

Foundations

Prior to commencement or pricing for the work check the existing foundation structure and depth with trial hole. Check to make sure the existing garage is on a traditional strip or trench fill foundation and not a piled with ring beam solution. It is assumed for the purposes of these plans unless advised that the existing garage foundations are traditional strip to a depth of between 900mm and 1000mm. The reason for noting this is the close proximity of the garage to an existing retaining wall. If the garage is constructed on piles advise should be taken from structural engineer as to the removal of the uniformly distributed loading with the wall removal and in terms of the new structure. Check and advise Building Inspector. New foundations 600 x 250mm concrete strip of trench fill equivalent min 1m depth or as otherwise advised by Building Control or Structural Engineer. Care is to be taken to avoid undermining existing structures and foundations.

Floor

The existing floor is to be retained and levelled with screed if sloping and prepared for new insulated finish. New floor to be 100mm concrete on 100mm well consolidated hardcore set at same level as finished in existing garage. On concrete lay polythene DPM, then 100mm celotex flooring grade insulation and then finish with vapour barrier and either 65mm concrete screed or 22mm flooring grade chipboard. (depending on final finish height required and door cills). DPM to run continuous and lapped with existing and new DPC in walls.

Roof Construction

Flat Ceilings

The existing roof over the garage is to be retained and extended over the new extension. Take advise and design from truss manufacturer to make sure the new trussed area is compatible with the existing layout and design. This will require a site visit / survey before manufacturer. Final roof will be tiles to match existing on roofing felt draped over rafters / trusses @ 600 centres unless otherwise specified by truss manufacturer.

50mm x 100mm (or similar to existing) wall plate strapped to wall @ 1m centres with galvanised straps.

Provide 400mm glasswool insulation to whole roof between and over ceiling chord and retain at eaves as necessary for roof ventilation. (see note below) with 12.5mm plasterboard and skim coat to underside.

Check the specification of the existing roofing felt. If it is breathable then provide new breathable felt to the new section and install in accordance with manufacturers guidelines. If standard felt ensure that you provide min 10mm cont ventilation at the eaves all round to the whole roof structure for full roof ventilation.

Walls

New Cavity wall construction to be as follows:-

102.5mm facing brickwork outer leaf, 100mm cavity completely filled with 90mm celotex thermaclass wall 21 insulation, 100mm blockwork inner leaf with 13mm plaster to all internal surfaces or 12.5mm plasterboard on dot and dab.

Cavity wall ties to be positioned @ 900mm centres horizontal and 450mm centres vertically staggered. Cavity to be closed @ junction with roof space. Hyload or similar approved DPC to be located min 150mm above ground level and set to run continuous with DPM and DPC in all walls and floors. At external door and window reveals provide insulated cavity closers with incorporated DPC. Starter bars with movement joints where new walls meet old.

Existing garage walls to be retained where shown other than part removal of end wall where shown. The walls are to be drylined with an internal timber frame insulated structure. Min 50mm gap (vented with cut in weeper joints at high and low level) 100mm timber frame internally adjusted around piers to screen out with 100mm celotex insulation between with 50mm celotex across and internally with vapour check plasterboard and skimcoat internally. Insulation to be reduced at pier location as necessary to achieve a continuous wall finish internally. Timber frame to be set on brickwork perimeter construction built off existing slab.

Drainage

New gutters and downpipes to connect to existing surface water drainage system. Carry out check survey to see where these run. If a new soakaway is required it should be constructed a min 5m away from building or structure and be suitable for ground conditions. Any new surface water drains to be 100mm osma or equivalent laid to falls in granular bed. Provide rodding access points at change in directions.

Fire Requirements

Self contained smoke detector to be provided in new games room hard wired (if possible) with battery backup.

