - SHEET 4 OF 4
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.10: PLAN OF 1ST FLOOR SHOWING LOCATION OF ROOF SLAB SURVEYED OVER NOT TO SCALE

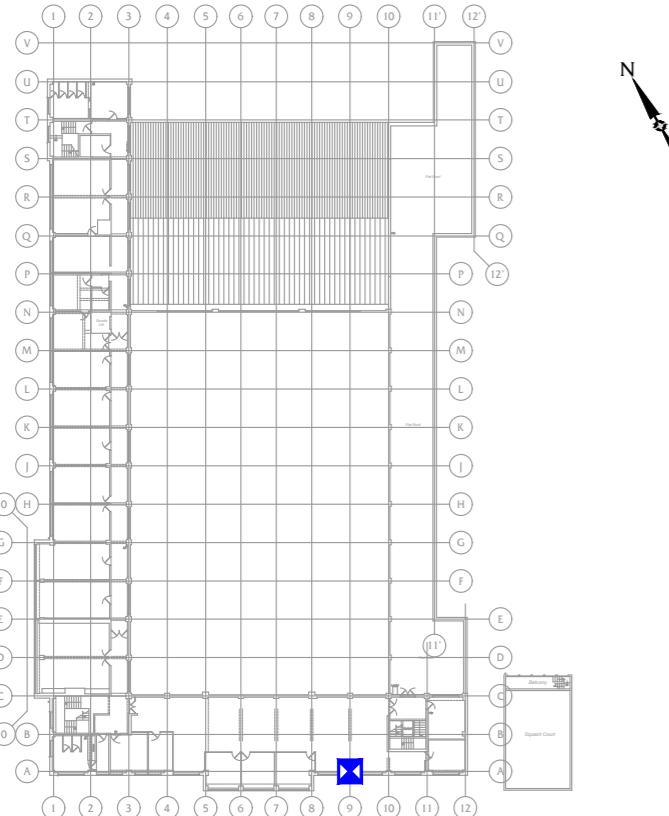
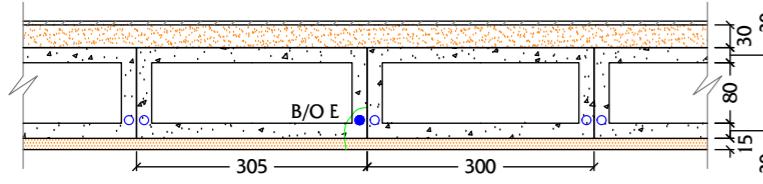
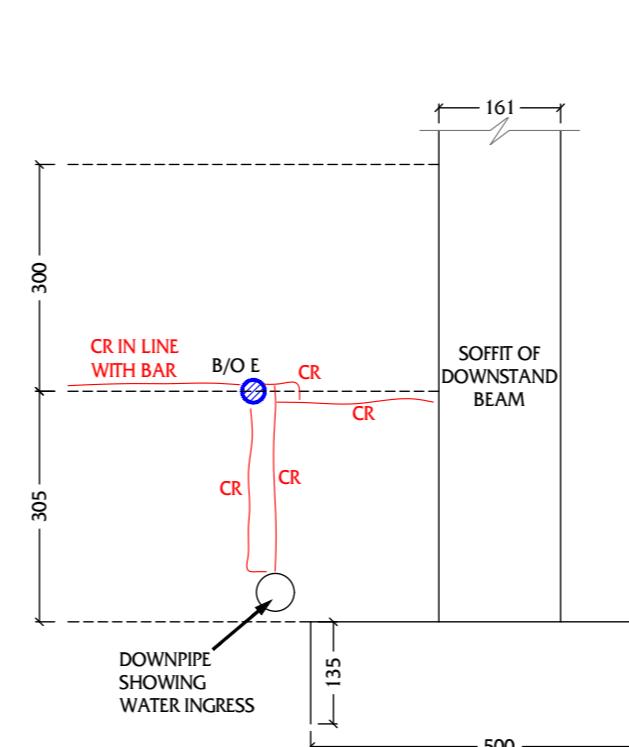


FIG.12: PART SECTION LOOKING EAST THROUGH ROOF SLAB SHOWING DETAILS OF PRECAST CONCRETE PLANK - SURVEY AREA RS4 SCALE 1:5



DETAILS OF BREAKOUT B/O E
12mmØ PLAIN ROUND BAR AT 18mm CONCRETE COVER.
BAR EXHIBITS VERY LIGHT SURFACE CORROSION WHERE LOCALLY EXPOSED.

FIG.11: PART REFLECTED SOFFIT PLAN OF ROOF SLAB SHOWING DOWNSTAND BEAM, PRECAST CONCRETE PLANK AND LOCALISED DEFECTS - SURVEY AREA RS4 SCALE 1:20



P11a: SURVEY AREA RS4

P11b: BAR EXPOSED AT BREAKOUT B/O D

AERIAL VIEW OF SITE



SYMBOLS USED

MATERIAL TYPES

PLAN EXTENT OF BUILDING SURVEYED	CONCRETE
SLAB INVESTIGATED	SCREED
BREAKOUT LOCATION	RENDER / PLASTER
APPROXIMATE EXTENT OF BREAKOUT	WATERPROOFING
EXPOSED REINFORCEMENT	
ASSUMED REINFORCEMENT	
DEFECT LOCATION	
CRACK	

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

THIS DRAWING HAS BEEN PREPARED USING EXISTING DRAWINGS AND/OR PRINTS OF DRAWINGS AS SUPPLIED BY THE CLIENT AND SUPPLEMENTED BY MEASUREMENTS TAKEN ON SITE. ALL DIMENSIONS THEREFORE ARE TO BE CHECKED ON SITE PRIOR TO PREPARING DRAWINGS OR COMMENCING ANY WORK.

0 METRES 5
AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF. REVISION DATE
ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF ROOF SLAB CONSTRUCTION SHEET 4 OF 4

Drawn Date Scale
HW SEP 20 AS SHOWN
CAD PM APP

Dwg. No. 4689-RS4



DETAILS OF 1ST FLOOR STAIR CORE CONSTRUCTION
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.1: PLAN OF 1ST FLOOR SHOWING LOCATION OF STAIR CORE SURVEYED NOT TO SCALE

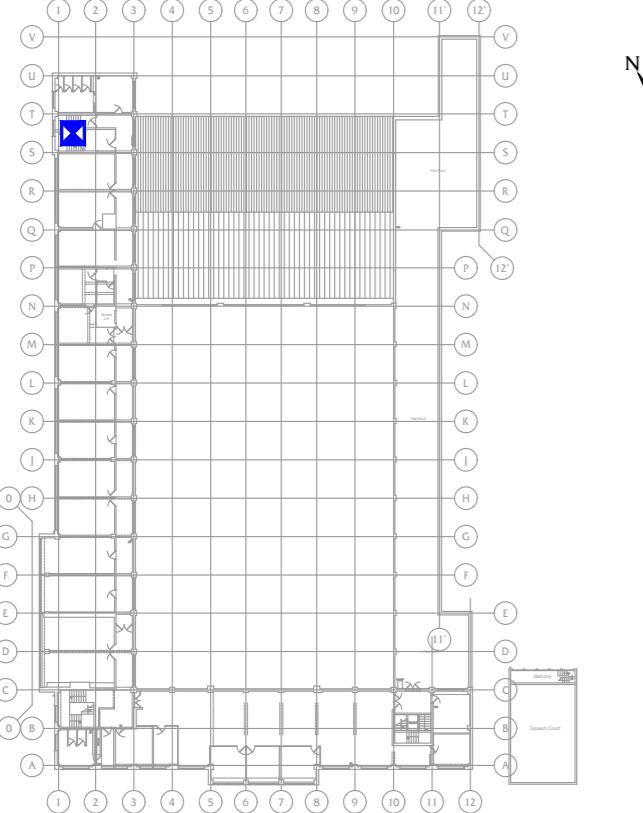
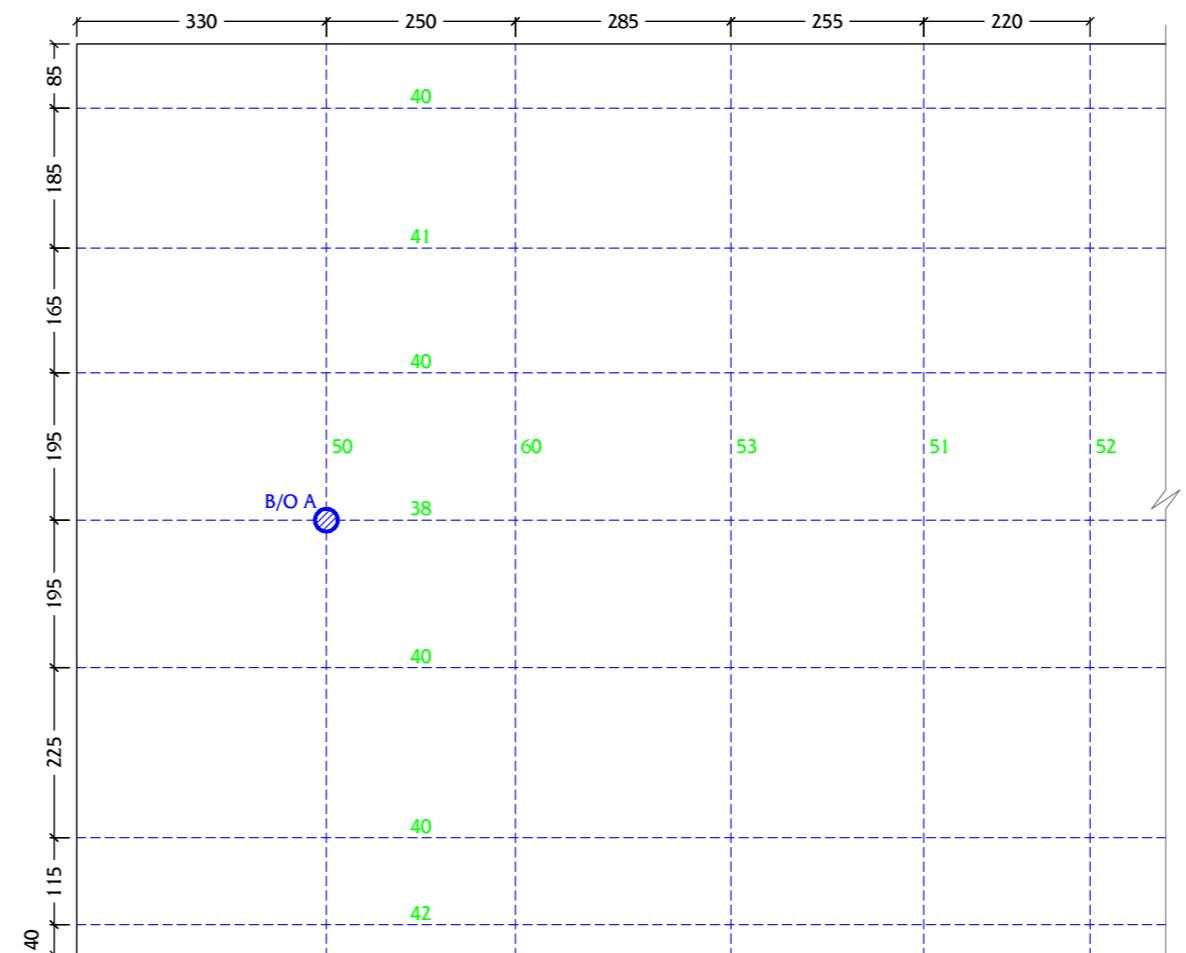
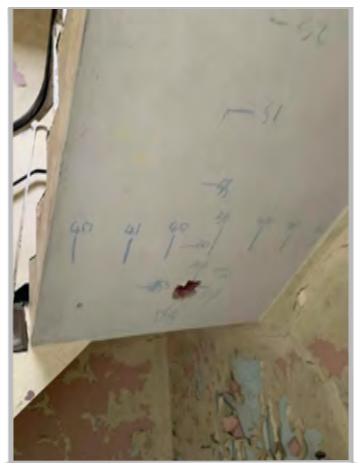


