



CONSULTING STRUCTURAL ENGINEERS

39-41 NORTH ROAD
LONDON
N7 9DP

TELEPHONE 020 7226 2444

THE WHITE HORSE
KIMPTON SG4 8RJ
STRUCTURE

18118/JO

OCT 20

OSBORNE EDWARDS LTD

DIRECTORS JACQUI OSBORNE BSC CENG MSTRUCTE
JOHN EDWARDS GRAD DIPL CONS (AA)

REGISTERED IN ENGLAND 4173590

GENERAL INTRODUCTION.

The White Horse is a Listed Grade II property located in the High Street in Kimpton within a conservation area. It comprises 4 original buildings that have been converted to one property, with a number of additions and extensions made during its life. The history and areas of significance are covered in detail in reports by others.

The linking together of the buildings resulted in significant changes in the property including in former party walls where corridors and openings have been added and sections of walls removed. New structure in the form of steel beams has been added in to provide support, some floor joists strengthened and alterations made to the King post trusses. Areas of the ground floor replaced with newer timber and some sections in concrete floor. We would consider the building to have been significantly altered during its' life, though much of the original fabric remains,

INVESTIGATIONS.

Limited investigations were carried out at the property in early September 2020 and the findings recorded on a plan and sketch sections, attached in **Appendix A and Appendix B.**

The investigations included trial pits to establish the depth of existing foundations and ground conditions, and investigations of existing historic fabric – all as agreed with the Conservation Officer.

A desk study carried out before the pre-application submission found the following:

GEOLOGY:

The nearest borehole is at The Bury from July 1976, recording:

- Topsoil 2ft
- Ballast 5ft
- Chalk – described as middle chalk.
- Water is recorded (in the middle of an exceptionally dry summer), as being 5.5m above the well head.

AQUIFER DESIGNATION:

- Aquifer designation (bedrock) – Principal
- Aquifer designation (superficial drift) – Secondary undifferentiated
- Ground water vulnerability - Major Aquifer – Intermediate

FLOOD RISK:

- From seas and rivers – Low
- From reservoirs – Low
- From ground water – Low to Medium.

We found ballast with some chalk content in trial pits at the rear of the site and in the basement. Further investigations, described below, will be needed to confirm more site information.

Additional investigations will be needed in the next phase to cover both the building and soil properties and conditions at depth, including:

- The condition of timber elements embedded in walls
- A detailed inspection of the roof above the middle buildings

There will also need to be a number of specialist investigations as follows:

- Boreholes to check the soil at depth and to also check water levels
- Soil and water samples taken for contamination testing.
- Specialist advice on timber decay and signs of insect attack with comment on best practice for ongoing protection.

EXISTING STRUCTURE.

We made a brief inspection of the building in 2018 and found the structure to be in fair condition, needing some strengthening, repair and maintenance. The investigations carried out in September 2020 were planned around observations made during that visit, to find out as much as possible about the structure without significant intrusion, with a focus on areas that are to be altered.

PRINCIPLE STRUCTURAL ALTERATIONS.

Refer to plans and details in Appendix C and Appendix D

a) NEW STRUCTURE.

Much of a relatively recent rear extension is to be removed and replaced with a new extension approximately 6m deep. This will have a sloping roof enclosing a double-height space. The roof will support a new first floor bathroom hung from the rafters and partly supported on the existing rear wall of the two middle buildings. Most of the floor in the double-height space is to be removed and replaced with a concrete slab spanning between basement walls and a new foundation at the rear of the site..

An relatively recently erected outbuilding used for storage is to be demolished. A new building is to be constructed on the space created, extending up to the rear boundary. Foundations to boundary walls at the rear of the site are deep and the new building built alongside without foundation work being needed. Towards the front of the site the existing foundations are more shallow and many of the boundary walls alongside the new building will need to be underpinned.

b) ALTERATIONS AND REPAIRS

Several load-bearing partitions are being removed in the two end houses, ceiling joists are being removed to expose the underside of rafters and purlin supports are being removed. The purlins will be strengthened to span between party walls and the rafter/wall junction at the eaves junction will be strengthened to provide lateral restraint to the wall.

Stairs are being reconfigured.

In the oldest building changes are minimal with interventions that are mostly to strengthen and repair. In particular the roof requires attention. The bottom chord of two king-post trusses have been removed and unconventionally re-supported, the front elevation is bowed, and some of the floor joists may need to be strengthened.

We are told the rear wall of the two middle buildings is of historic significance and repairs here are possible. A small part of the what appears to be the original timber frame is visible in an eaves storage cupboard and this appears to be in good condition. However, beneath this, in the ground floor, one part of the wall we exposed was finished in plasterboard and appeared to comprise new timber studs. Another part in front of the existing kitchen was brick. Further investigations will be needed to confirm the construction, condition and extent of work needed here.

Where new stairs are to rise from ground floor to first floor, the partition alongside – possibly original, will be exposed.

Basements are to be cleared of recently added posts and bases and new steelwork added to give a clear floor area. The floor level is to be dropped over much of the ground floor and a new concrete slab added.

A list of likely repairs includes:

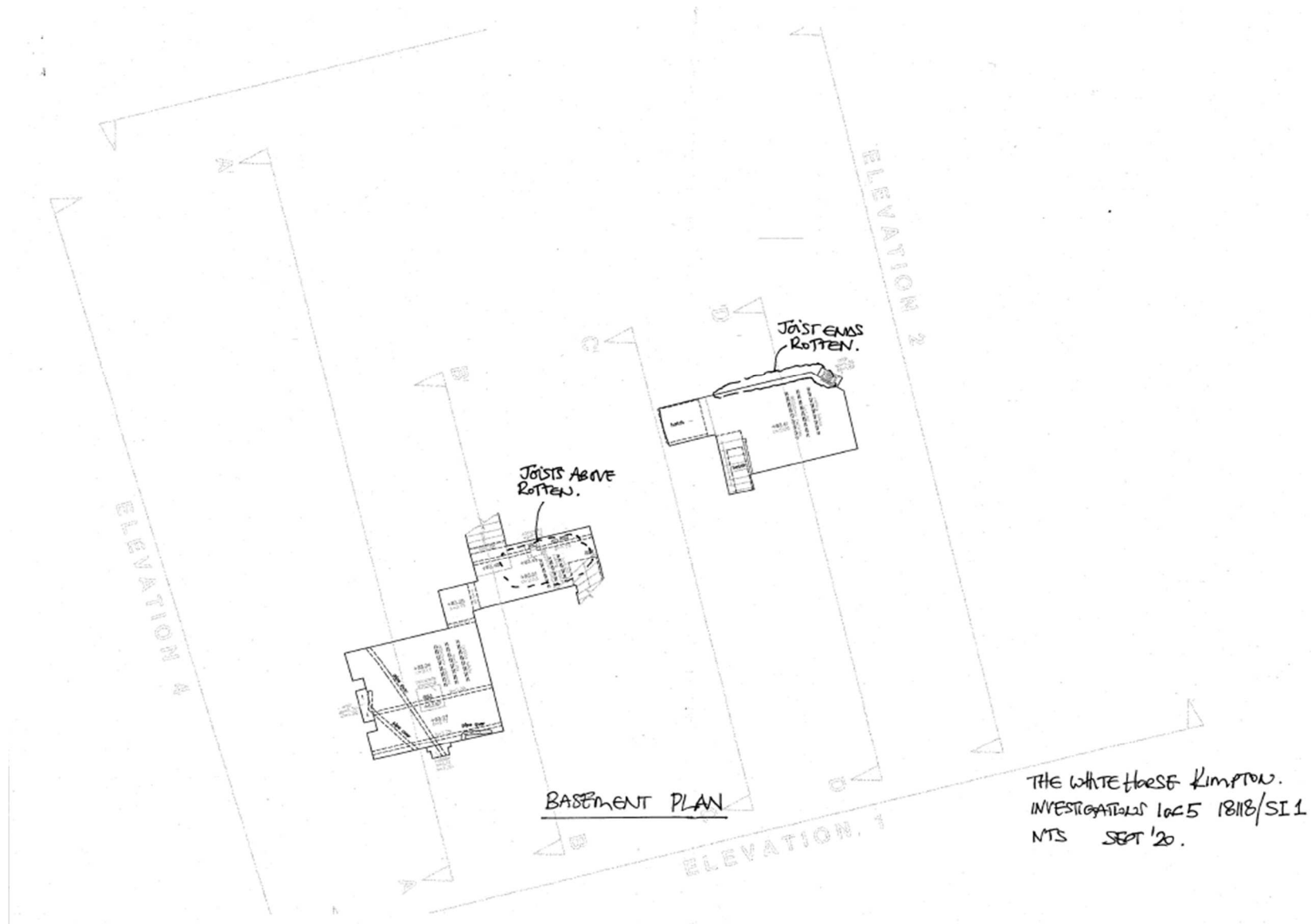
- Replacement of timber ends where decayed or badly attached by insects.
- Replacement of badly decayed timbers built into external walls.
- Replacement of bottom chord of the roof trusses by adding a new fitch beam.
- Strengthening of rafter, purlins, props where necessary.
- Repairs to timber in historic partitions.

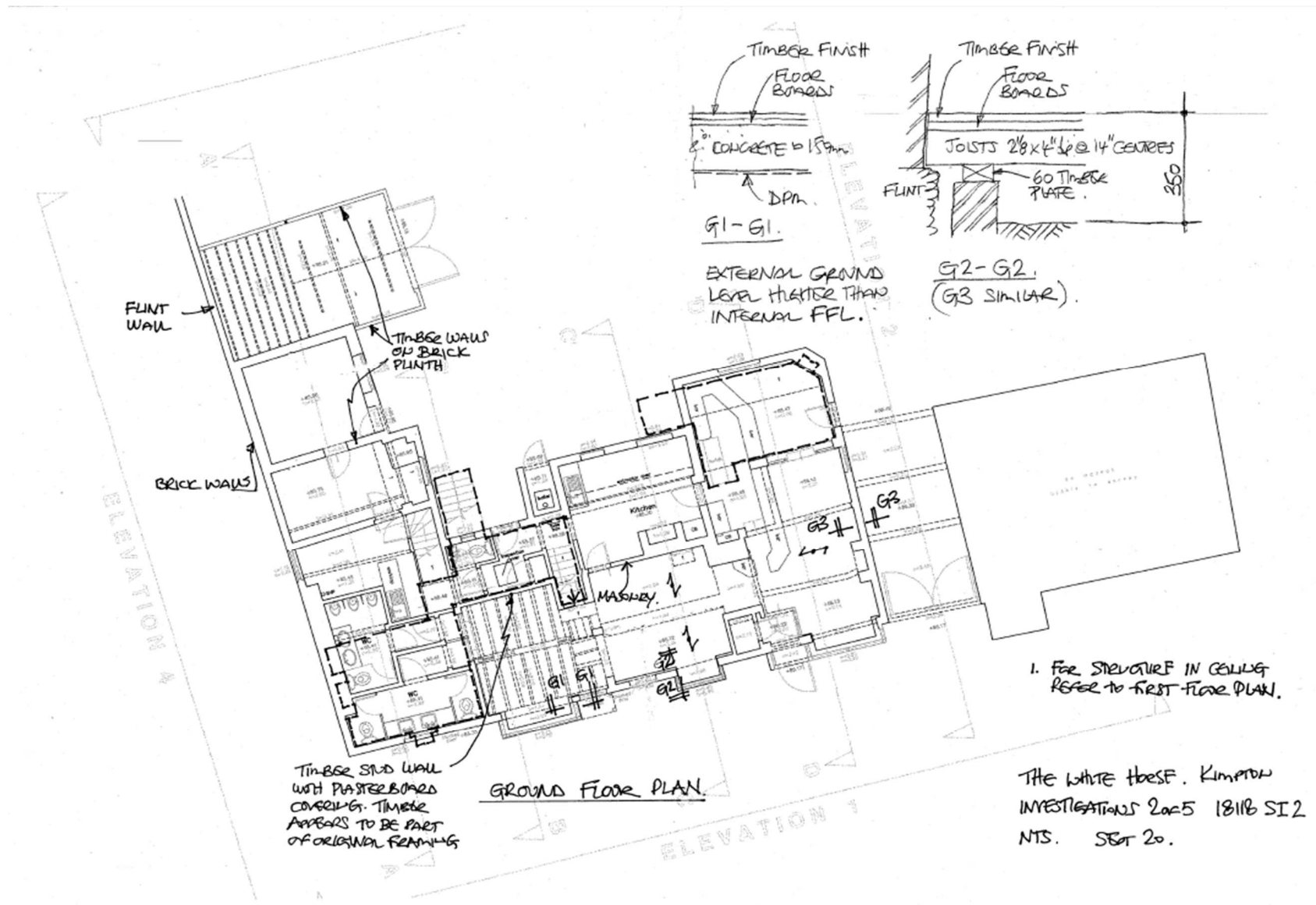
Where possible timber elements will be retained rather than removed, but better protected in line with timber specialist advice. However, where removal or significant repair is needed we expect to adopt conservation principles, where proposed interventions are likely to stand out as being new rather than aiming to replicate the construction of the older fabric. In accordance with this we will aim for repairs and interventions to be reversible where practical to do so.

