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RE: Top Green & March Hare Cottage, Hawkedon

The proposed extension and lowering of the floor will be sequence in a manor not to risk undermine the existing footings, should the construction vary from the areas as inspected in the trial holes.

Foam glass insulation is load bearing and suitable for installation under a floor slab, in addition to its insulating properties it is a moisture impermeable barrier, therefore a damp proof membrane or injected damp proof courses is not required.

The proposed extension will be constructed on a raft foundation to minimise excavations externally. The raft will be sequenced to ensure stability to the original cottages during construction.

The sequencing of the works

- Install the new raft foundation for the extension offset 700mm from the face of Top Green and March Hare cottages.
- Install the 700mm strip limecrete slab between existing footings and the raft, in bays to allow for inspection of the footings, before proceeding to excavate.
- Internal floor slab lowered in four separate zones, each zone to be sequenced to allow for inspection of the footings, before proceeding to lower the floor and introduce foamed glass insulation and limecrete slab.

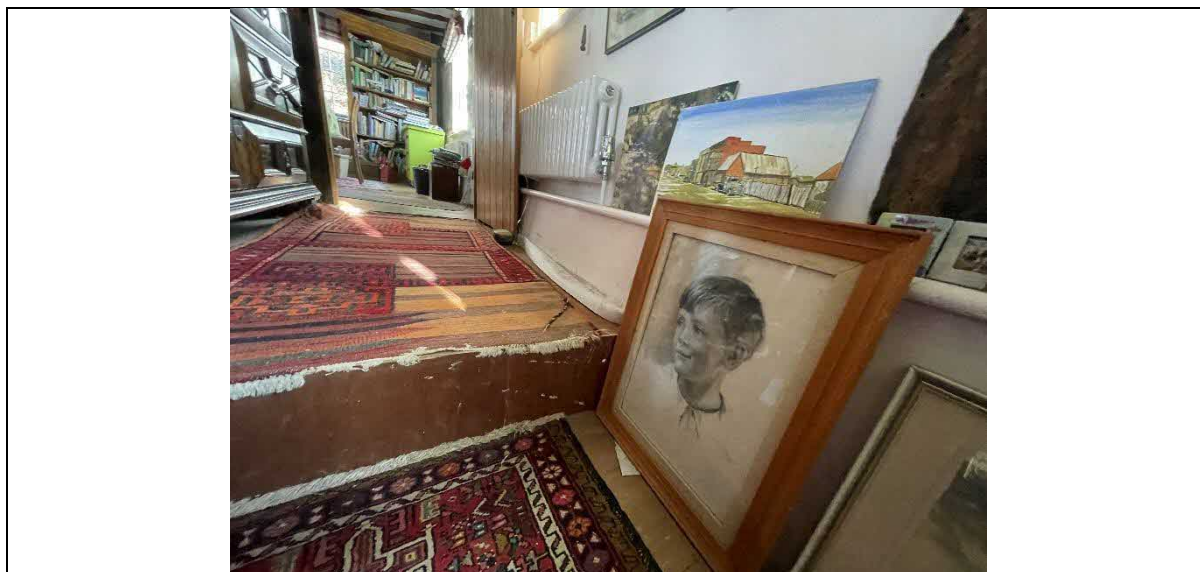
I have enclosed for reference the trial hole investigations and foundation concept prior to development of the construction drawings for submission to support discharge of conditions in accordance with approved Planning and Listed Building consent for the scheme.