Windows glazing and Doors

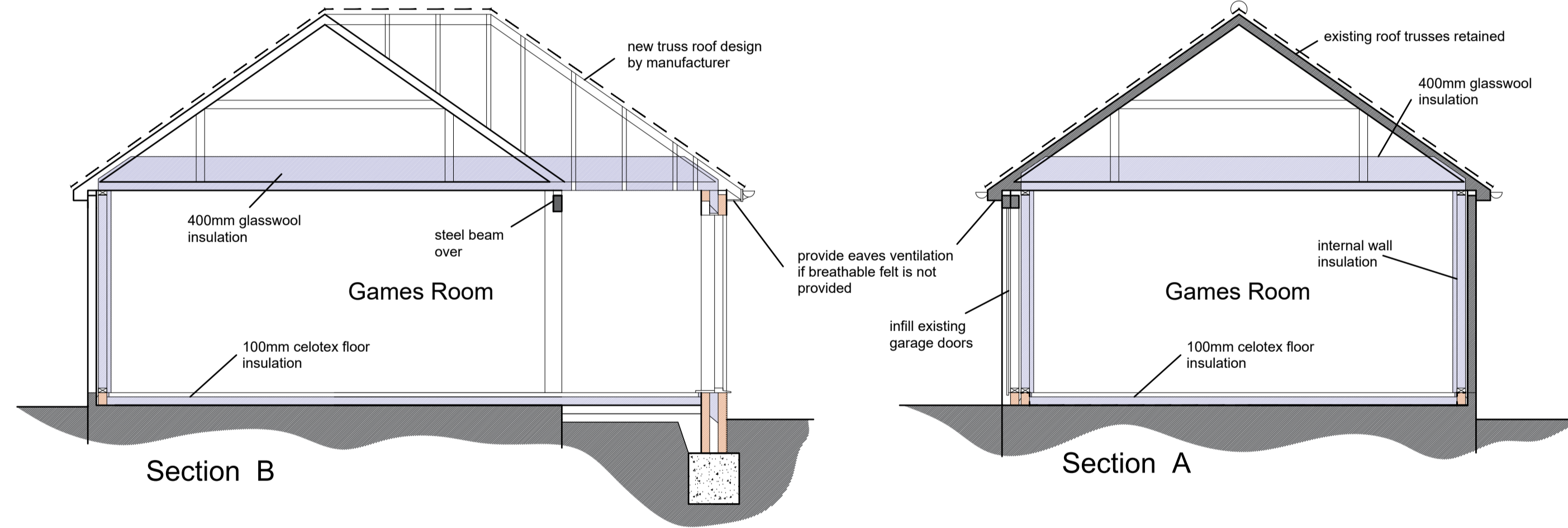
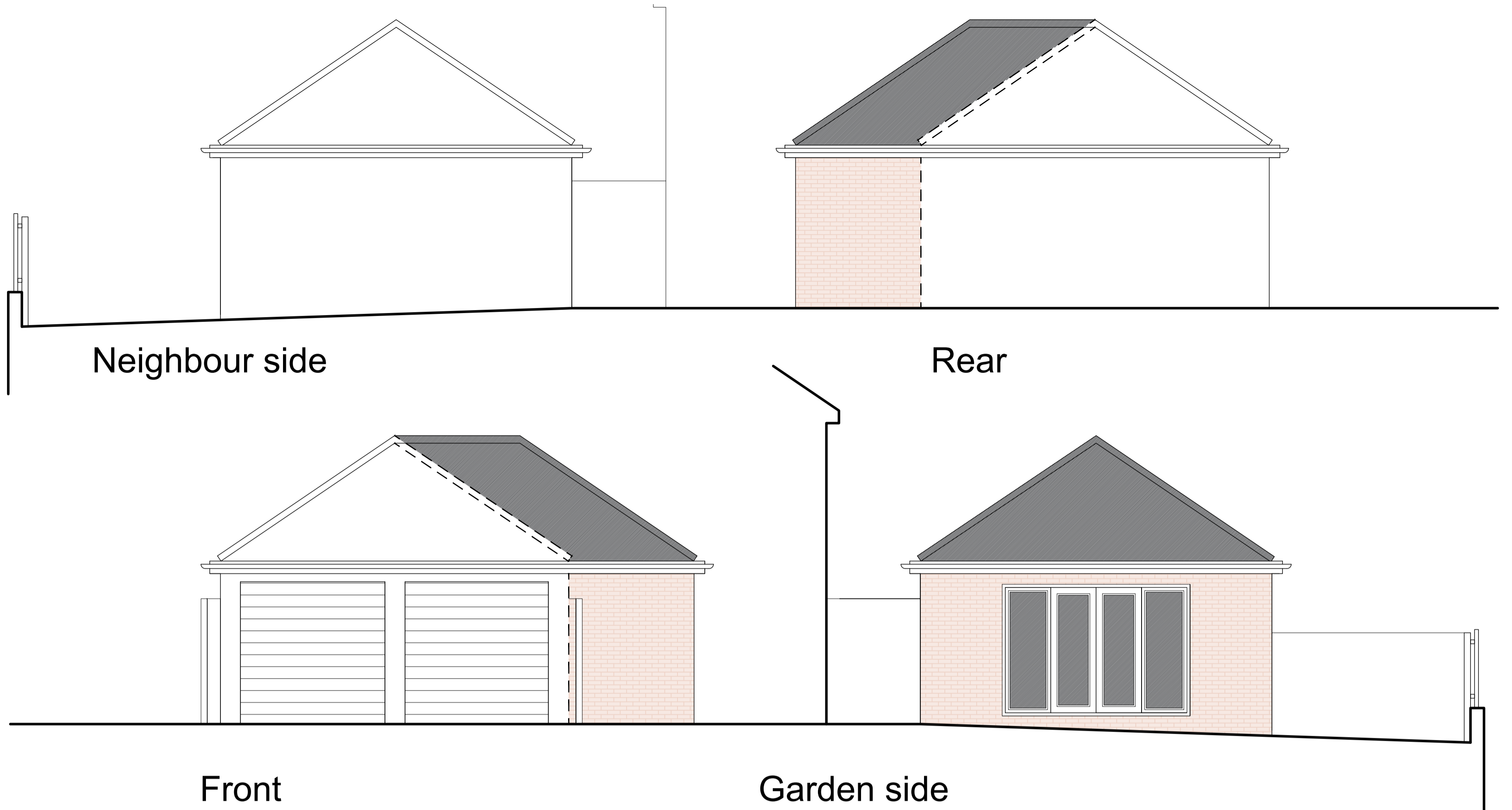
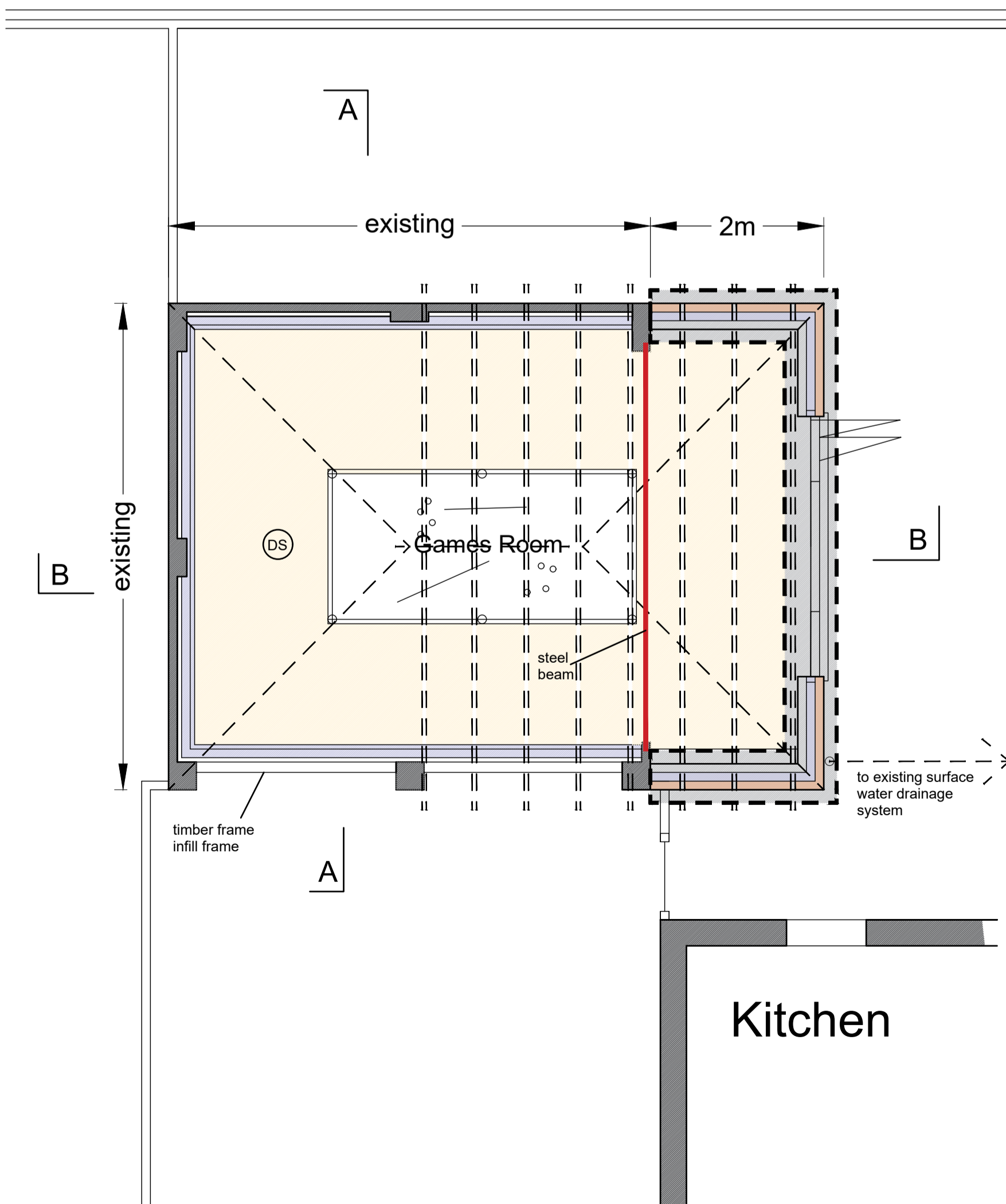
New Doors to be either UPVC or aluminium. To be double glazed with a min 16mm air gap. All doors to have draught stripping to limit infiltration. New Doors to be set back to overlap the cavity by a min 30mm. Insulated cavity closers with incorporated DPC to be provided at door reveals. Glass to have low 'e' glass and argon filled for thermal requirements. 'U' values to be as follows:-