DRAINAGE AND SUDS

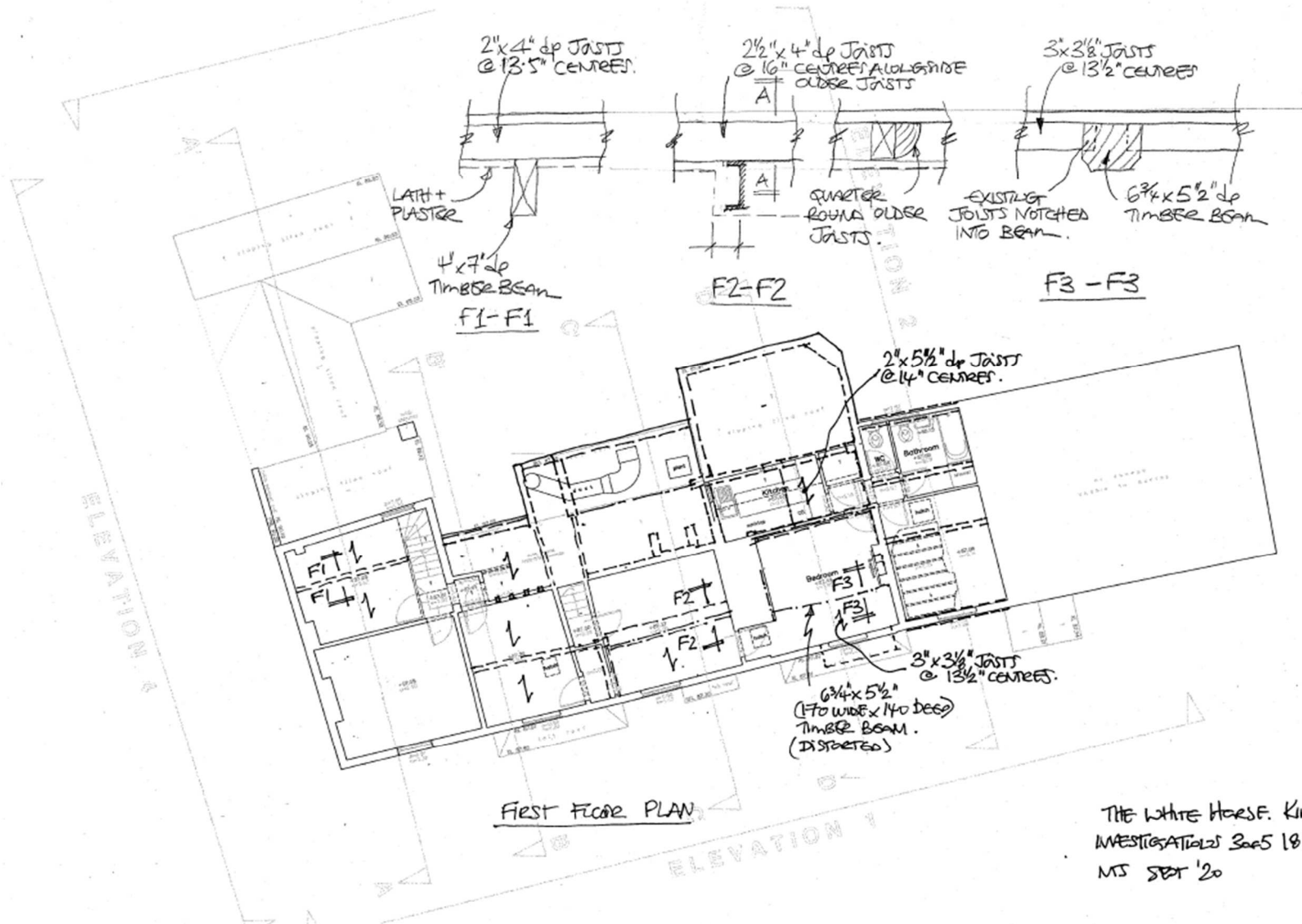
Drainage currently that exists at the rear of the property will need to be removed and replaced when the extension is constructed. The foul drainage needs are likely to be reduced for the proposed use, but the area of new roof will increase demands on the rainwater system. It is expected that an attenuation tank will be needed to cope with the increase in rainwater, or a soakaway incorporated into the scheme. Further investigations and testing will be required.

APPENDIX A: SITE INVESTIGATON PLANS





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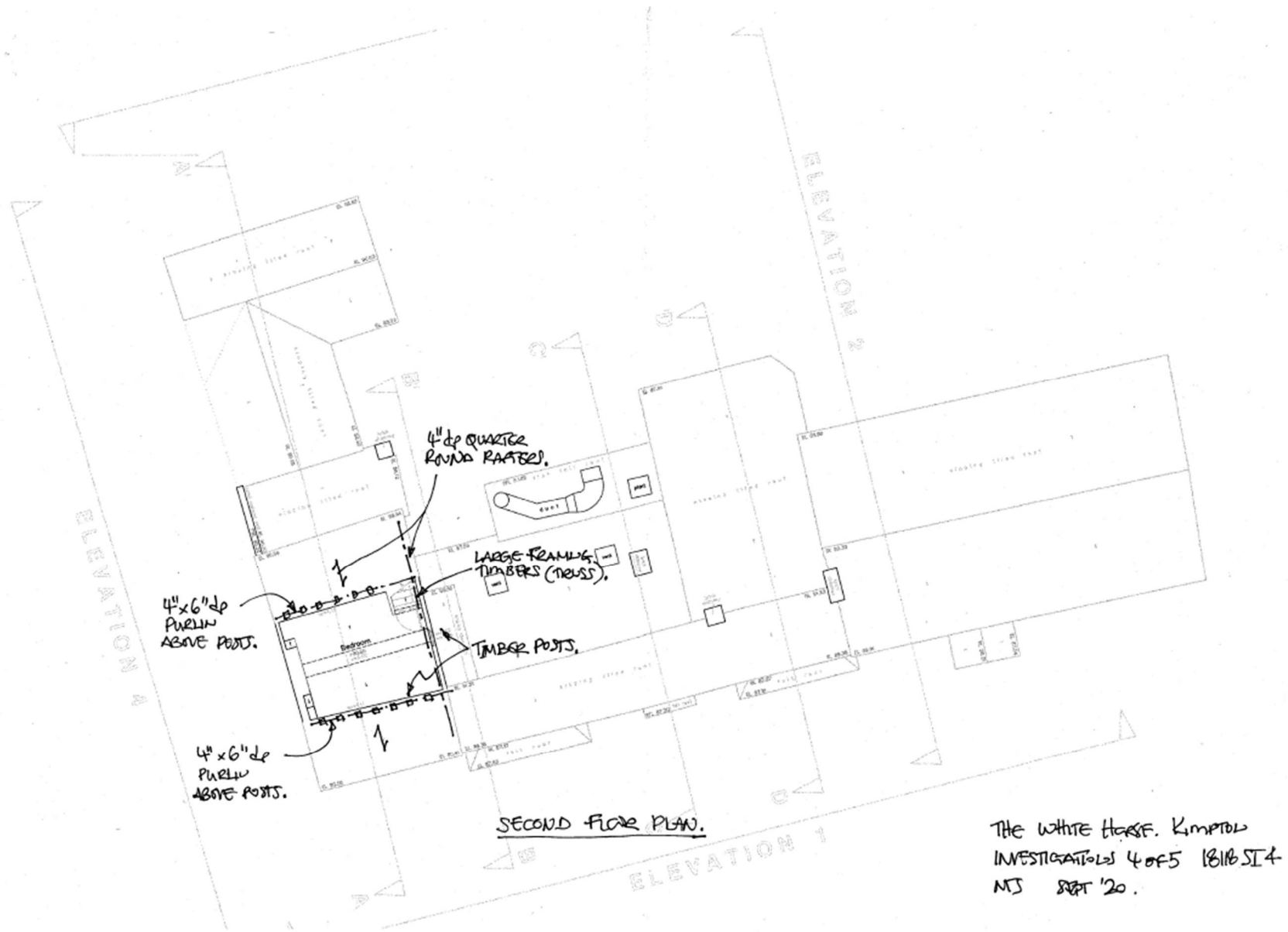


THE WHITE HORSE, KIMPTON
INVESTIGATIONS 3005 18/11/20
MS SEPT '20

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DIRECTORS JACQUI OSBORNE BSC CENG MSTRUCTE
JOHN EDWARDS GRAD DIPL CONS (AA)