FIG.2: PART REFLECTED SOFFIT PLAN OF 1ST FLOOR STAIR LANDING SHOWING BREAKOUT AND NEAR SURFACE STEEL REINFORCEMENT ARRANGEMENT - SURVEY AREA S-T/1-2 SCALE 1:20



DETAILS OF BREAKOUT B/O A

10mmØ N-S BAR AT 36mm CONCRETE COVER.
16mmØ E-W BAR AT 20mm CONCRETE COVER.
BOTH BARS EXHIBIT LIGHT SURFACE CORROSION ONLY.



P2a: SURVEY AREA S-T/1-2



P2b: BREAKOUT B/O A

AERIAL VIEW OF SITE



SYMBOLS USED

- PLAN EXTENT OF BUILDING SURVEYED
- SLAB INVESTIGATED
- BREAKOUT LOCATION
- COVERMETER READING (mm)
- REINFORCEMENT POSITION, DETERMINED VIA NDT METHODS (MAY COMprise OF MORE THAN 1 ADJACENT BARS)

PROJECT DETAILS
GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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0 METRES 5

AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF.	REVISION	DATE
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ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF 1ST FLOOR STAIR CORE CONSTRUCTION

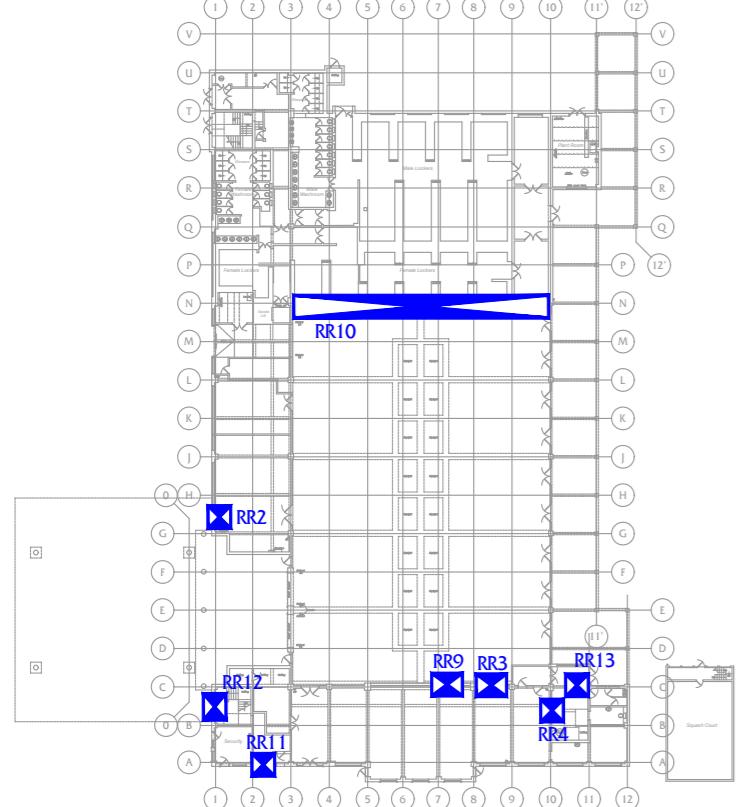
Drawn HW Date SEP 20 Scale AS SHOWN
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Dwg. No. 4689-SC1

LOCATIONS OF GROUND FLOOR WALL DAMP PROOF COURSE (DPC) AND CRACK SURVEYS

NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.1: PLAN OF GROUND FLOOR SHOWING LOCATIONS OF SURVEY AREAS NOT TO SCALE



NOTES

DAMP PROOF COURSE WAS LOCATED AT SURVEY AREAS RR9 AND RR12 AT LOW LEVEL. NO OTHER DAMP PROOF COURSE WAS FOUND AT THE REMAINING GROUND FLOOR SURVEY AREAS. CRACKS TO WALL FINISHES DID NOT EXTEND INTO THE BRICKWORK MASONRY WHERE INVESTIGATED.



P1a: DPC INVESTIGATION - SURVEY AREA RR2

P1b: DPC INVESTIGATION - SURVEY AREA RR10

P1c: DPC INVESTIGATION - SURVEY AREA RR11



P1d: DPC INVESTIGATION - SURVEY AREA RR12



P1e: DPC INVESTIGATION - SURVEY AREA RR13



P1f: CRACK INVESTIGATION - SURVEY AREA RR3



P1g: CRACK INVESTIGATION - SURVEY AREA RR4



P1h: CRACK INVESTIGATION - SURVEY AREA RR9

AERIAL VIEW OF SITE



SYMBOLS USED

PLAN EXTENT OF BUILDING SURVEYED

WALL SURVEY AREA

MOISTURE METER READING (SURFACE FINISH)

8.8

NOTES

DAMP PROOF COURSE WAS LOCATED AT SURVEY AREAS RR9 AND RR12 AT LOW LEVEL. NO OTHER DAMP PROOF COURSE WAS FOUND AT THE REMAINING GROUND FLOOR SURVEY AREAS. CRACKS TO WALL FINISHES DID NOT EXTEND INTO THE BRICKWORK MASONRY WHERE INVESTIGATED.

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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0 METRES 5

AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF. REVISION DATE

ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: LOCATIONS OF GROUND FLOOR WALL DAMP PROOF COURSE (DPC) AND CRACK SURVEYS

Drawn HW Date SEP 20 Scale AS SHOWN
CAD PM APP

Dwg. No. 4689-W1

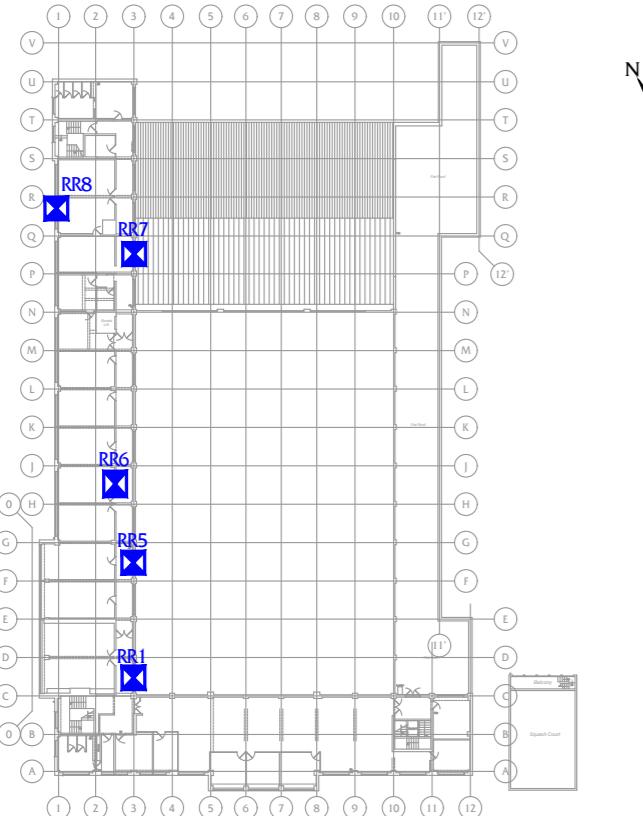


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LOCATIONS OF 1ST FLOOR WALL CRACK SURVEYS