Yours sincerely

For Steria Consulting LTD



GINA SOWDEN-TURNER



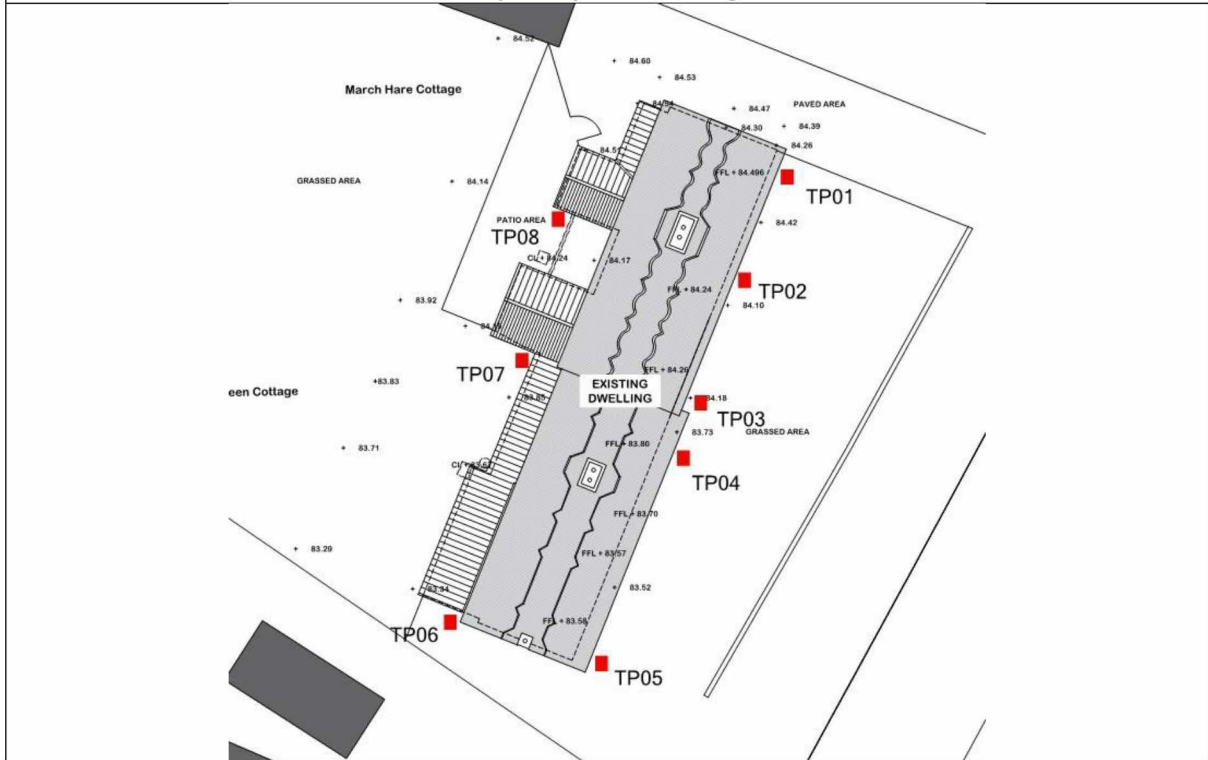
Photograph 01
Step in March Hare Cottage