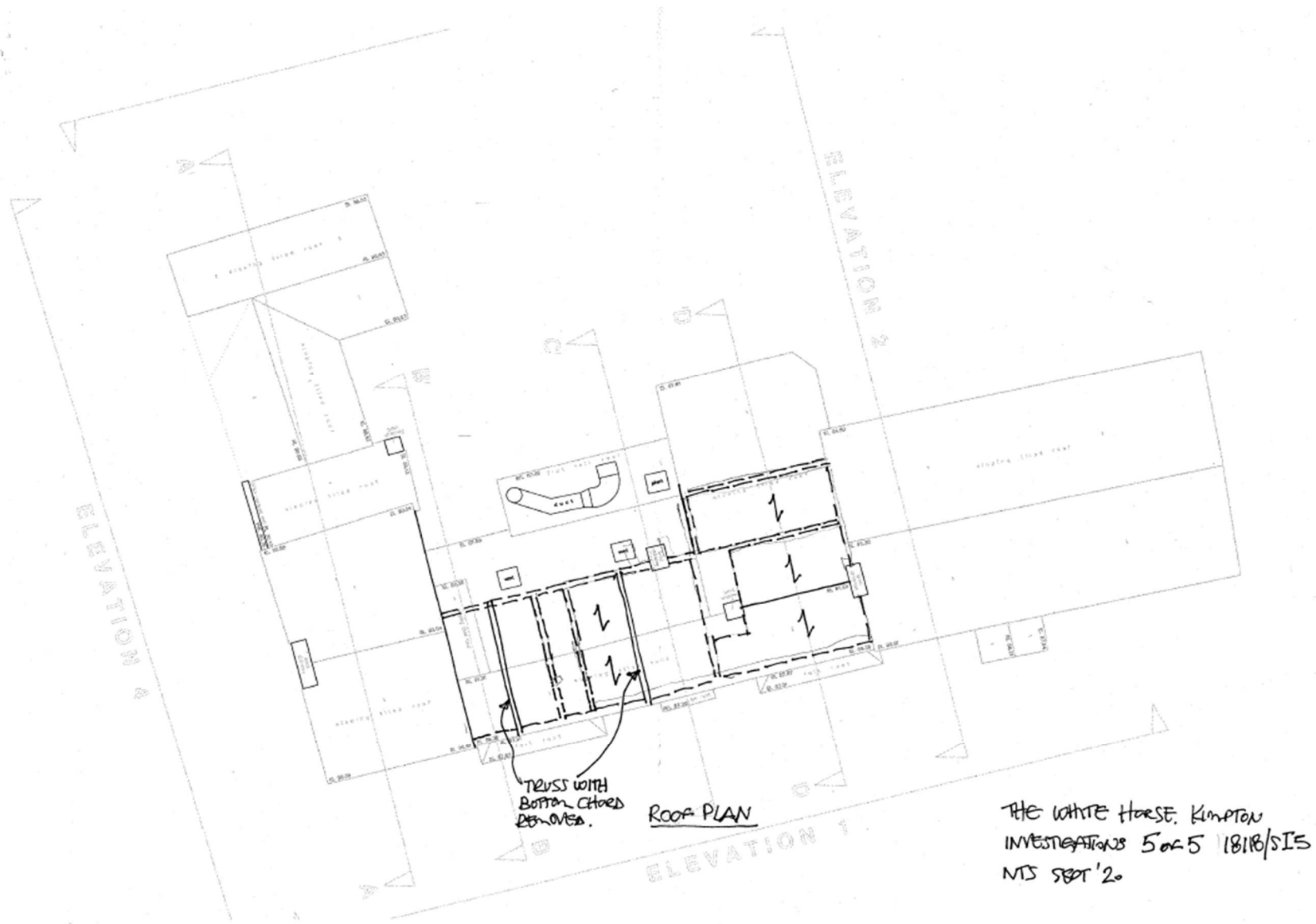
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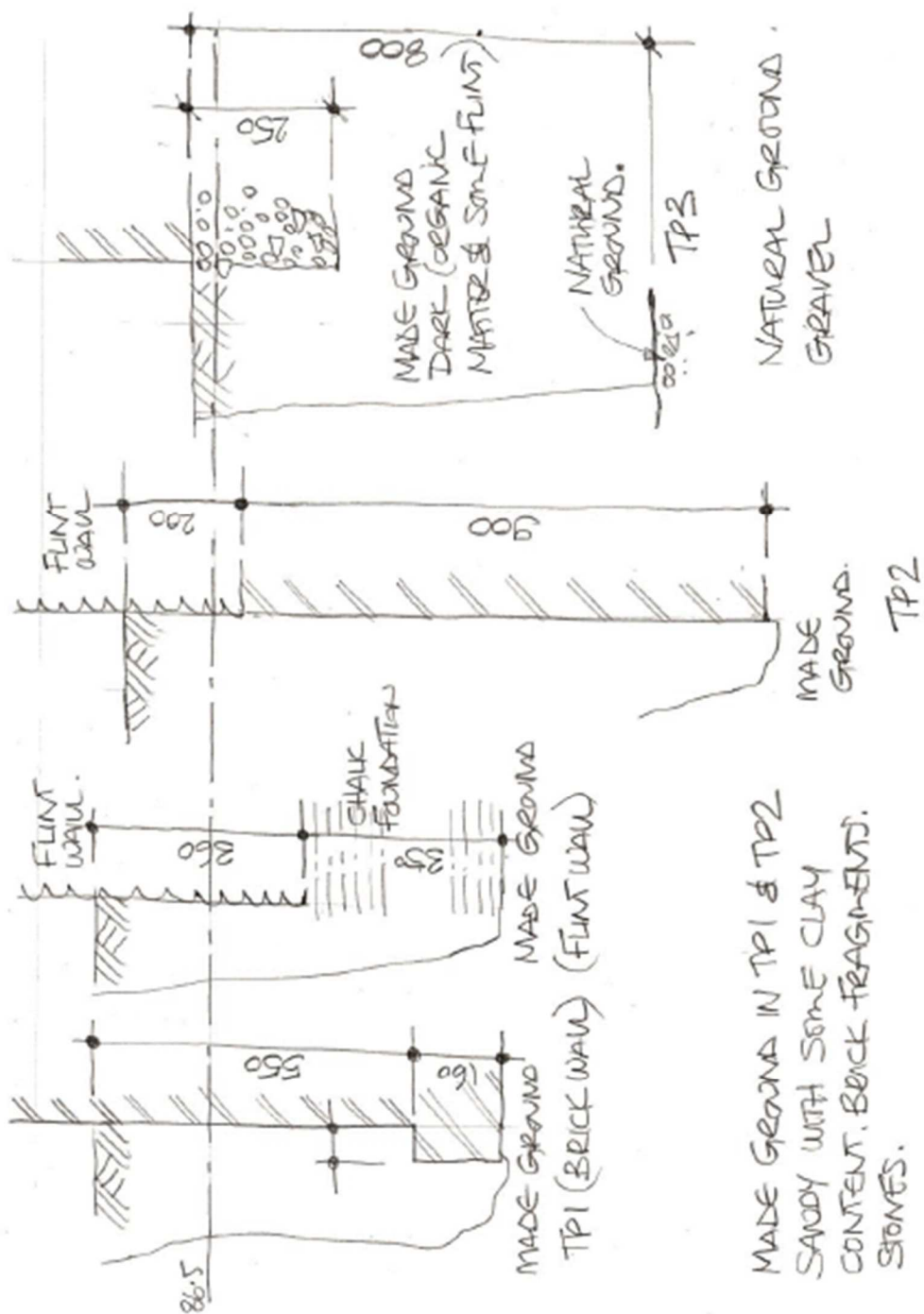


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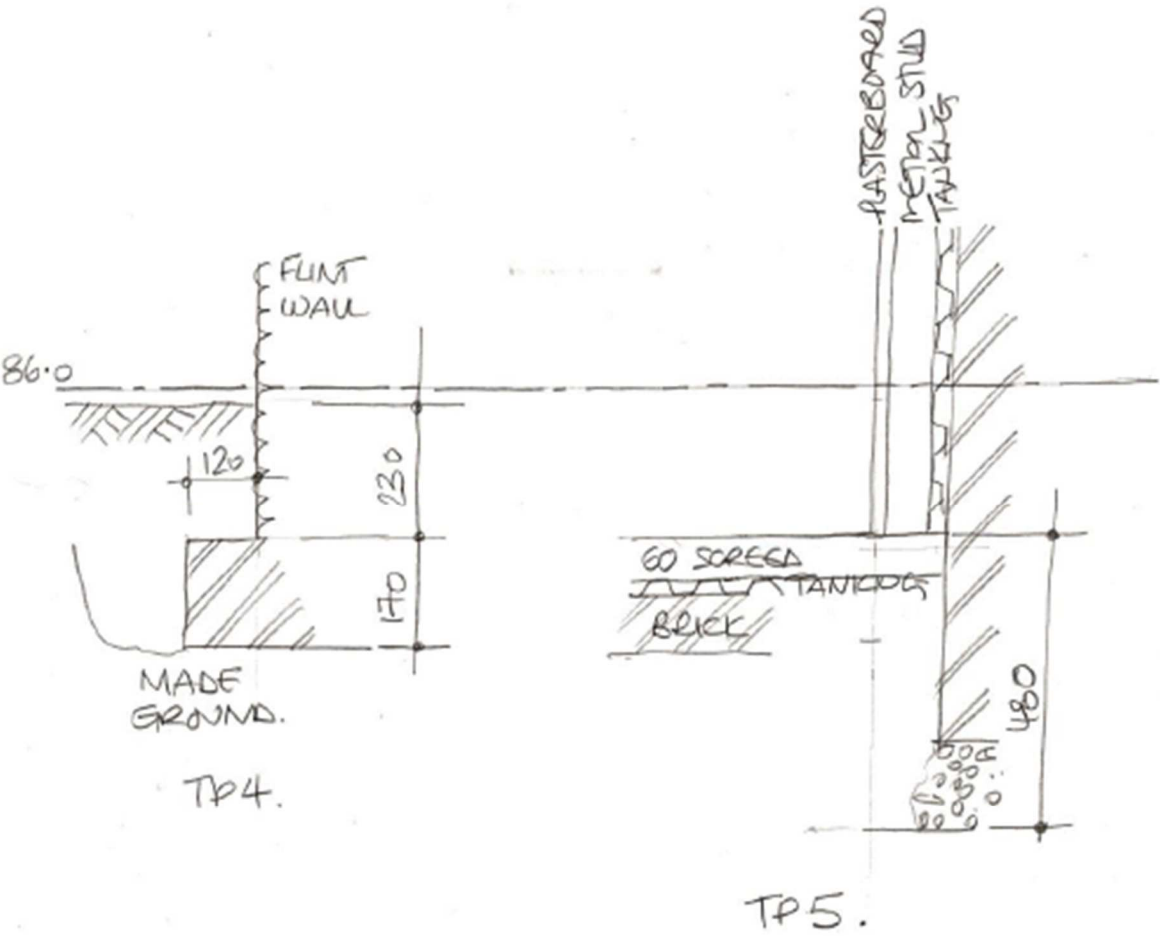
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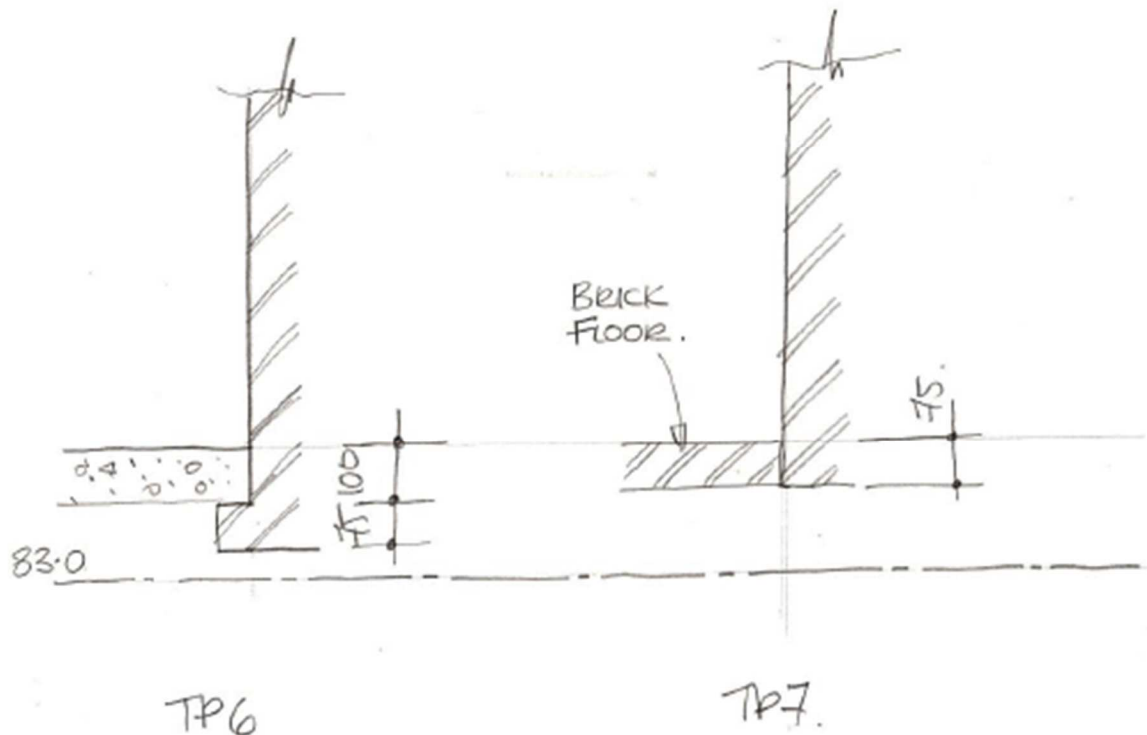
APPENDIX B: SITE INVESTIGATION DETAILS



Osborne Edwards Ltd CONSULTING STRUCTURAL ENGINEERS OMNIBUS BUSINESS CENTRE 39/41 NORTH ROAD LONDON N7 5DP TELEPHONE 020 7226 2444	PROJECT TITLE		JOB NO
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	SCALE	DATE	REV
	1:10	SEPT '20.	