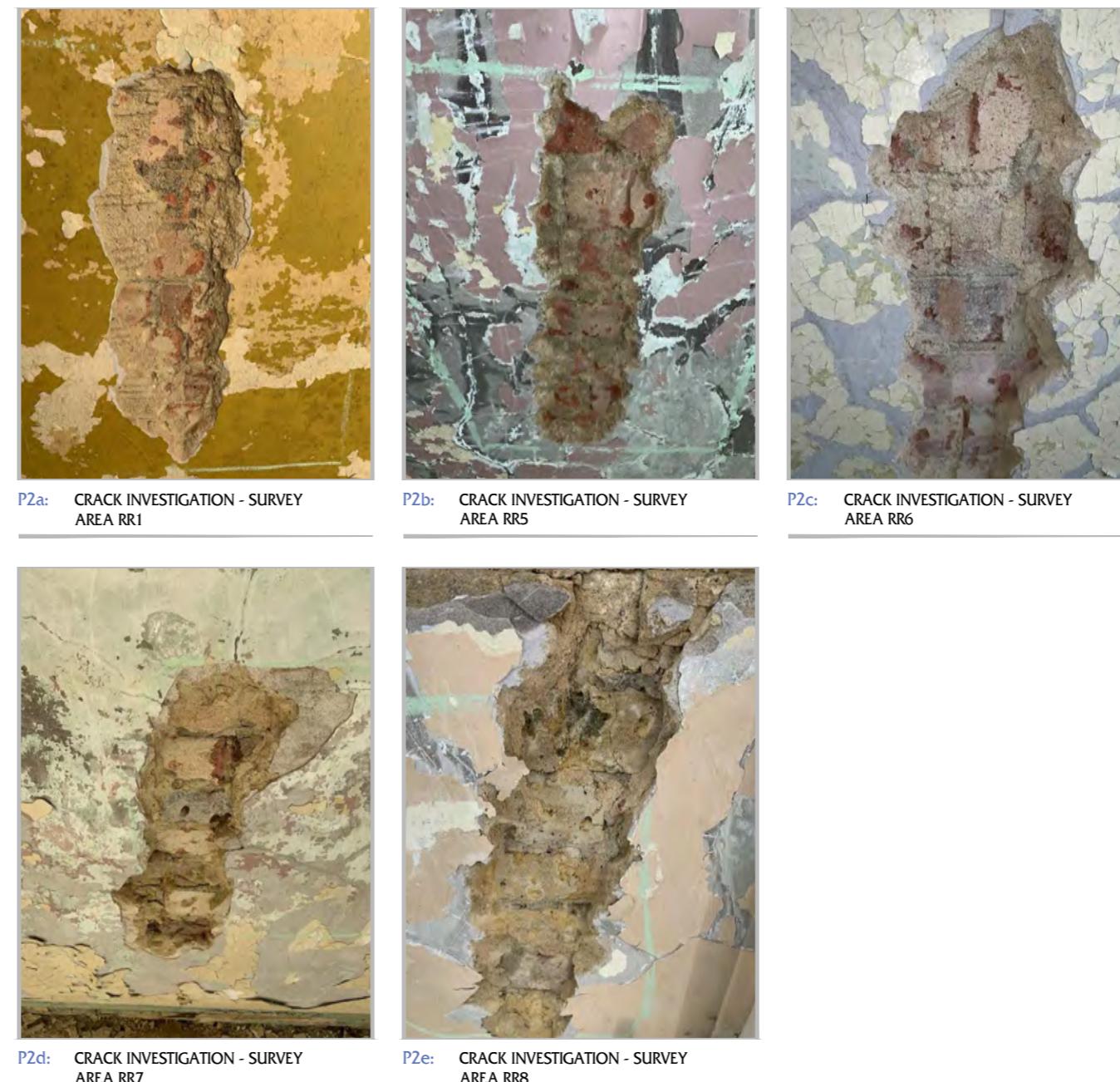
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.2: PLAN OF 1ST FLOOR SHOWING LOCATIONS OF WALLS SURVEYED NOT TO SCALE



NOTES

CRACKS TO WALL FINISHES DID NOT EXTEND INTO THE BRICKWORK MASONRY WHERE INVESTIGATED.



AERIAL VIEW OF SITE



SYMBOLS USED

PLAN EXTENT OF BUILDING SURVEYED

WALL SURVEY AREA

MOISTURE METER READING (SURFACE FINISH)

8.8

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF.	REVISION	DATE
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ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: LOCATIONS OF 1ST FLOOR WALL CRACK SURVEYS

Drawn HW CAD	Date SEP 20 PM	Scale AS SHOWN APP	Dwg. No. 4689-W2
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LOCATIONS AND DETAILS OF DAMP SURVEYS TO GROUND FLOOR - SHEET 2 OF 2
NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.5: PLAN OF GROUND FLOOR SHOWING LOCATIONS OF THERMAL SURVEYS NOT TO SCALE

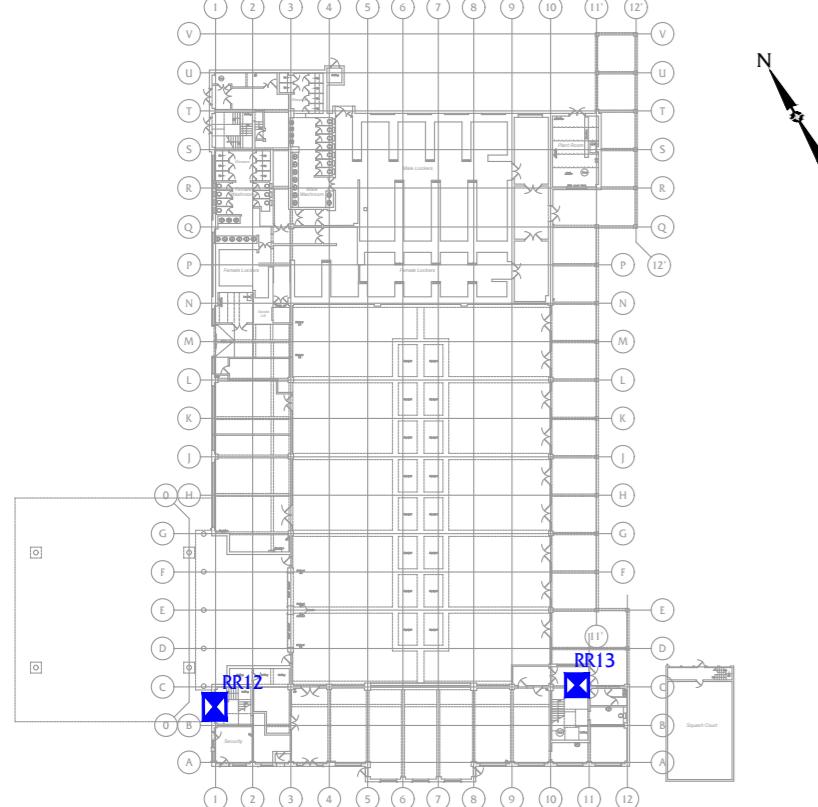


FIG.6: RESULTS OF THERMAL SURVEY - AREA RR12

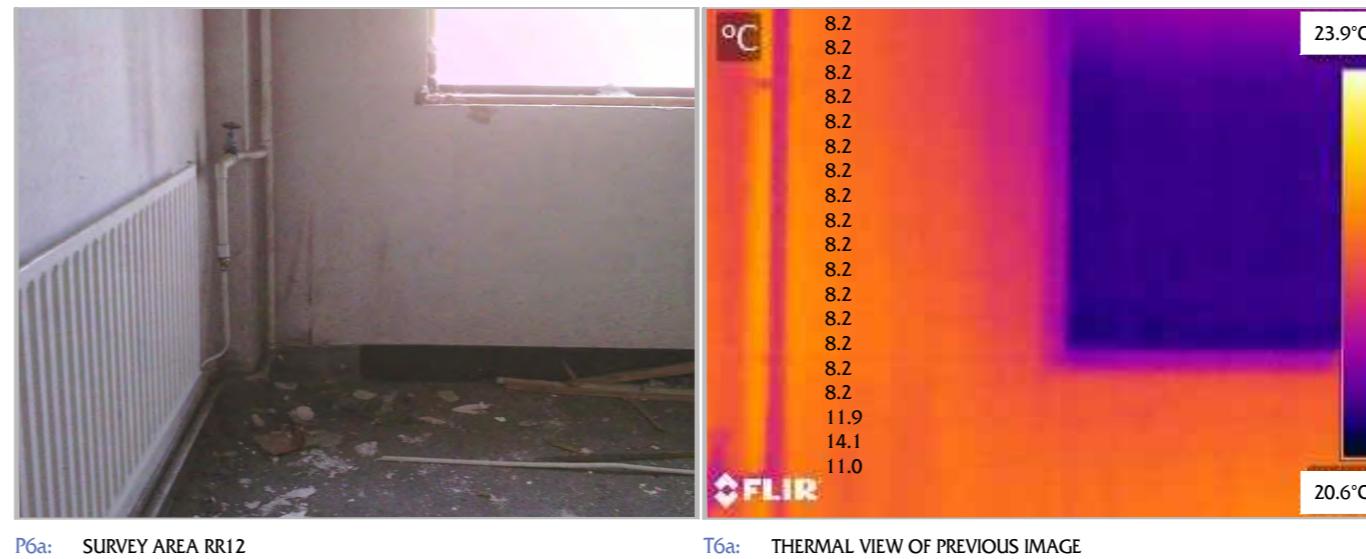
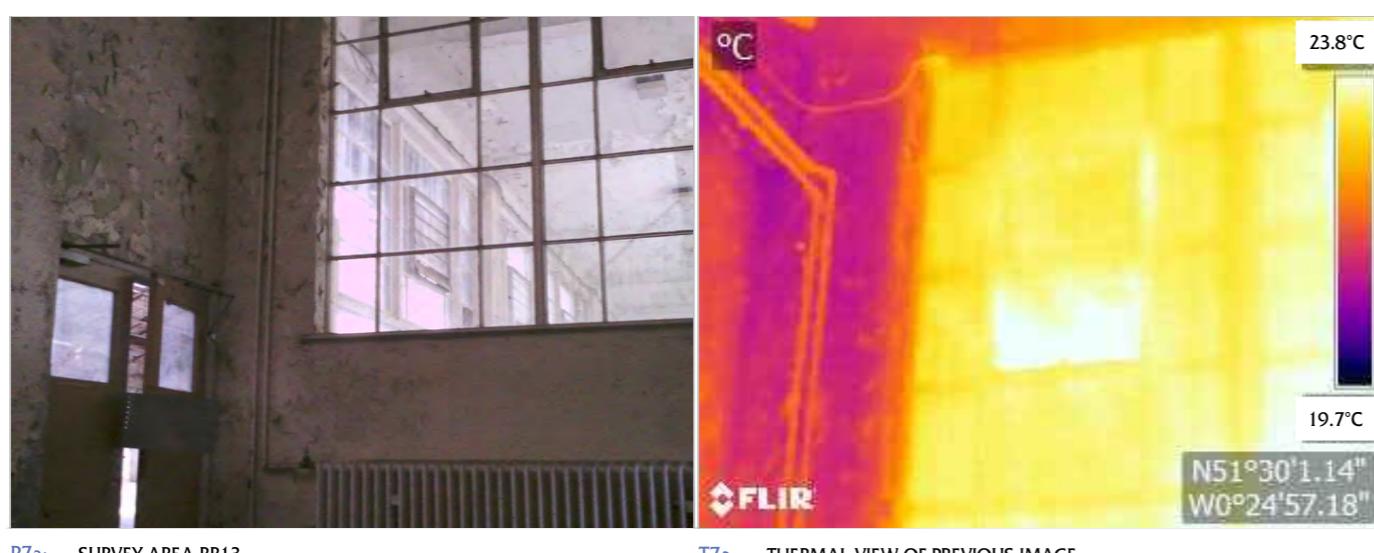