Photograph 02
Step March Hare into Top Green Cottage



Photograph 03
Step in Top Green Cottage



Photograph 04
Trial Hole Location Plan

April 2023



Photograph 05
Trial Hole 01



Photograph 06
Trial Hole 02

April 2023





Photograph 07
Trial Hole 03

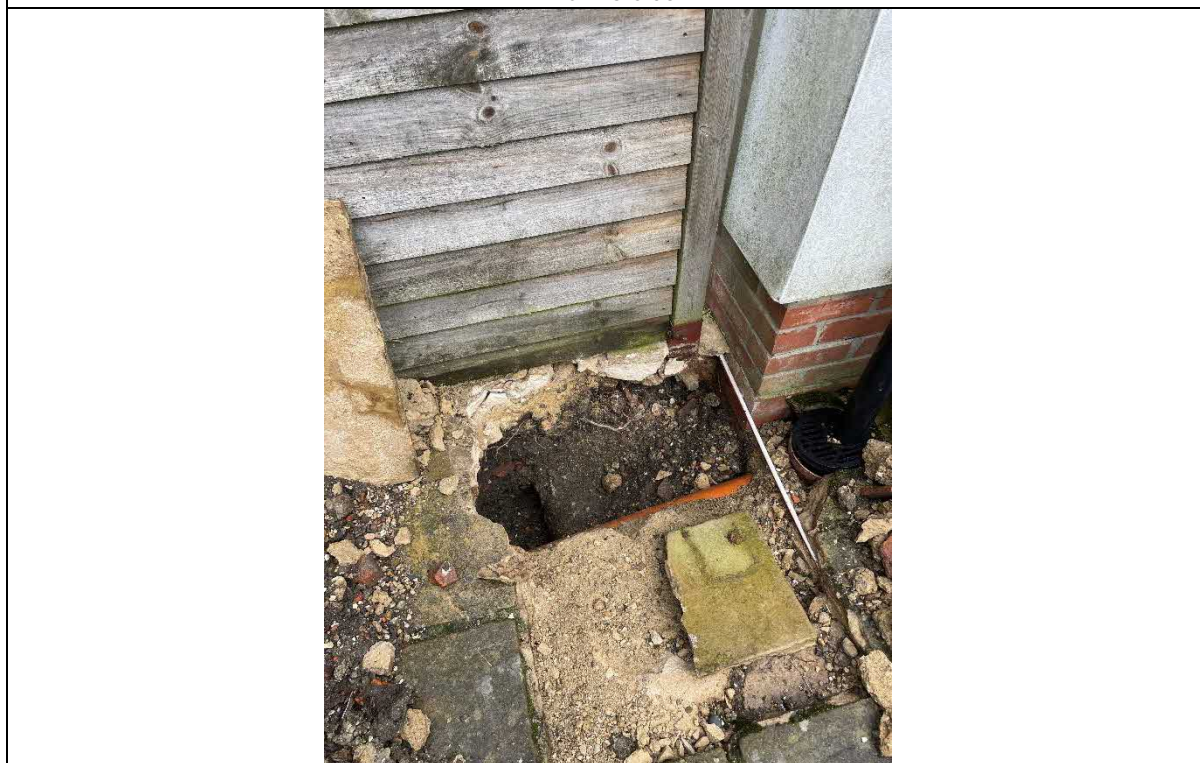