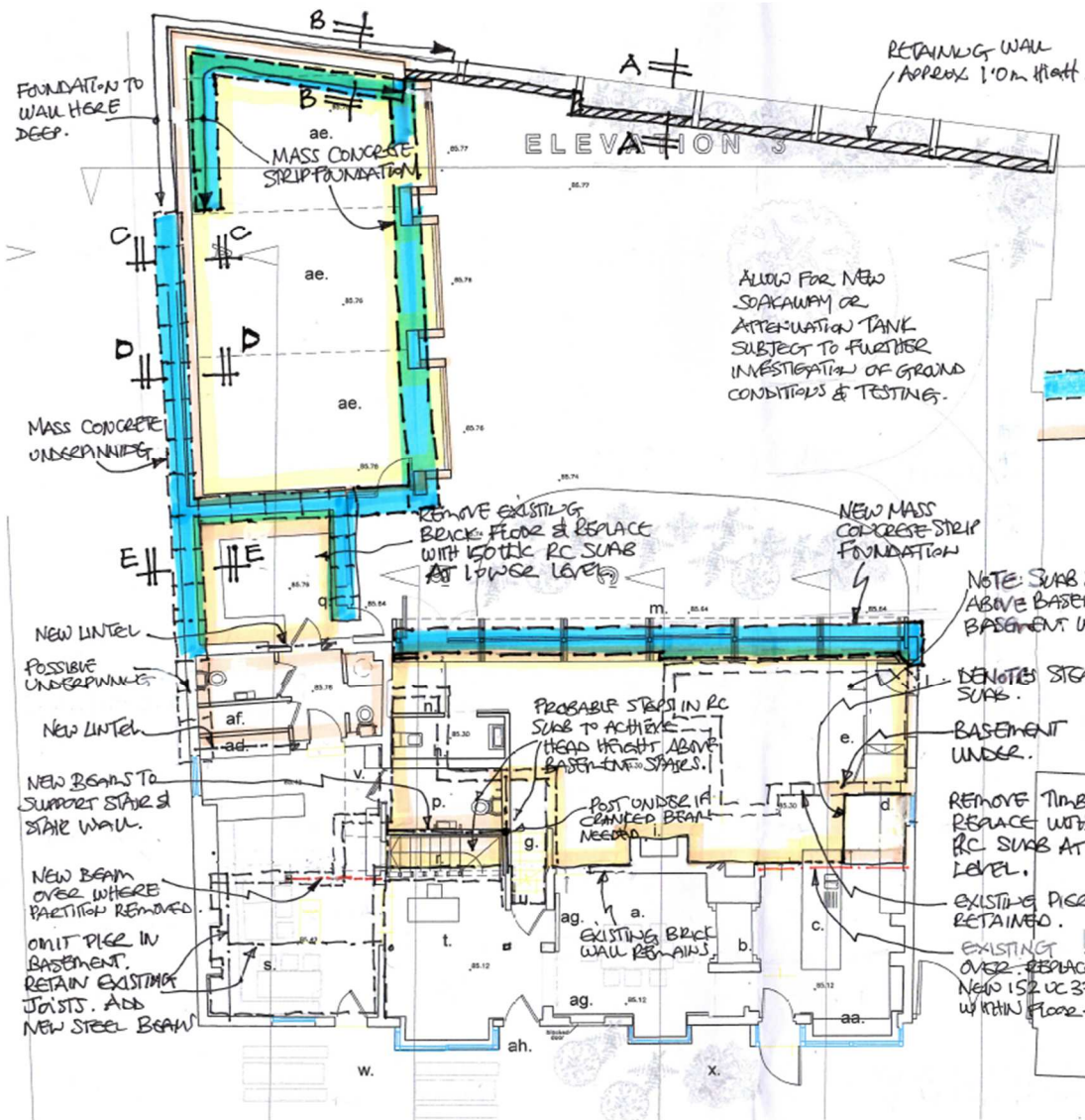


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	SCALE 1:10	DATE SEP '20	REV



Osborne Edwards Ltd CONSULTING STRUCTURAL ENGINEERS OMNIBUS BUSINESS CENTRE 39/41 NORTH ROAD LONDON N7 9CP TELEPHONE 020 7226 2444	PROJECT TITLE THE WHITE HORSE, KIMPTON		JOB NO 18118
	DRG TITLE TRIAL PIT LOGS 3003		DRG NO SIT3.
	SCALE 1:10	DATE SEPT '20	REV

APPENDIX C: PROPOSED PLANS



Notes:

- a. New formal dining living space
- b. New brick oven
- c. New kitchen island 3mx1m
- d. New kitchen area
- e. New staircase to master suite and bedroom 2.
- f.
- g. Stair to bedrooms 3/4
- h. Bathroom
- i. Reinstated fireplace and central rug, existing studs exposed
- j. New tap room
- k. Living space, exposed structure over.
- l. New glazed door
- m. New rear extension Oxidised copper clad folding external shutters, internal joinery shutters.
- n. new boat area
- o. Store
- p. New disabled WC
- q. Existing wash house retained
- r. Stair to office area
- s. New tap room tables
- t. New reception area
- u. Access to cellar retained
- v. New storage / displays
- w. External cafe seating
- x. New front garden area
- y. New paved courtyard - levels reduced to align with the FFL in the new property, graded to 1:30 to the rear of the site
- z. New planted margin with retaining structures
- aa. Window seat
- ab. Toilet WC space (RL over)
- ac. Kitchenette
- ad. Keg display
- ae. Office space, flexible workshop space
- af. keg store/access
- ag. Sliding wall
- ah. Potential bin store locations

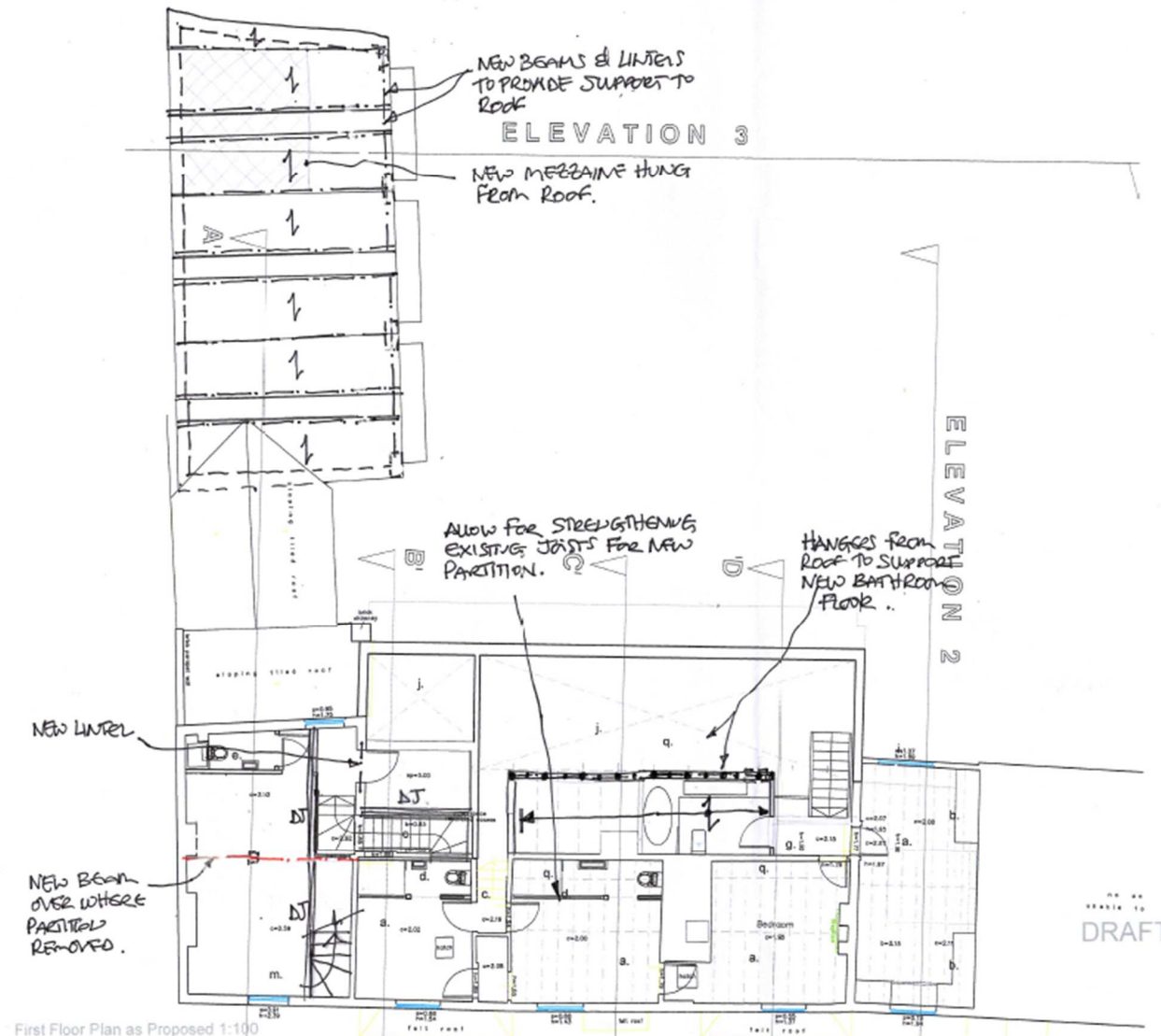
OSBORNE EDWARDS
1816/PI B.

Note: This drawing is copyright
OS not scale from this drawing

Note: to be read in conjunction with Structural
Engineers Information, specification and drawings

All setting out dimensions to be checked on
site by contractor and any discrepancies to be
noted ASA. Windows, steelwork, to be site
sized.

Michael Collins Architects LLP 12 Purwell Lane Hitchin, SG4 ONE 07895478770 michaelcollinsarchitects@gmail.com	
Internal Reconfiguration The White Horse Kimpton New house, pub and workspace	
039	020
CF Plan as proposed	Stage 1



Notes:

- a. Bedroom
- b. Full height wardrobes with bed recess
- c. Access stair - rooflight over
- d. New ensuite shower room
- e. office suite bathroom
- f. Void to living area below (roof-lights over)
- g. gallery
- h. storage gallery
- i. New elevation / window
- j. Void to roof, rooflight over
- k. New shower area
- l. New stair to meeting gallery, storage below.
- m. Ceiling open over
- n. New glazed lobby
- o. Office kitchenette below
- p. New meeting gallery
- q. Skylight

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18/18/P2A

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Note: to be read in conjunction with Structural
Engineers Information, specification and drawings

All setting out dimensions to be checked on
site by contractor and any discrepancies to be
noted ASAP. Windows, steelwork, to be site
sized.

Internal Reconfiguration
The White Horse Kimpton

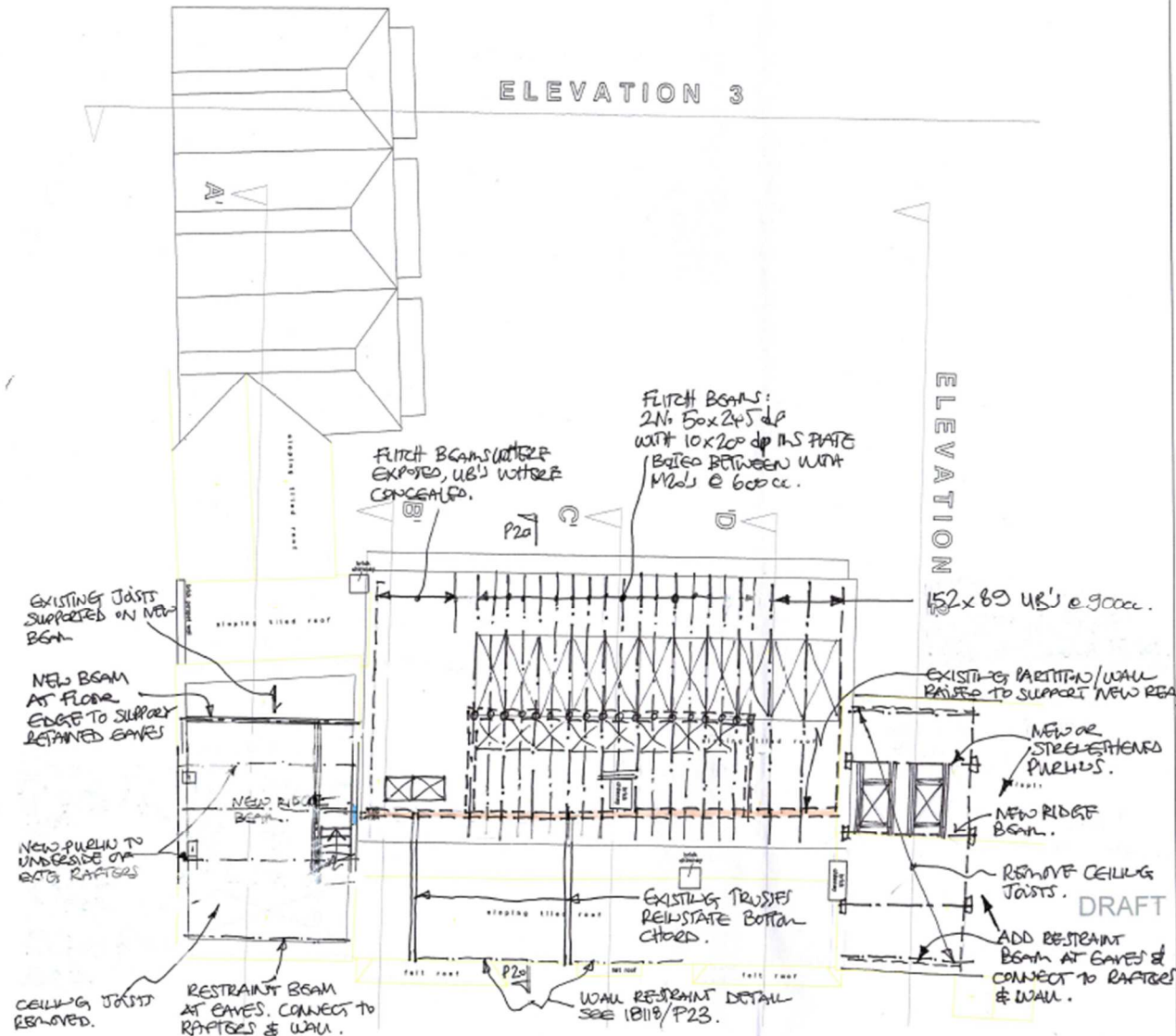
039 First Floor Plan
as Proposed

021

Stage 2

DIRECTORS JACQUI OSBORNE BSC CENG MSTRUCTE
JOHN EDWARDS GRAD DIPL CONS (AA)