FIG.7: RESULTS OF THERMAL SURVEY - AREA RR13



AERIAL VIEW OF SITE



SYMBOLS USED

- PLAN EXTENT OF BUILDING SURVEYED
- WALL SURVEY AREA
- MOISTURE METER READING (SURFACE FINISH)

8.8

MOISTURE METER READING (SURFACE FINISH)

PROJECT DETAILS
GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING

LOCATION NORTH HYDE GARDENS, HAYES, UB3 4RF

PURPOSE OF INVESTIGATION TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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0 METRES 5

AT A SCALE OF 1:100 - ORIGINAL DWG SIZE A2 (420mm x 594mm)

REF.	REVISION	DATE
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ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: LOCATIONS AND DETAILS OF DAMP SURVEYS TO GROUND FLOOR - SHEET 2 OF 2

Drawn HW CAD Date SEP 20 PM Scale AS SHOWN APP

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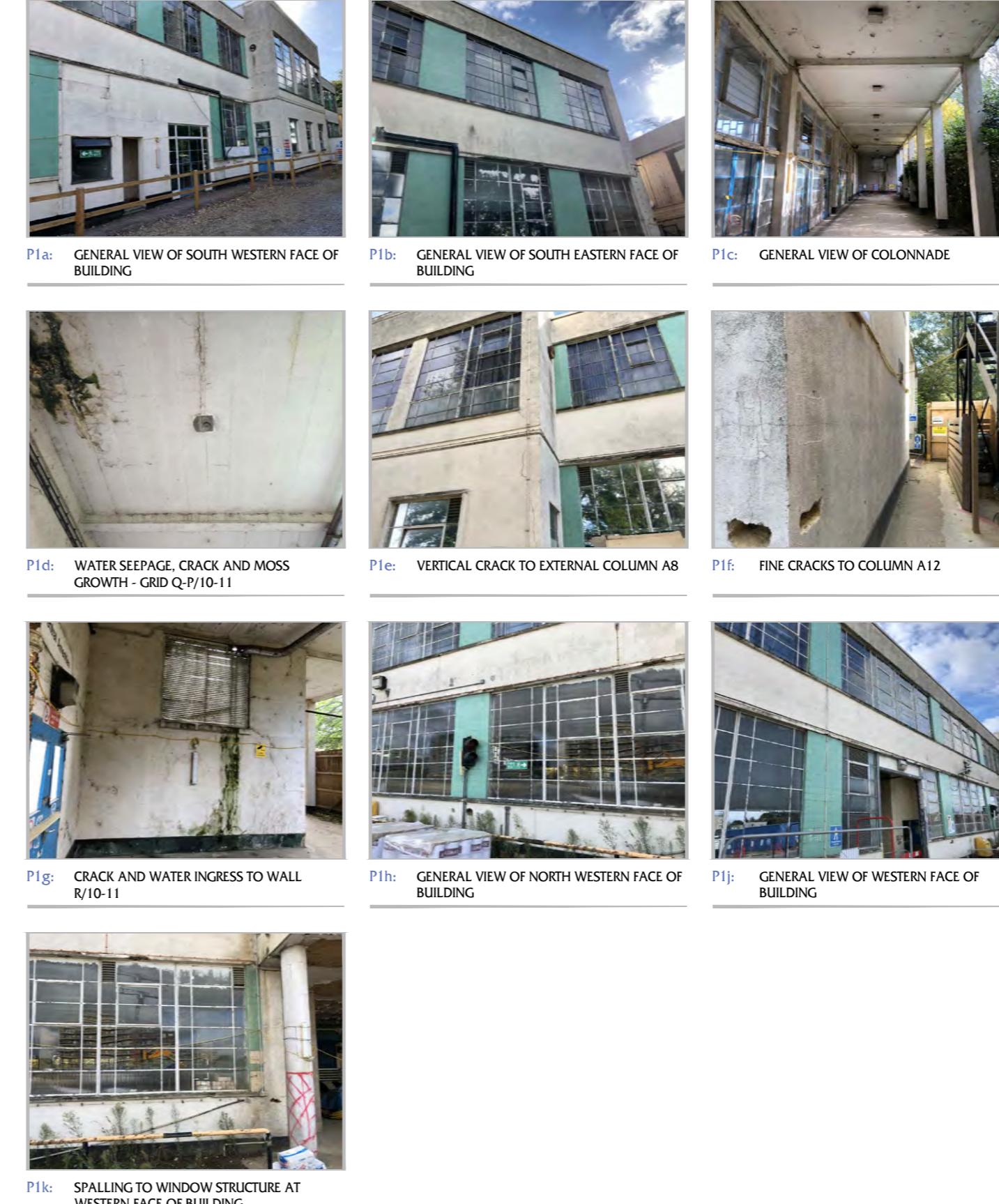
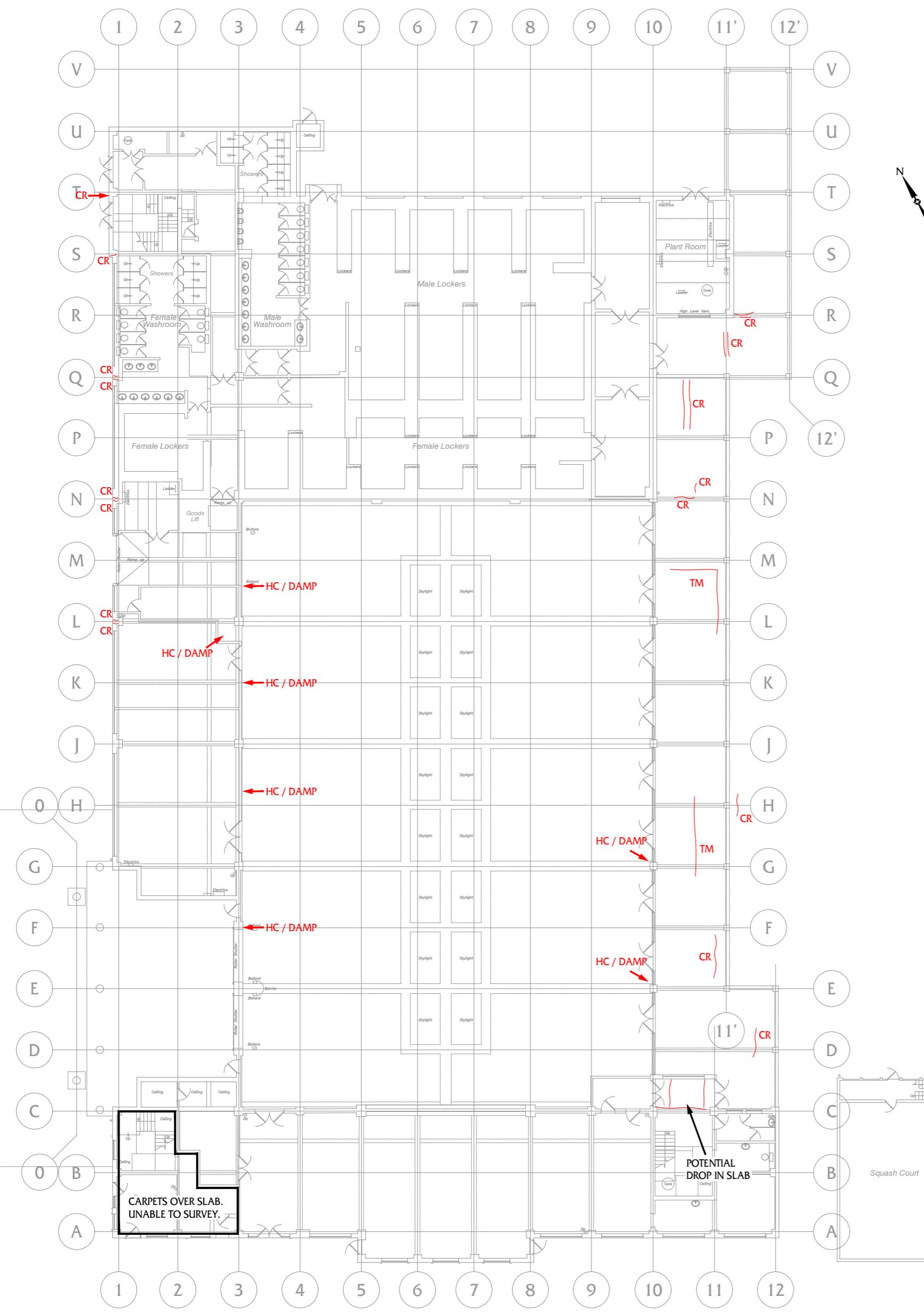
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DETAILS OF GROUND FLOOR DEFECT OBSERVATIONS IN VICINITY OF SURVEY AREAS