Photograph 08
Trail Hole 04

April 2023



Photograph 09
Trial Hole 05

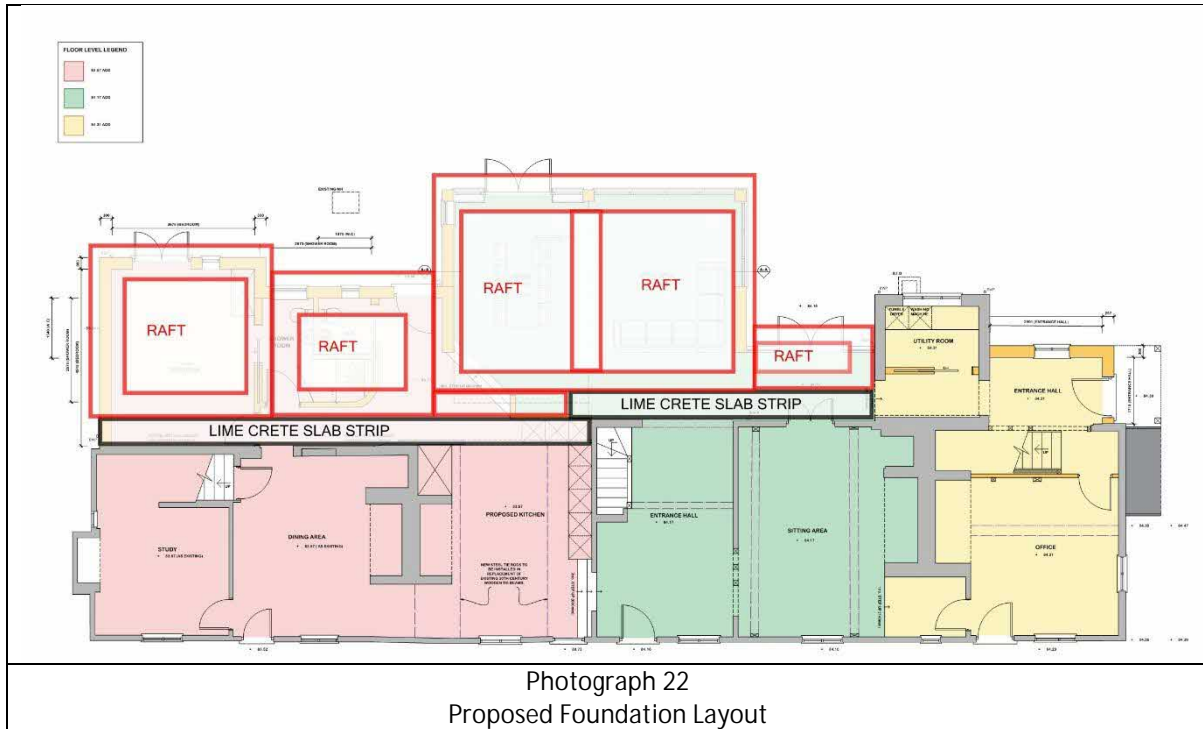


Photograph 10
Trial Hole 06



Photograph 11
Trial Hole 07

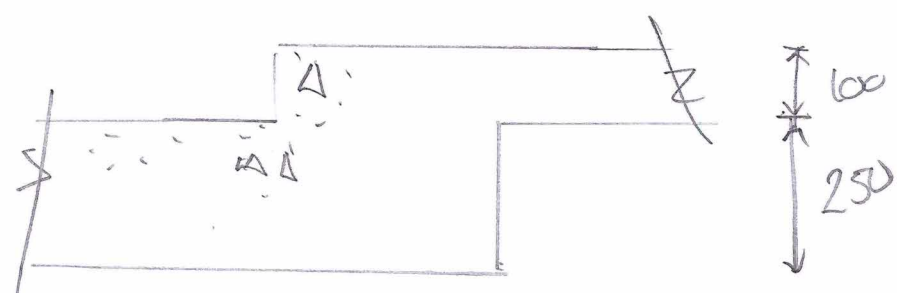
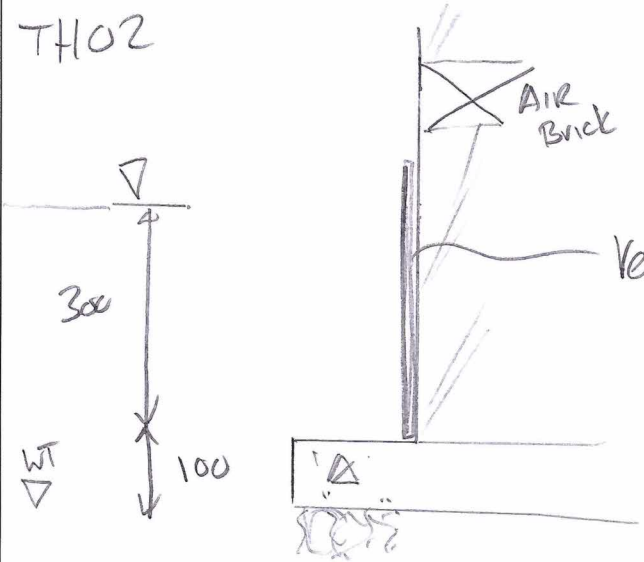
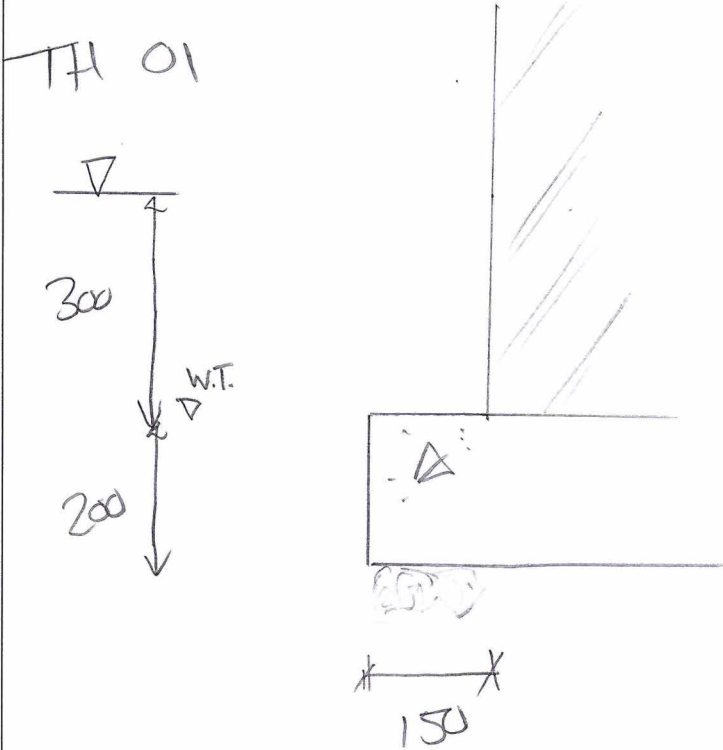