REGISTERED IN ENGLAND 4173590



Notes:

- a. New formal dining living space
- b. New brick oven
- c. New kitchen island 3mx1m
- d. New kitchen area
- e. New staircase to master suite and bedroom 2.
- f.
- g. Stair to bedrooms 3/4
- h. Bathroom
- i. Reinstated fireplace and central snug, existing slabs exposed
- j. New cafe/bar kitchen
- k. Living space, exposed structure over.
- l. New glazed door
- m. New rear extension Oxidised copper clad folding external shutters, internal joinery shutters.
- n. new boot area
- o. Store
- p. New disabled WC
- q. Existing wash house retained
- r. Stair to office area
- s. New Cafe tables
- t. New reception area
- u. Access to cellar retained
- v. New storage / displays
- w. External cafe seating
- x. New front garden area
- y. New paved courtyard - levels reduced to align with the FFL in the new property, graded to 1:30 to the rear of the site
- z. New planted margin with retaining structures
- aa. Toplit WC space (RL over)
- ab. Kitchenette
- ac. Server room
- ad. Office space, flexible workshop space
- ae. Glazed wall
- af. glazed Sliding wall
- ag. Potential bin store locations

OSBORNE EDWARDS
1B118/P3A.

Note: This drawing is copyright
Do not scale from this drawing

Note: to be read in conjunction with Structural
Engineers Information, specification and drawings

All setting out dimensions to be checked on
site by contractor and any discrepancies to be
noted ASAP. Windows, steelwork, to be site
sized.

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07866479770

michael@michaelcollinsarchitects.com

Internal Reconfiguration

The White Horse Kimpton

New house, pub and workspace

039

SF Plan as
proposed

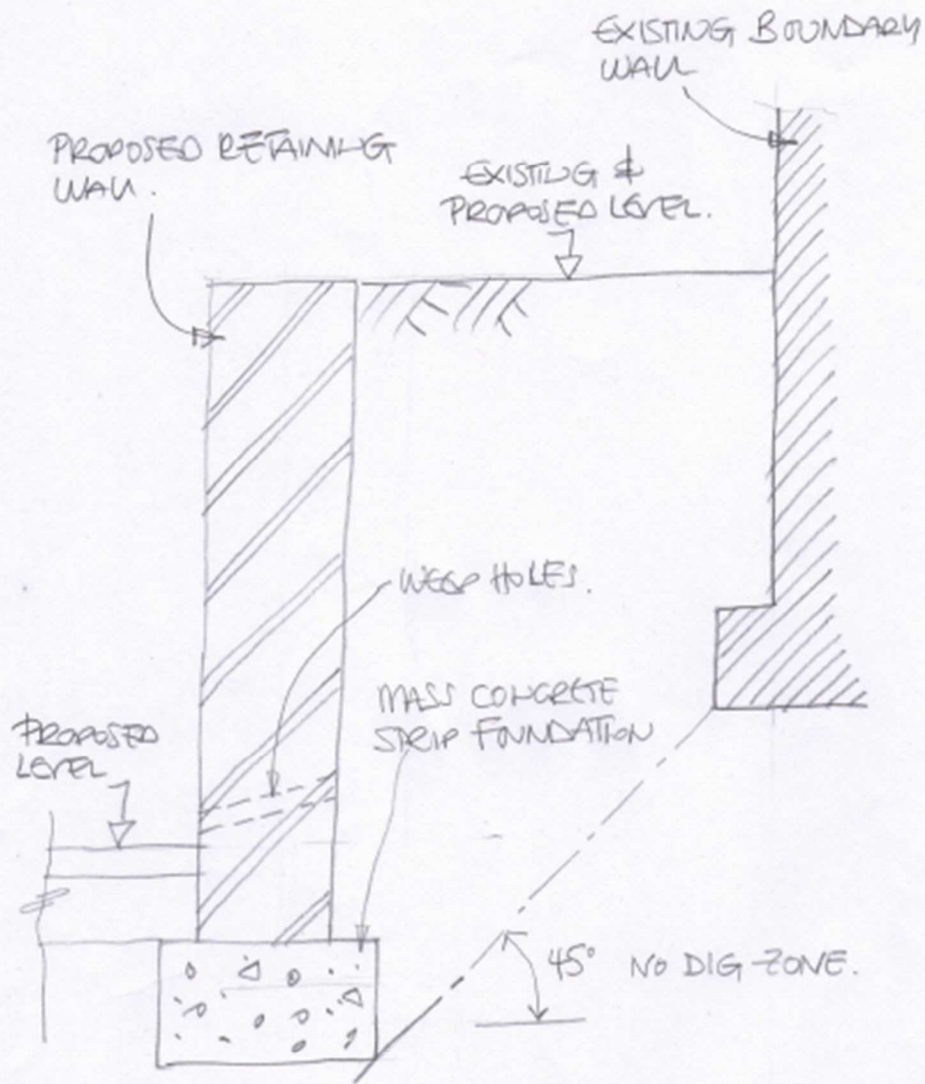
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Stage 1

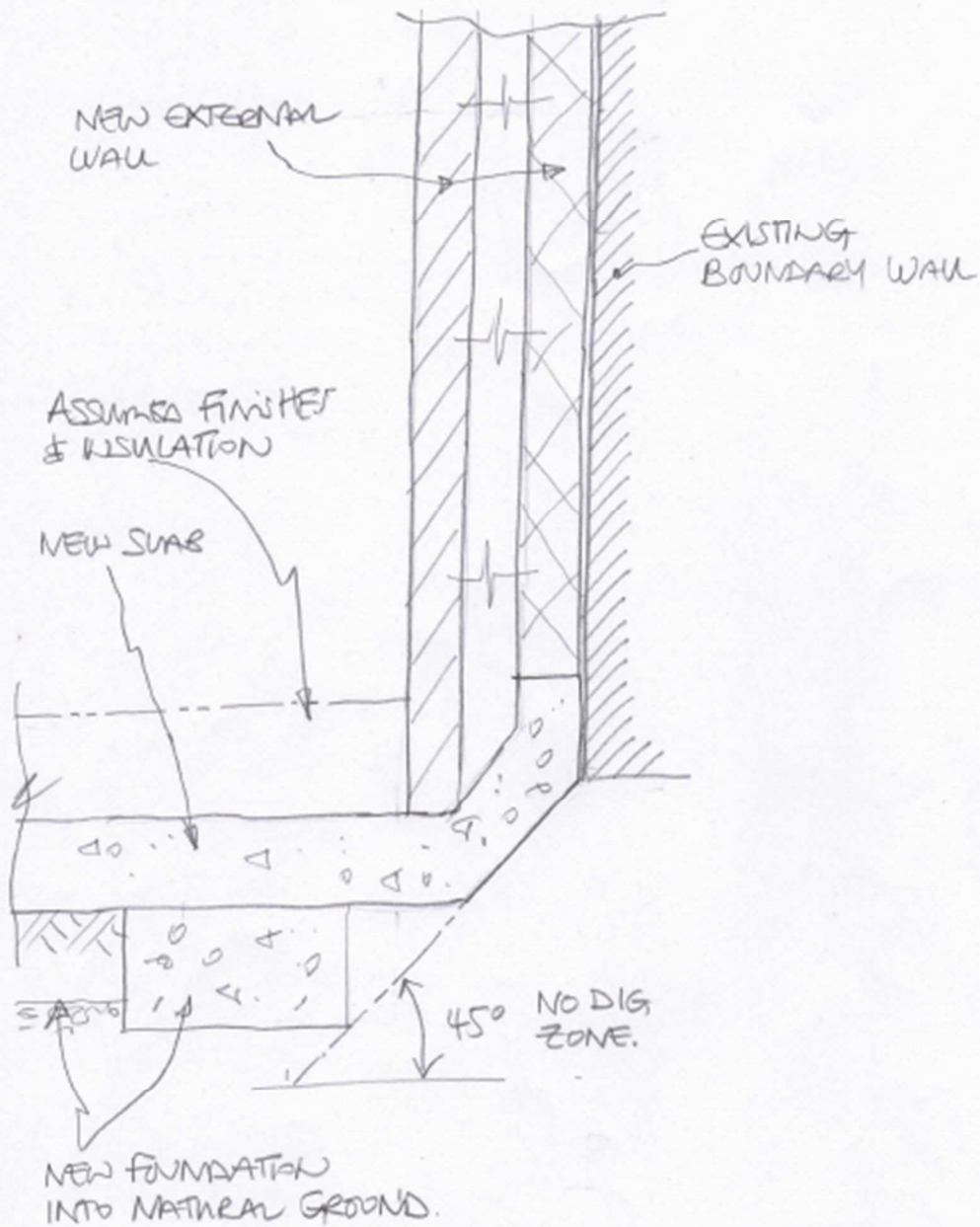
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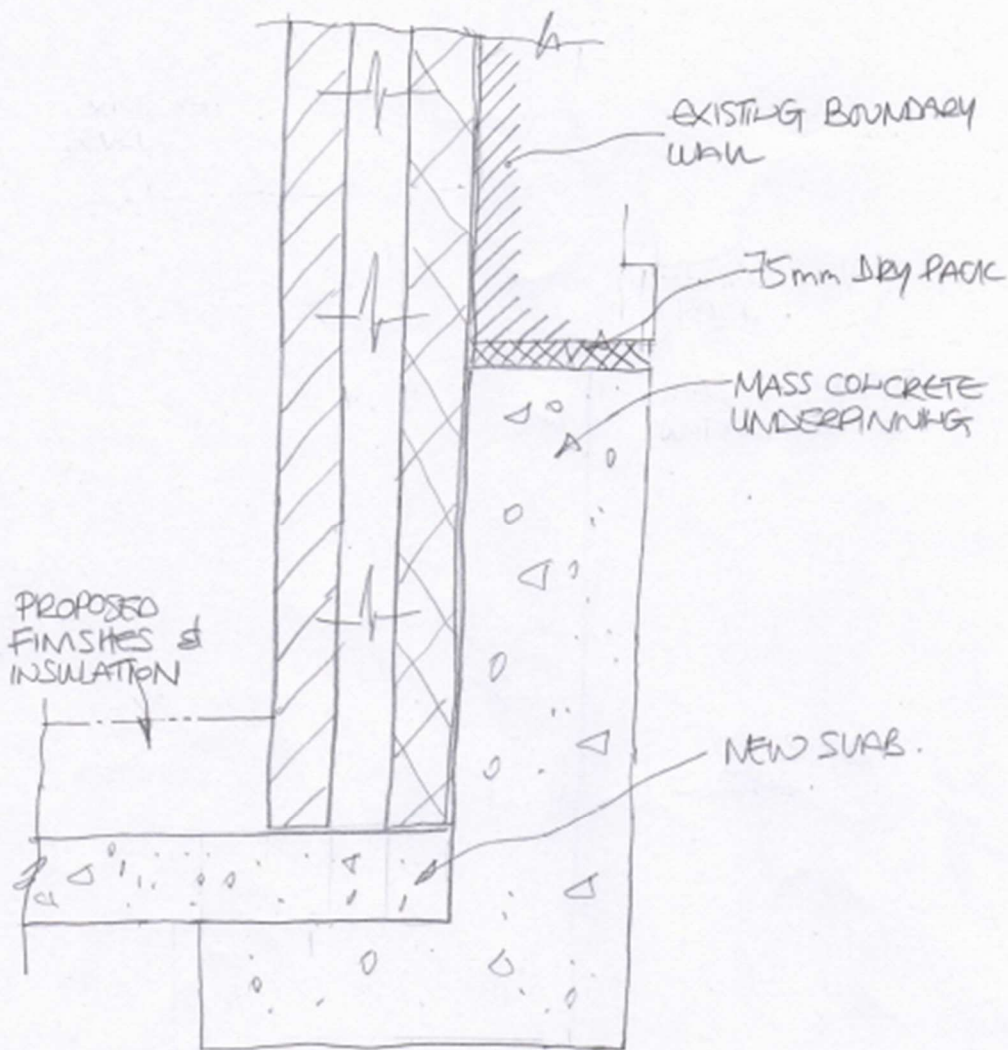
APPENDIX D: PROPOSED DETAILS