NESTLE FORMER CANTEEN BUILDING, HAYES

FIG.1: PLAN OF GROUND FLOOR SHOWING LOCATIONS OF DEFECT OBSERVATIONS IN VICINITY OF SURVEY AREAS NOT TO SCALE



AERIAL VIEW OF SITE



SYMBOLS USED

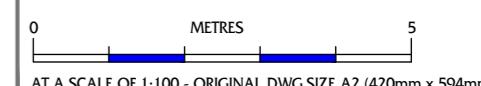
■	PLAN EXTENT OF AREA SURVEYED
CR	CRACK
HC	HONEYCOMBING
WD	WATER DAMAGE
PR	PATCH REPAIR
TM	TILE MOVEMENT
RF	EXPOSED REINFORCEMENT
SP	SPALLED CONCRETE
RS	RUST STAINING

PROJECT DETAILS

GBG REPORT No. 4698 ACCOMPANIES THIS DRAWING.

STRUCTURE INVESTIGATED	TWO STOREY STEEL FRAMED FORMER CANTEEN BUILDING
LOCATION	NORTH HYDE GARDENS, HAYES, UB3 4RF
PURPOSE OF INVESTIGATION	TO DETERMINE CERTAIN STRUCTURAL DETAILS AND MATERIAL PROPERTIES AS REQUIRED BY THE CLIENT'S DESIGN TEAM

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REF.	REVISION	DATE
ALL ORIGINAL DRAWINGS ARE PRODUCED IN COLOUR		

Project: NESTLE FORMER CANTEEN BUILDING, HAYES

Client: BARRATT LONDON

Title: DETAILS OF GROUND FLOOR DEFECT OBSERVATIONS IN VICINITY OF SURVEY AREAS

Drawn HW Date SEP 20 Scale AS SHOWN
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APPENDIX 2
SAMPLE DESCRIPTIONS AND PHOTOGRAPHS



Plate: SD1 (D7730_001)

Site Reference:

C1

Laboratory Ref:

7452

Location: Slab Survey Area GS1: Ground Floor Level – Main Hall

A core extracted in one piece with a diameter of 97mm, including a 10mm thick granolithic screed layer bonded to an underlying 195mm thick concrete layer. The overall length of the sample was 205mm.

The concrete contained approximately 45-55% mixed flint-gravel as the coarse aggregate, which was sub-rounded to sub-angular and equant to elongate in shape, generally well graded and evenly distributed, with a maximum nominal size of 20mm. The cement paste within the core sample was light grey in colour and apparently of good compaction, with excess voidage judged at 0.5% and a maximum void size of 4mm x 3mm x 6mm deep.

The surface of the core was dry on receipt and the voids were empty. There were no cracks cutting the core. There was 1No. 8mm diameter steel bar present within the core at 25mm from the top surface of the core.

Other Information: The top surface of the screed has a smooth surface finish. The bottom surface of the core was uneven but smooth, with the impression of a damp proof membrane.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.1

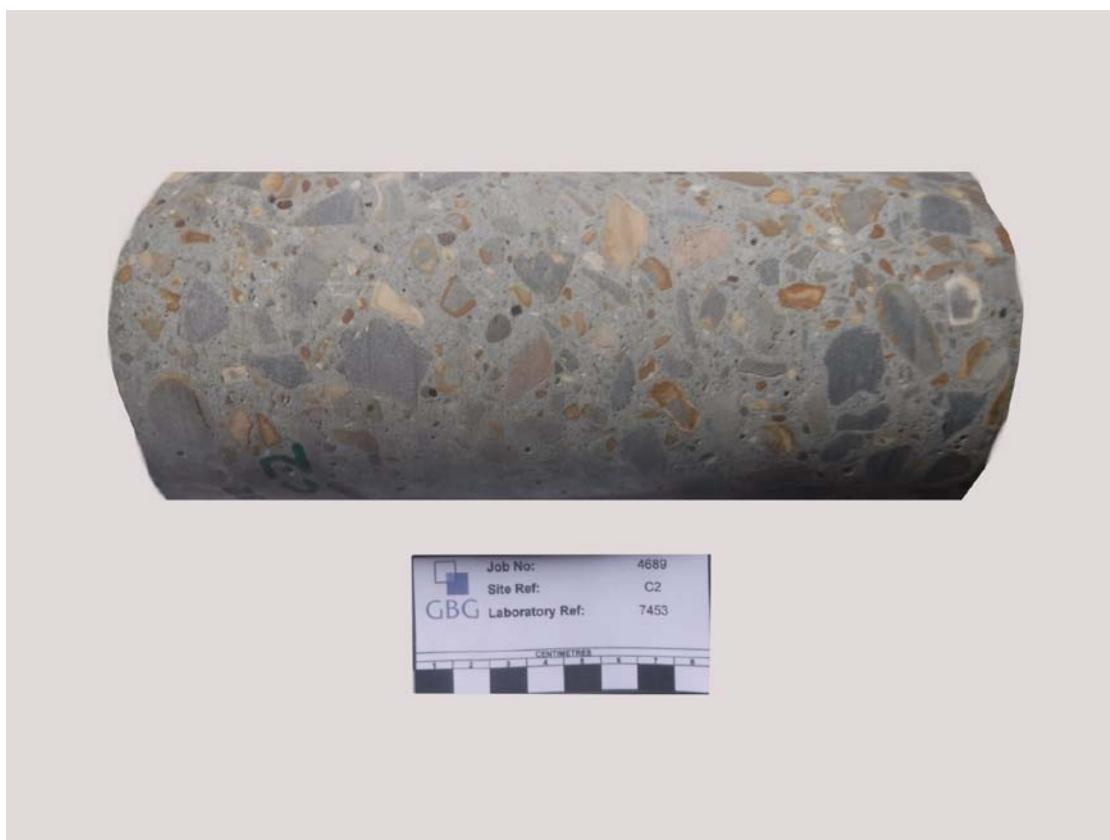


Plate: SD2 (D7730_014)

Site Reference:

C2

Laboratory Ref:

7453

Location:

Slab Survey Area GS2: Ground Floor Level – Main Hall

A concrete core extracted in one piece with a diameter of 97mm. The overall length of the sample was 220mm.

The concrete contained approximately 45-55% mixed flint-gravel as the coarse aggregate, which was sub-rounded to sub-angular and equant to elongate in shape, generally well graded and evenly distributed, with a maximum nominal size of 20mm. The cement paste within the core sample was grey in colour and apparently of good compaction, with excess voidage judged at 0.5% and a maximum void size of 1mm x 2mm x 2mm deep.

The surface of the core was dry on receipt and the voids were empty. There were no cracks cutting the core. There were no steel bars present in the core.

Other Information: The top surface of the concrete has a smooth surface finish. The bottom surface of the core was uneven but smooth, with the impression of a damp proof membrane.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.2



Plate: SD3 (D7730_049)

Site Reference:

C3

Laboratory Ref:

7454

Location: Slab Survey Area GS3: Ground Floor Level – Main Hall

A core extracted in two pieces, including a 35mm thick granolithic screed layer and a 210mm thick concrete layer, each with a diameter of 97mm. The overall length of the sample was 245mm.

The concrete contained approximately 45-55% mixed flint-gravel as the coarse aggregate, which was sub-rounded to sub-angular and equant to elongate in shape, generally well graded and evenly distributed, with a maximum nominal size of 20mm. The cement paste within the core sample was light grey in colour and apparently of good compaction, with excess voidage judged at 1.5% and a maximum void size of 5mm x 5mm x 5mm deep.

The surface of the core was dry on receipt and the voids were empty. There were no cracks cutting the core. There were no steel bars present in the core. Minor honeycombing was observed at the bottom of the core.