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Reference Calculations

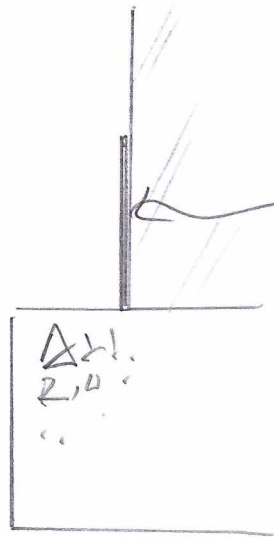
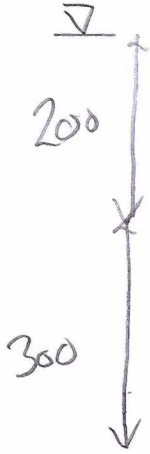
Output



Reference Calculations

Output

TH03

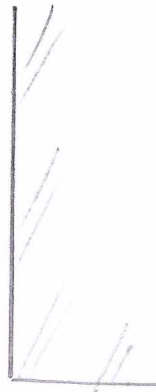
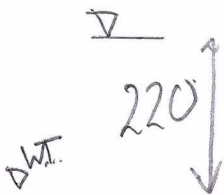


Peasingle adjacent to footing

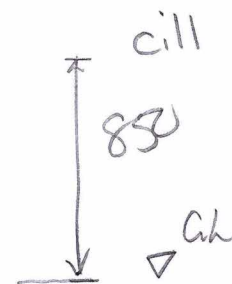
Vertical slate bed

No water.

TH04



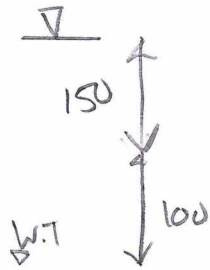
convolutes with internal TH.



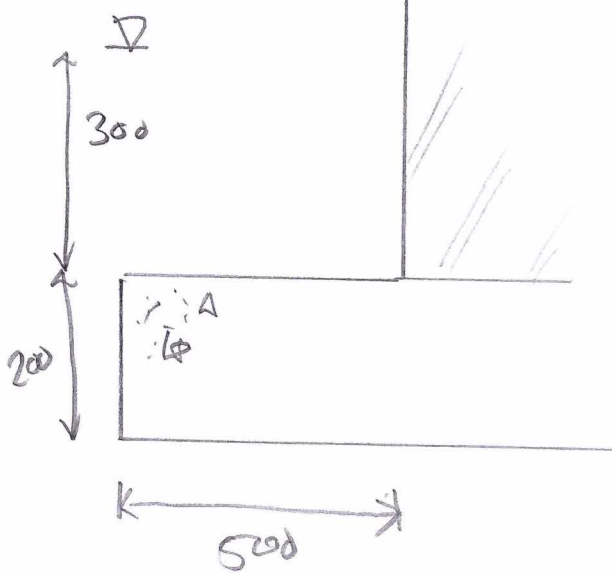
Reference Calculations

Output

TH 05



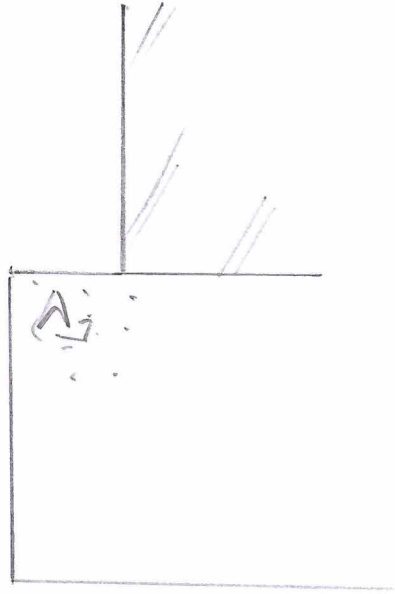
TH 06



Reference Calculations

Output

TH 07



WT below footing

TH 08



Reference Calculations

Output

Proposed foundation - Extension



Δ_{45} 45° angle of repose undisturbed soil for new raft.

Cast raft then strip of slab adjacent to existing then replace slab internally