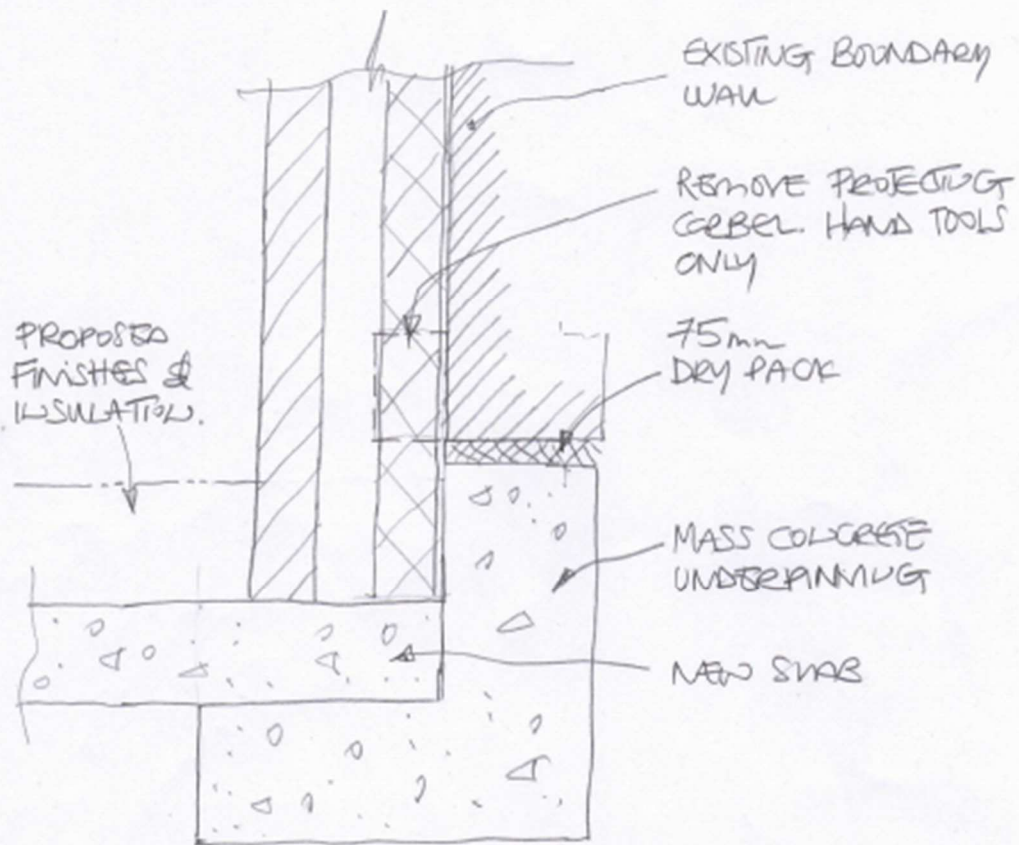
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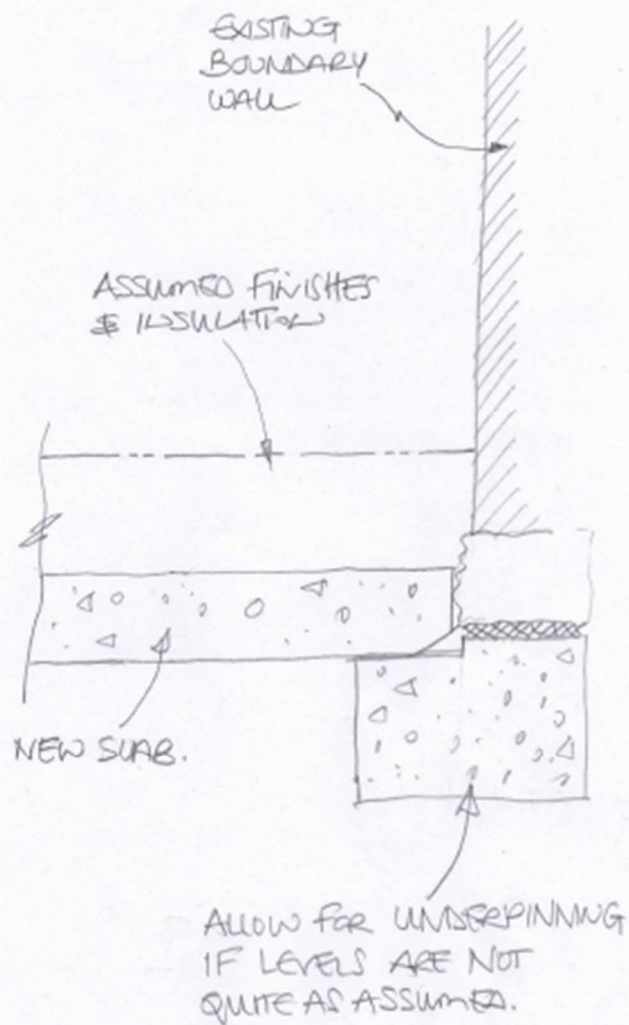
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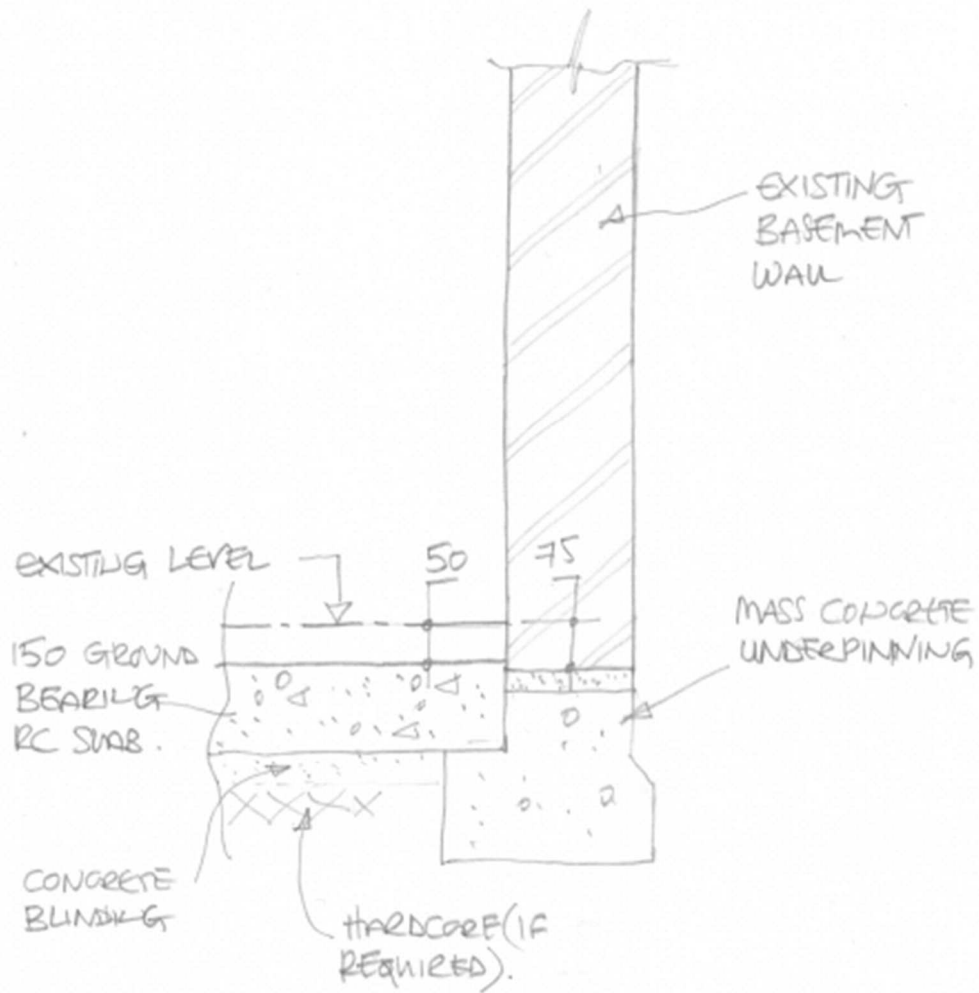
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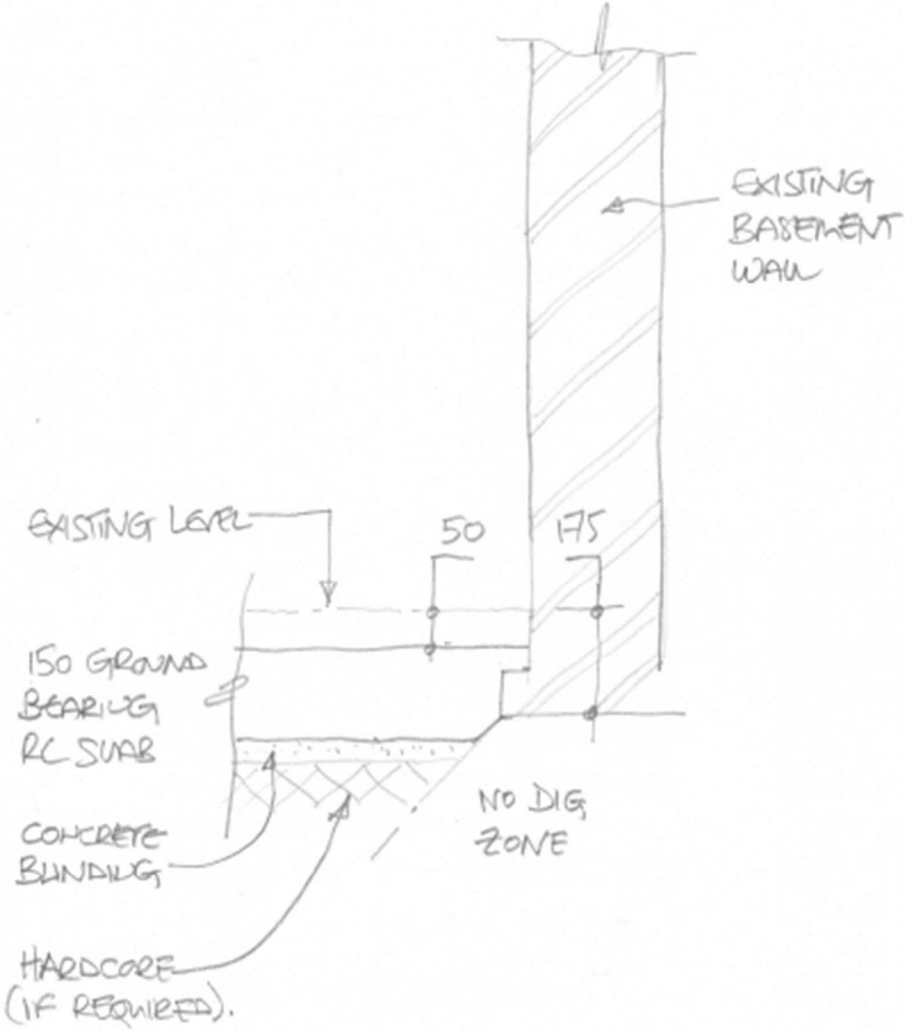