Other Information: The top surface of the screed had a roughly cast surface finish and the screed had become detached from the underlying concrete. The bottom surface of the core was uneven but smooth, with the impression of a damp proof membrane.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.3

4689

Fig. A2.3

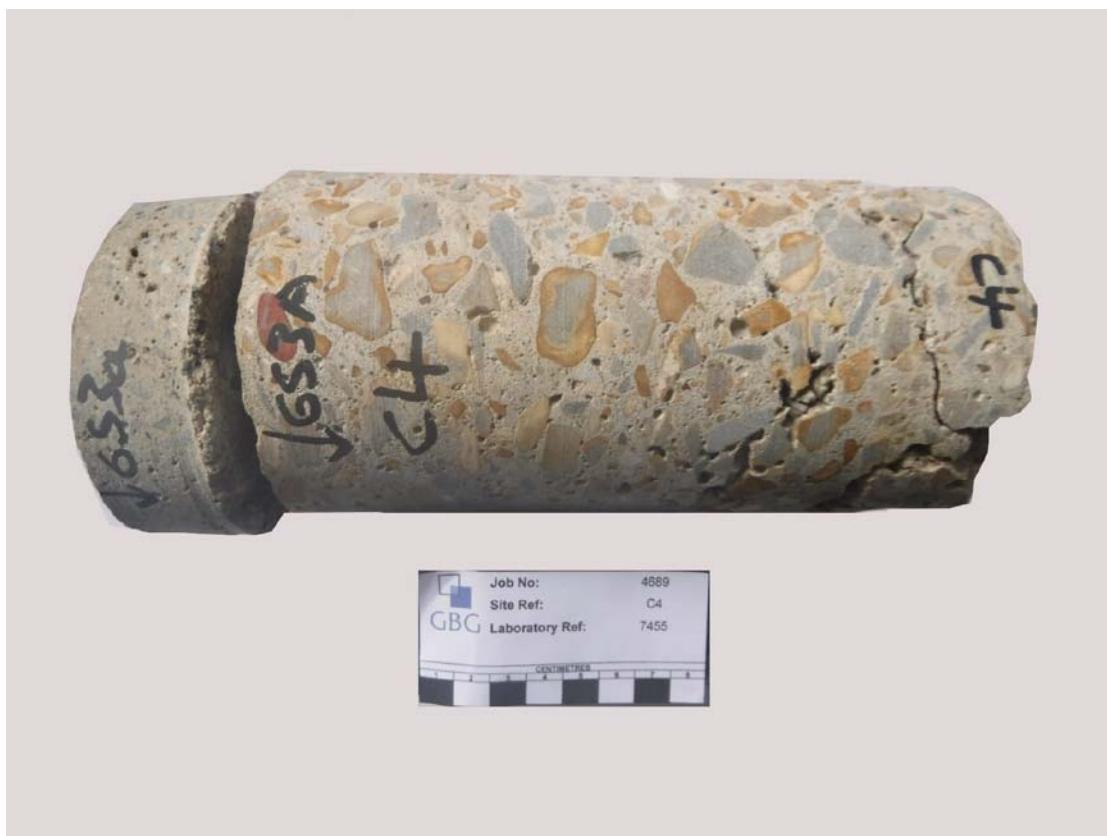


Plate: SD4 (D7730_062)

Site Reference:

C4

Laboratory Ref:

7455

Location:

Slab Survey Area GS3: Ground Floor Level – Main Hall

A concrete core extracted in two pieces, including a 35mm thick granolithic screed layer and a 165-209mm thick concrete layer, each with a diameter of 97mm. The overall length of the sample was 200-244mm.

The concrete contained approximately 45-55% mixed flint-gravel as the coarse aggregate, which was sub-rounded to sub-angular and equant to elongate in shape, generally well graded and evenly distributed, with a maximum nominal size of 20mm. The cement paste within the core sample was light grey in colour and generally of good compaction, with excess voidage judged at 1.5%. However, honeycombing was evident towards the bottom of the core and the maximum void size observed was 8mm x 9mm x 6mm deep (honeycombed area).

The surface of the core was dry on receipt and the voids were empty. A cracks was observed cutting a portion of the bottom of the core within the honeycombed area. There were no steel bars present in the core.

Other Information: The top surface of the concrete has a roughly cast surface finish. The bottom surface of the core was roughly cast and uneven. There was no damp proof membrane at the bottom of the core.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE CANTEEN, HAYES	Fig. A2.4



Plate: SD5 (D7736_003)

Site Reference: SS1

Laboratory Ref: 7572

Location: Grid Q/11 – Steel Column – Ground Floor Level

A 150mm long x 25mm wide steel coupon sample cut from the steel column web.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.5



Plate: SD6 (D7736_005)

Site Reference: SS2

Laboratory Ref: 7573

Location: Grid N/11 – Steel Column – Ground Floor Level

A 150mm long x 25mm wide steel coupon sample cut from the steel column web.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.6



Plate: SD7 (D7736_007)

Site Reference: SS3

Laboratory Ref: 7574

Location: Grid A-B/9 – Steel Beam – First Floor Level

A 150mm long x 25mm wide steel coupon sample cut from the steel beam flange.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.7



Plate: SD8 (D7736_009)

Site Reference: SS4

Laboratory Ref: 7575

Location: Grid G/1-2 – Steel Beam – First Floor Level

A 150mm long x 25mm wide steel coupon sample cut from the steel beam flange.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.8



Plate: SD9 (D7729_001)

Site Reference: L1

Laboratory Ref: 7475

Location: Grid J/3 – Column Encasement - Ground Floor level

A very firm concrete containing natural fine and coarse aggregates set in a grey coloured binding paste.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.9

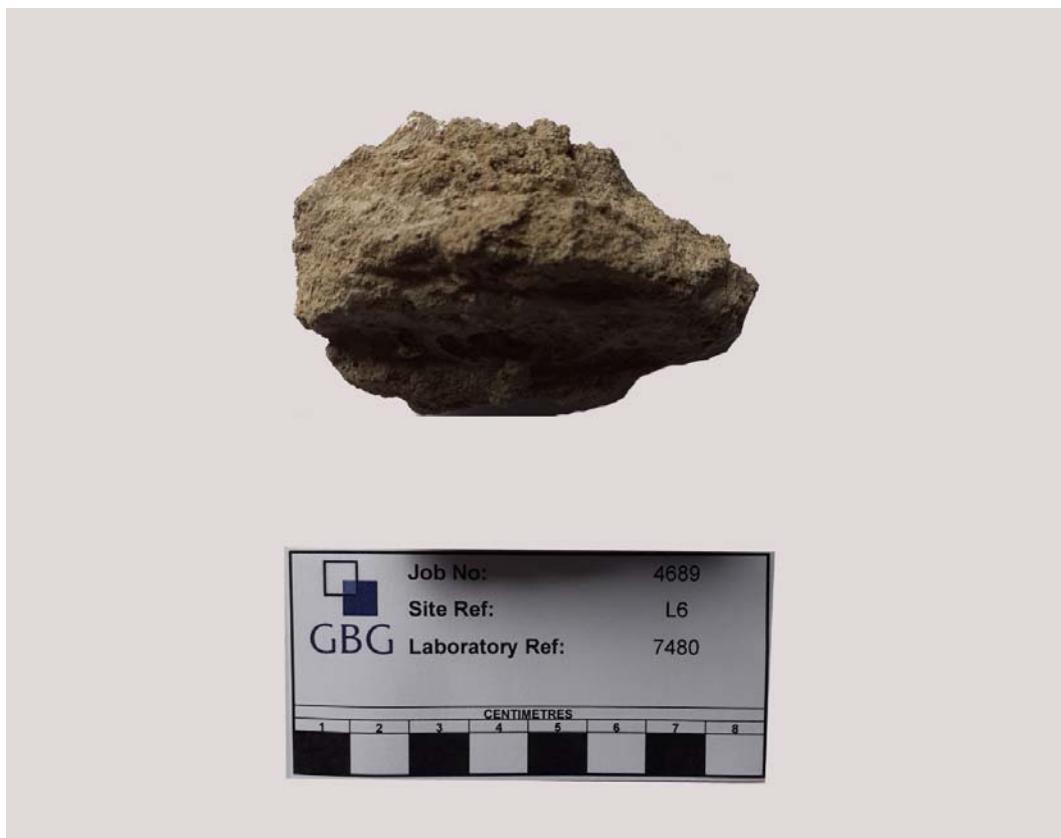


Plate: SD10 (D7729_014)

Site Reference:

L6

Laboratory Ref:

7480

Location:

L/1 – Column Encasement - Ground Floor level

A firm but brittle mortar containing natural fine aggregates set in a light buff coloured binding paste.

SAMPLE DESCRIPTIONS

Job No.
4689

NESTLE FORMER CANTEEN BUILDING, HAYES

Fig.
A2.10

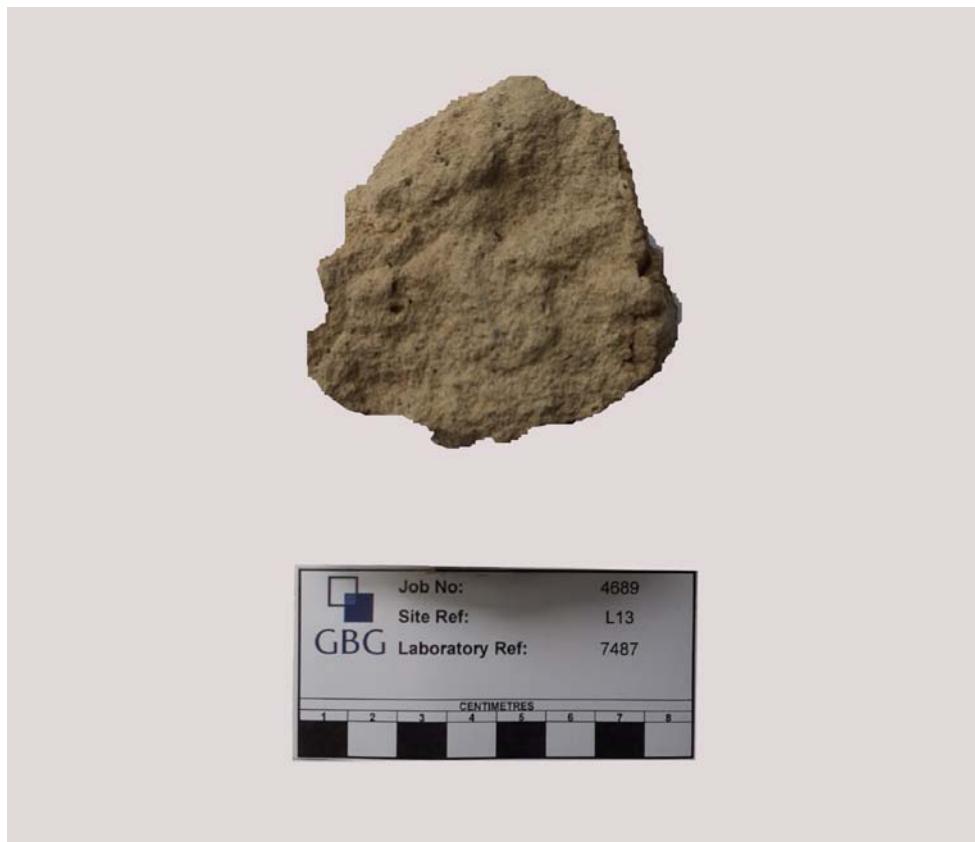


Plate: SD11 (D7729_031)

Site Reference:

L13

Laboratory Ref:

7487

Location:

C/10 – Column Encasement - Ground Floor level

A firm but brittle mortar containing natural fine aggregates set in a light buff coloured binding paste.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.11



Plate: SD12 (D7736_001)

Site Reference: L18

Laboratory Ref: 7556

Location: A/5 – Column Encasement - Ground Floor level

A firm but brittle mortar containing natural fine aggregates set in a light buff to grey coloured binding paste.

SAMPLE DESCRIPTIONS	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig. A2.12

APPENDIX 3
SITE AND LABORATORY TEST RESULTS SUMMARY

Site Ref.	Depth/Dia.	Location/Element	Min. Depth of Concrete Cover	Depth of Carb'n	Density	Core Compressive Strength	Estimated in-situ Cube Strength	Presence of HAC	Sulfate Content*	Chloride Content*
	mm		mm	mm	kg/m ³	MPa	MPa		%	%
<u>R.C. Ground Bearing Slab</u>										
C1	100 dia.	Grid F-G/4-5 – GS1			2310	62.6	64.2			
C2	100 dia.	Grid G-H/2-3 – GS2			2310	60.9	61.6			
C3	100 dia.	Grid B-C/10-11 – GS3			2320	55.9	57.1			
C4	100 dia.	Grid B-C/10-11 – GS3								
Average					2310	59.8	61.0			
<u>Concrete Foundations</u>										
S17	5-30	Trial Pit 1 at Grid J/3							1.97	
S18	5-30	Trial Pit 2 at Grid N/8							2.29	
S19	5-30	Trial Pit 2 at Grid E/10							2.06	
Average									2.11	
<u>R.C. Pre-cast Concrete Planks</u>										
S1	5-30	Roof at Grid N/3						Not present	0.11	
S2	5-30	Roof at Grid G/3						Not present	0.27	
S3	5-30	Roof at Grid B/7						Not present	0.58	
S4	5-30	Roof at Grid A/9						Not present	0.13	
S9	5-30	Roof at Grid B/7						Not present	0.07	
S5	5-30	First Floor at Grid L-K/3	20	5				Not present	0.05	
S15	5-30	First Floor at Grid H/3						Not present	0.40	
S23	5-30	First Floor at Grid Q/11	25	5					0.27	
B/O		First Floor at Grid Q/12	25	5						
S27	5-30	First Floor at Grid K/11	30	5					0.41	
S29	5-30	First Floor at Grid F/11	25	15				Not present	0.25	
Average				25	7				0.25	
KEY:										
C1 – Core Sample, S1 – Dust Sample, B/O – Breakout										
*An assumed cement content of 14% was used to express the chloride and sulfate contents of the concrete samples.										
SITE AND LABORATORY TEST RESULTS SUMMARY									Job No. 4689	
NESTLE FORMER CANTEEN BUILDING, HAYES									Fig No. A3. 1	

Site Ref.	Depth/Dia.	Location/Element	Min. Depth of Concrete Cover	Depth of Carb'n	Presence of HAC	Sulfate Content*	Chloride Content*
		mm	mm	mm		%	%
<u>Steel Beam Concrete Encasement</u>							
S11	5-30	Roof Beam at Grid B/7				0.09	
S13	5-30	Roof Beam at Grid G/1-2				0.01	
B/O		Roof Beam at Grid A-C/7	41	15			
B/O		Roof Beam at Grid C/10-11	90	20			
S6	5-30	First Floor at Grid K/3	55	70		0.01	
S7	5-30	First Floor at Grid L-K/2-3				0.01	
S14	5-30	First Floor Beam at Grid H3				0.01	
S16	5-30	First Floor Beam at Grid J-H/2-3	55	90		0.01	
S20	5-30	First Floor Beam at Grid G/10	45	25	Not present	0.01	
S21	5-30	First Floor Beam at Grid K/3				0.01	
S28	5-30	First Floor Beam at Grid F/10-11	50	15			
B/O		First Floor Beam at Grid K/11	50	20			
B/O		First Floor Beam at Grid Q/11	50	25			
B/O		First Floor Beam at Grid Q/12	55	30			
Average			55	34		0.02	
<u>Steel Column Masonry/Concrete Encasement</u>							
L1	5-30	Ground Floor Column at Grid J/3				0.01	
L6	5-30	Ground Floor Column at Grid L/1				0.01	
L13	5-30	Ground Floor Column at Grid C/10				0.01	
L18	5-30	Ground Floor Column at Grid A/5				0.01	
Average						0.01	

KEY:

L1 – Lump Sample, S1 – Dust Sample, B/O – Breakout

*An assumed cement content of 14% was used to express the chloride contents of the concrete samples.

70 – Carbonation front has reached or exceeded the concrete depth of cover to the embedded steel.

Site Ref.	Location/Element	Lead (aqua regia extractable in "other") mg/kg	Cadmium (aqua regia extractable in "other") mg/kg	Tensile strength	
				Yield (0.2%rp) Stress MPa	Maximum Stress MPa
<u>Steel Beams and Columns</u>					
SS1	Ground Floor Column at Grid Q/11			271	412
SS2	Ground Floor Column at Grid N/11			276	460
SS3	First Floor Beam at Grid A-B/9			234	435
SS4	First Floor Beam at Grid G/1-2			263	459
Average				261	442
<u>Paint Samples (Steel Trusses)</u>					
M1	Truss at Grid D	2100	<0.2		
M2	Truss at Grid G	1600	<0.2		
M3	Truss at Grid H	1000	<0.2		
M6	Truss at Grid D/10	7400	<0.2		
M7	Truss at Grid G/10	8200	<0.2		
M8	Truss at Grid H/10	17000	0.3		
Average				6200	<0.2

KEY:

SS1 – Steel Sample, M1 – Paint Sample

SITE AND LABORATORY TEST RESULTS SUMMARY	Job No. 4689
NESTLE FORMER CANTEEN BUILDING, HAYES	Fig No. A3. 3

Site Ref.	Location/Element	Probable Mix Proportions By Volume	Equivalent Mortar Grade (BS 4551:2005+A2:2013)
		cement: sand cement: lime: sand	

Masonry Wall

M4	Ground Floor - RR2 at Grid G/1	1:7 to 8 or 1:5 to 6	1:1:5 to 6	iv or iii
M5	Ground Floor - RR4 at Grid B/10	1:8 or 1:7 to 8	1:2:8 to 9	v or iv

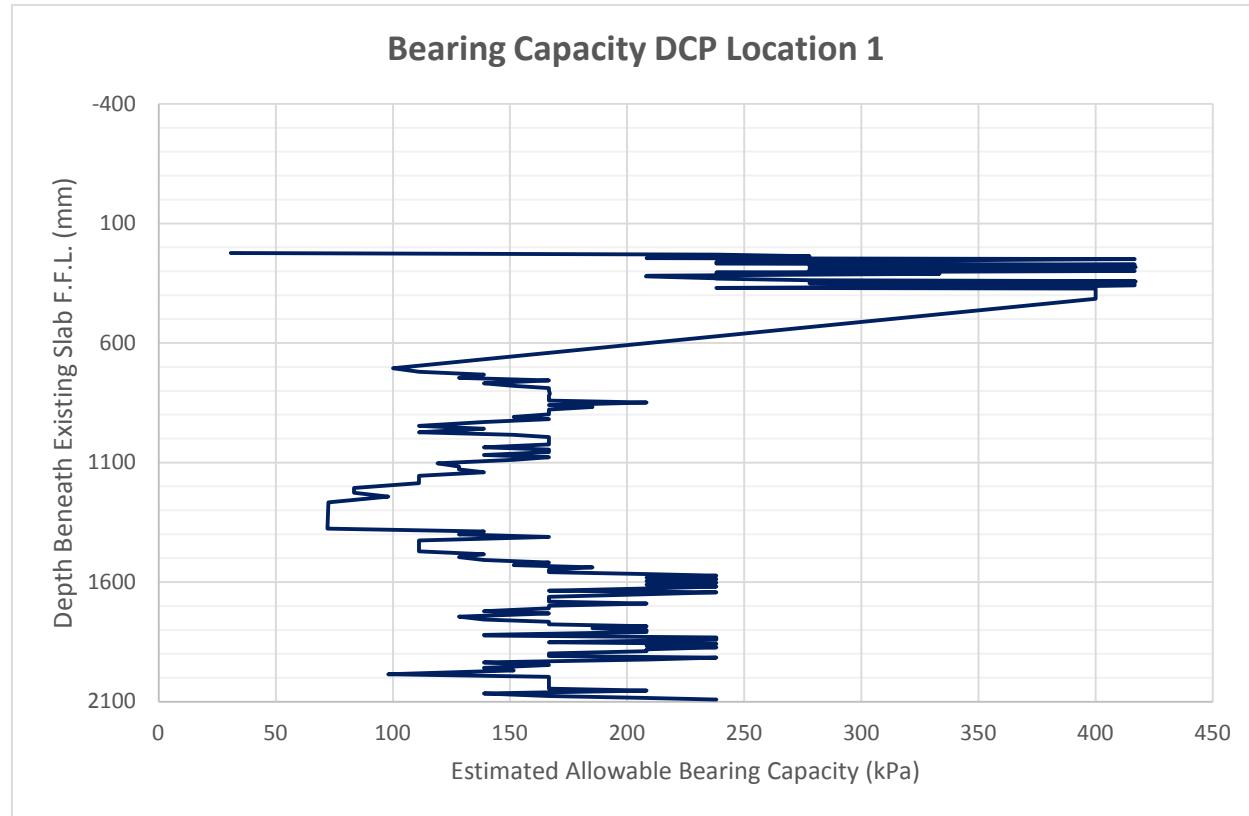
KEY:**M1 – Mortar Sample****Methods of Mortar Testing**