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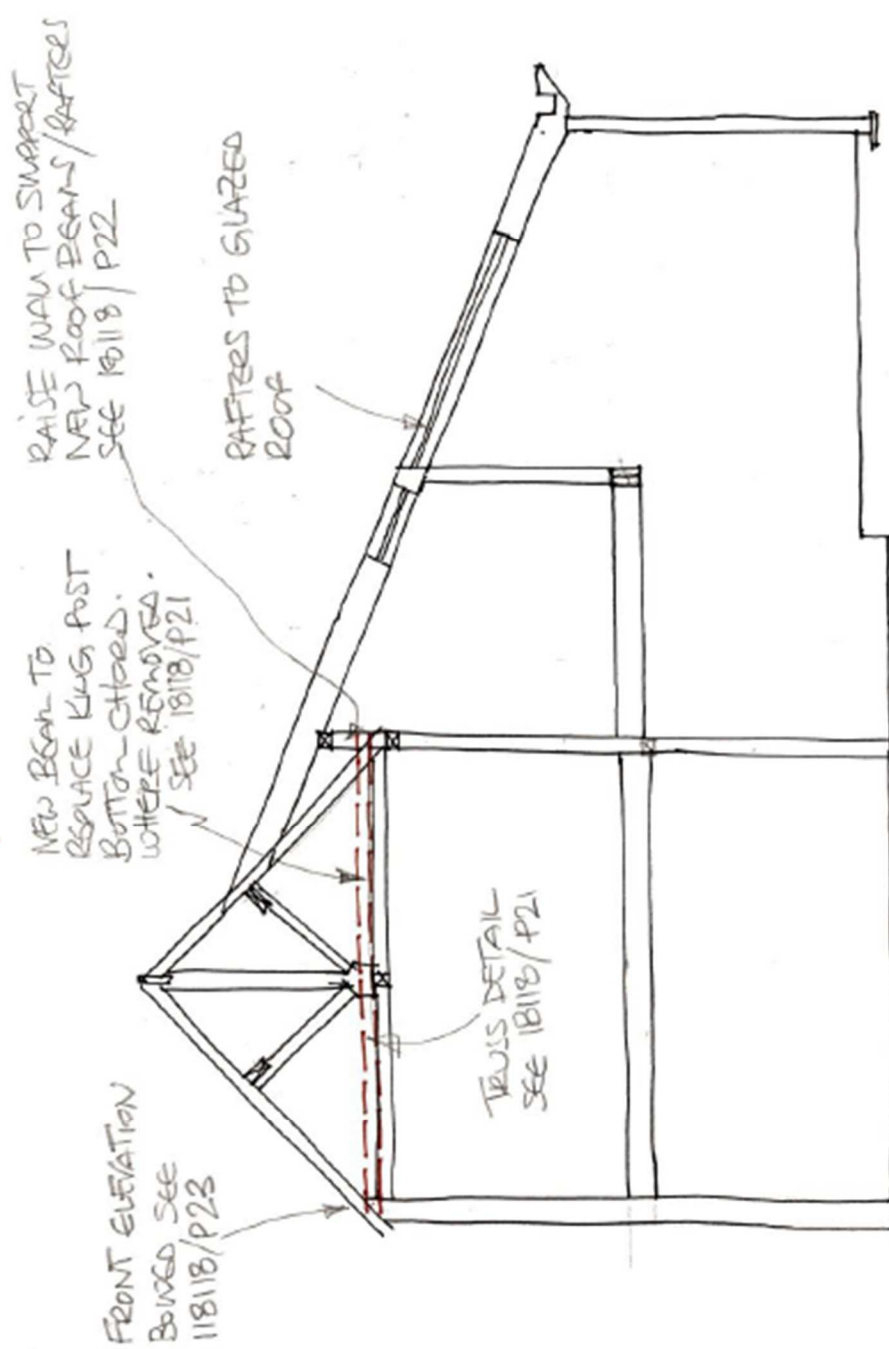
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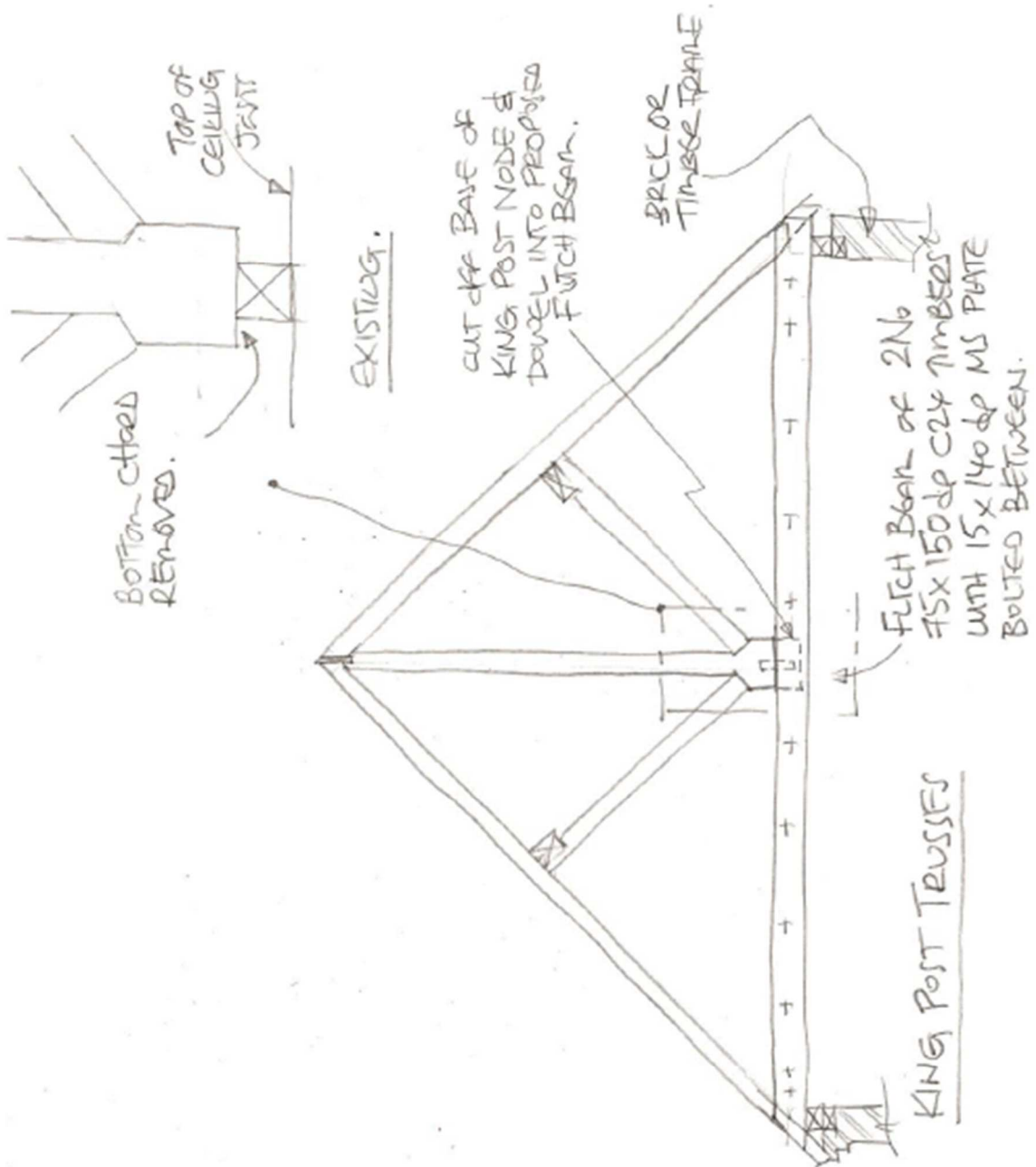
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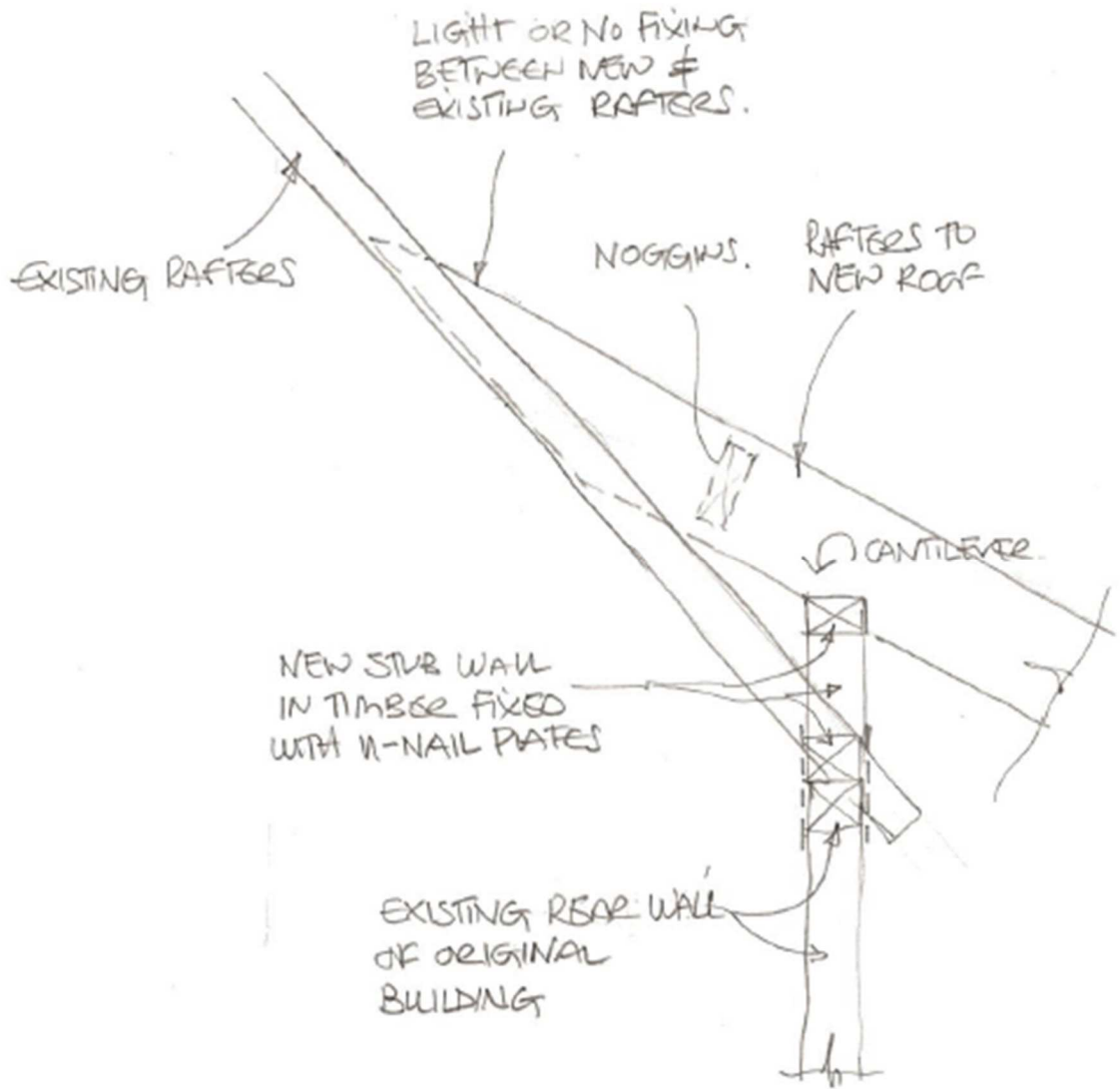
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		SEP '20	A