The mix proportions were determined by the method described in B.S. 4551:2005+A2:2013. The ground sample was extracted with acid and alkali. The silica and calcium oxide contents were determined by atomic absorption spectrophotometric/titrimetric method from the extract. The insolubles were determined by drying at 105 °C. The cement, lime and sand contents were calculated using the following assumptions:

silica content of cement (CEM I) = 0.202 bulk density of sand = 1675 kg/m³
 calcium oxide content of cement (CEM I) = 64.50% bulk density of cement = 1450 kg/m³
 soluble silica content of sand = 0.20% bulk density of lime = 575 kg/m³
 calcium oxide content of lime = 72.70%

The traditional mix proportions were then chosen based on the cement content from Table 4 and 7 of the above standard. Based on the standard chemical analysis, visual observations and experience of the laboratory, the most likely mix proportions are highlighted in bold in the above results table.

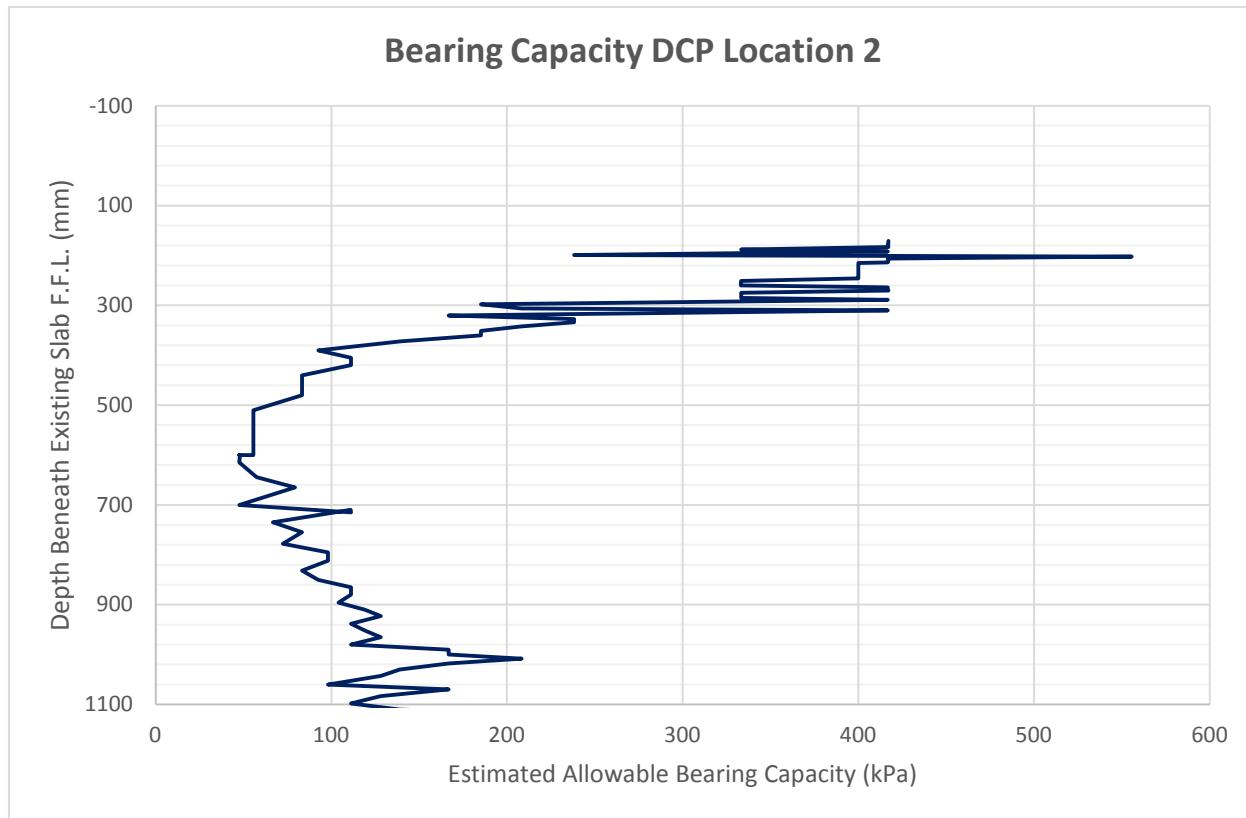
APPENDIX 4
DCP TEST RESULTS GRAPHS



DCP TEST RESULTS

NESTLE FORMER CANTEEN BUILDING, HAYES

Job No.	4689
Fig No.	A4.1

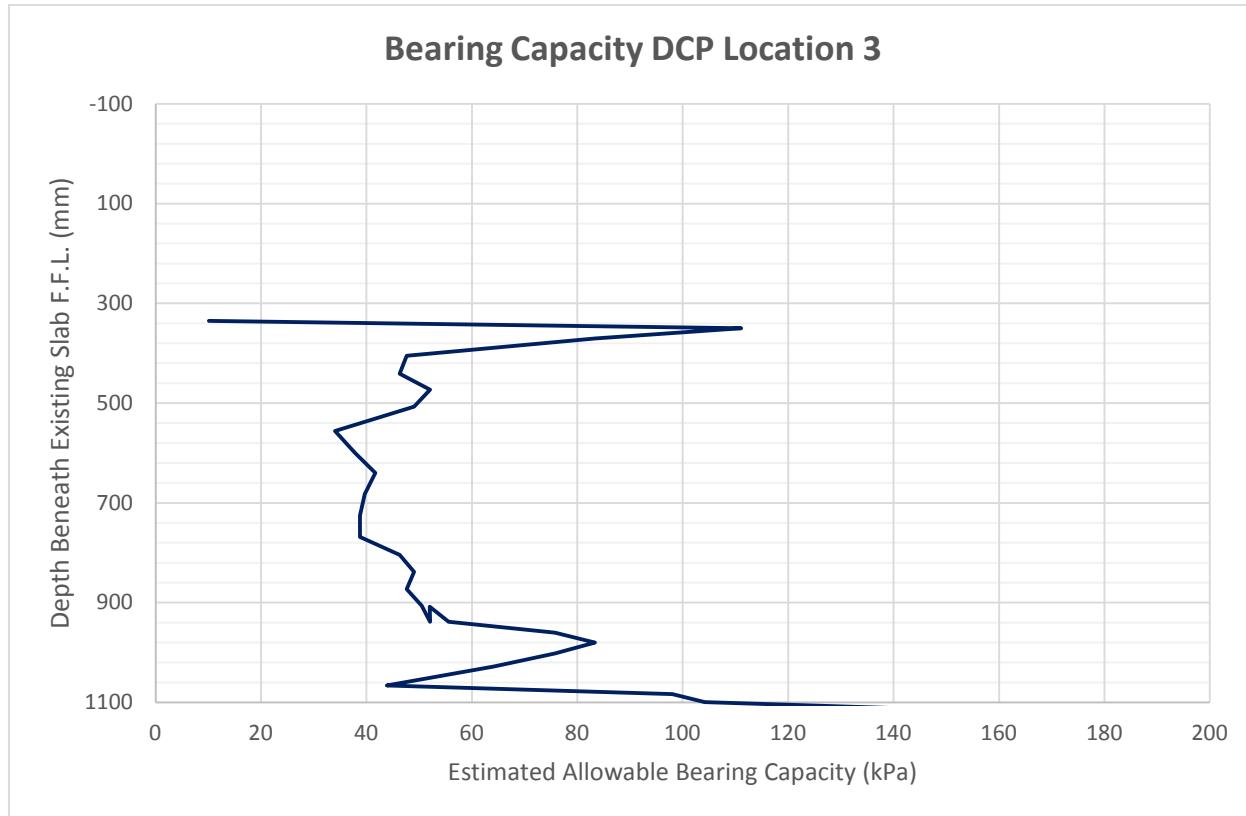


DCP TEST RESULTS

Job No. **4689**

Fig No. **A4.2**

NESTLE FORMER CANTEEN BUILDING, HAYES



DCP TEST RESULTS

NESTLE FORMER CANTEEN BUILDING, HAYES

Job No. **4689**

Fig No. **A4.3**