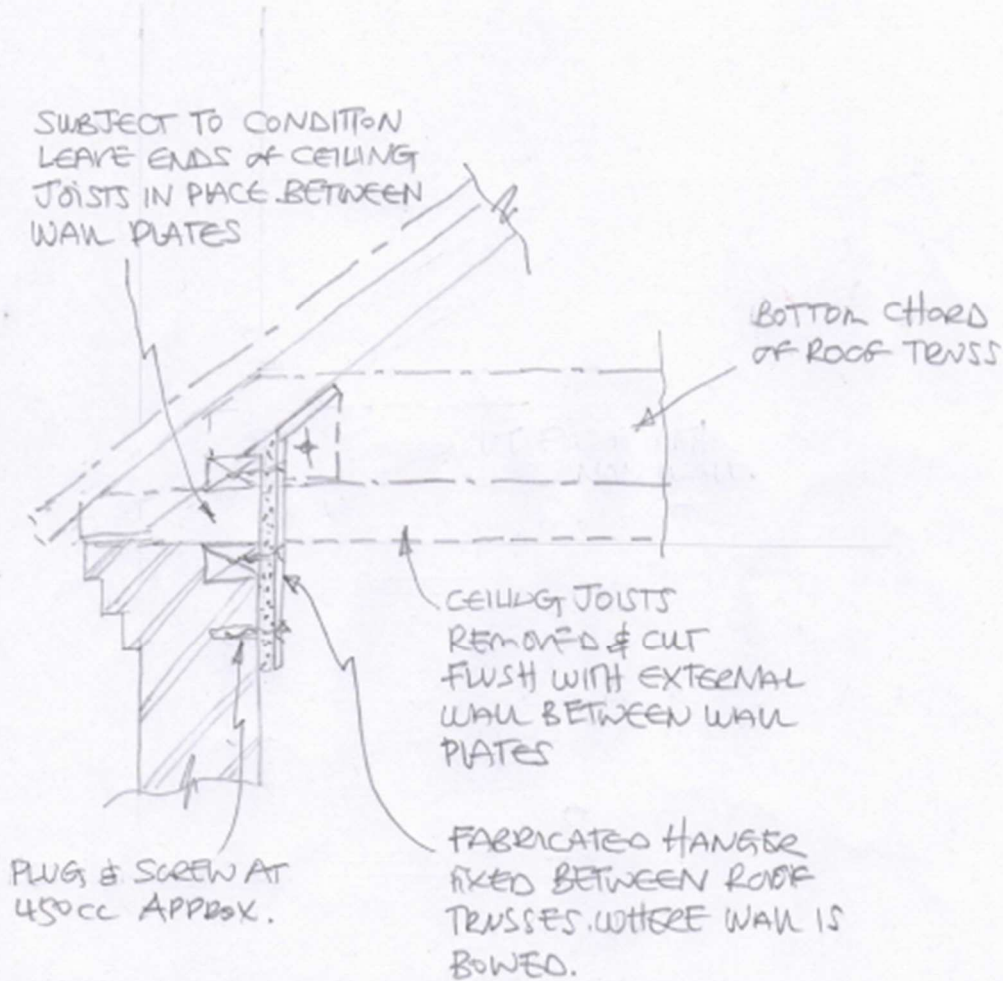


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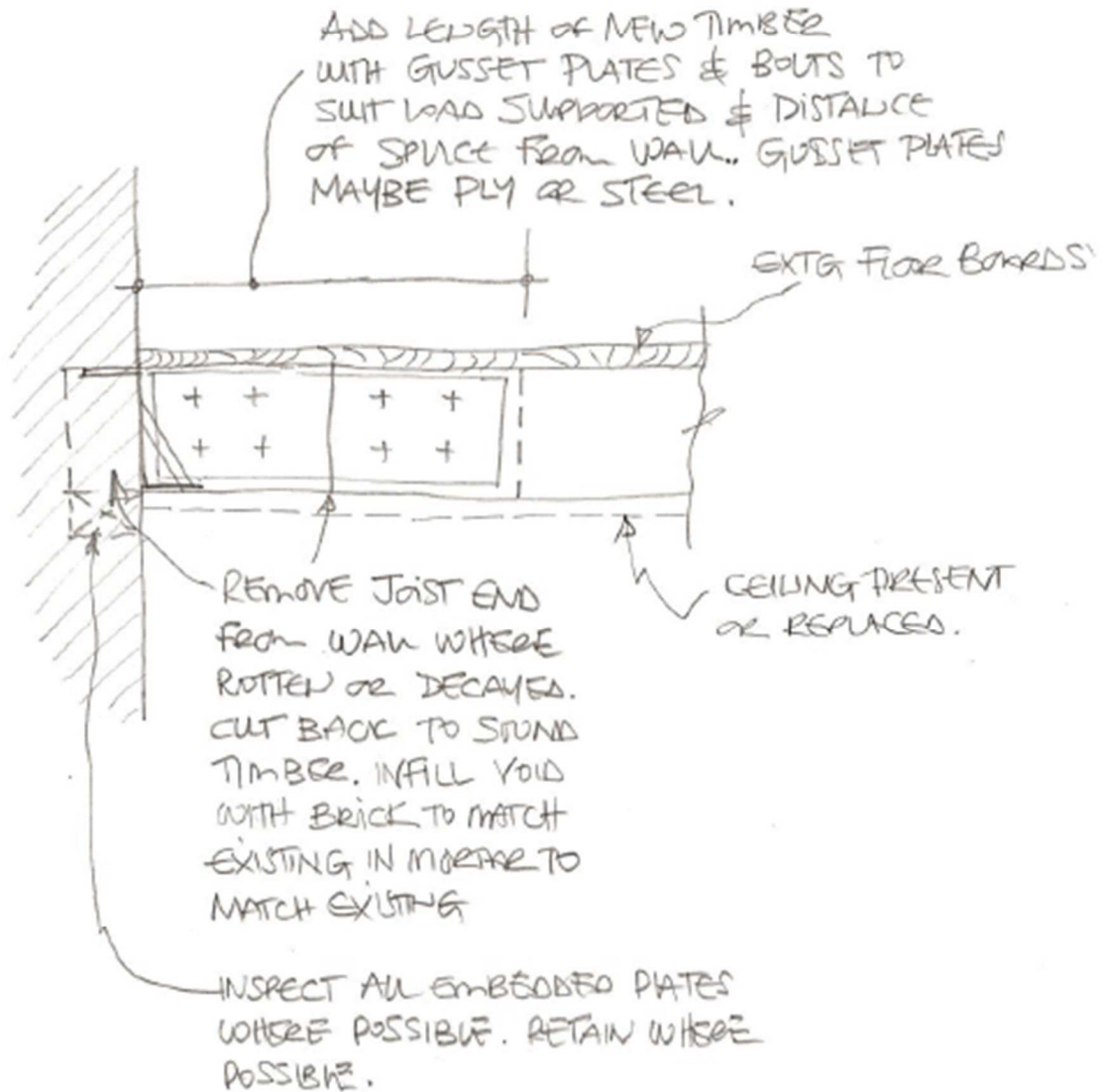


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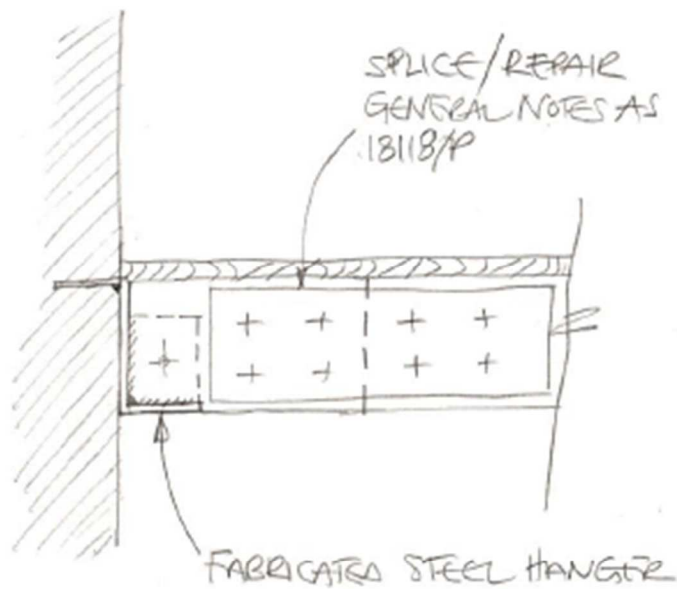
NOTE: A SIMILAR PRINCIPLE CAN BE USED IN AN AREA WHERE CEILING JOISTS ARE REMOVED AND SUPPLEMENTARY RESTRAINT REQUIRED.



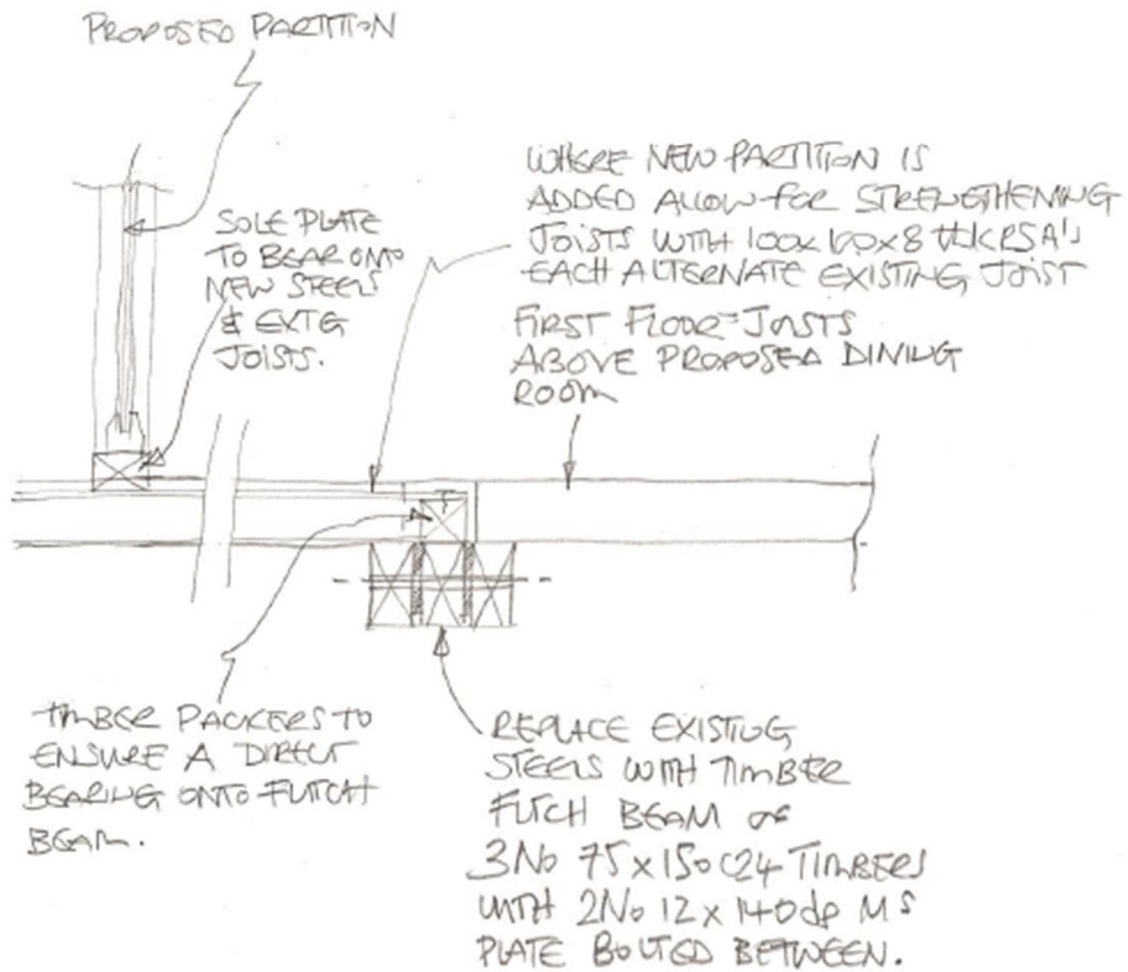
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Osborne Edwards Ltd CONSULTING STRUCTURAL ENGINEERS OMNIBUS BUSINESS CENTRE 38/41 NORTH ROAD LONDON N7 9DP TELEPHONE 020 7226 2444	PROJECT TITLE THE WHITE HORSE		JOB NO 18118
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