Glazed Doors u value 1.4

Glass in doors and adjacent screens to have toughened safety glass below 1500mm high. Glass in any other windows below 800mm to be toughened safety glass.

Security

All easily accessible doors and windows are to be designed to meet the requirements of PAS 24 2012 for security purposes.



Ventilation
8000mmsq trickle ventilation is to be provided to games room. This is to be provided with trickle vents located within new door frames.

Structural Engineer
Will be required for the following items:-
1) Foundations id not traditional following inspection
2) New steel beam supporting existing roof plate where wall being removed. Also check of existing pier sizing and padstone.

Lintels
All lintels are to be Catnic steel or equivalent with min 150mm end bearings. Lintels used in cavity wall construction to be either CG, CH or CX 90/100 unless stated otherwise on plan. Existing lintels retained over existing garage doors.

Electrics
Light switches to be located 1200mm above floor (top of switch) and electrical sockets located 450mm above floor (bottom of socket) All lights throughout the conversion to be low energy lighting. Any external lights are to be infra red type and have control gear that is light sensitive and turns them off automatically during daylight hours.

All electrical work must meet the requirements of part P and be designed, installed, inspected and tested by a person competent to do so. Prior to completion the Building Control Officer is to be satisfied that part P has been complied with and that all work meets the requirements of BS7671 and a certificate issued for the work carried out.

Services
The contractor is to ensure that the location of all existing services running in or close to the works have been located and protected from the construction process. It is suggested that services companies are contacted in advance of commencement on site so that these can be marked out on site, located and where necessary made safe. A plan is to be marked up showing these service runs and kept on site at all times for reference.

Insulations
All insulations are to be installed in accordance with the manufacturers recommendations and guidelines. To include recommendations on vapour control locations as necessary

Party Wall Act
Due to the close proximity to boundaries and adjoining structures the Party Wall Act may apply to this project. This will require appropriate notices being served on adjoining third parties. It is advised that a Party Wall Surveyor contacted for advise in this matter.

Health and Safety (Design and Management Regulations)
CDM 2015 will apply to this project and the client/contractor need to be aware or their responsibilities for Health and Safety of the works. A comprehensive Health and Safety file for the project will be required through from design to completion and future management. The dwelling has been designed to minimise risk where possible to Construction workers, general public and end users both in terms of design and materials used. The site is in a location where members of the public may be at risk so protection/security of the site should be included in the Health and Safety file.

Howe and Boosey Architectural Services LTD are not acting as Principle designers under the CDM regulations unless specifically appointed to do so. However a designer risk assessment will be provided for the Health and Safety file.

Take advise for the project and what is required form a specialist Health and Safety advisor/specialist.

General Notes
These drawings have been provided for obtaining Planning and Building Regulation approval only. Client to ensure that all other necessary approvals have been applied for and approved such as service connections, rights of drainage, access, drainage boards, Environment Agency, CIL liabilities etc etc.

Heating
Space heating to be provided with electrical plug in radiators.

PRELIMINARY Building Regulations logo, Howe and Boosey Architectural Services Ltd contact info (28 Julian Road, Norwich, NR10 3QA), Project info (Diana Caruso, 6 Brown Close, Cringleford Norwich), and a table with Scale (1:50, 1:100), Job No. (0309, 02), Drawn by (H and B), Date (Sep 2023), and @ A1.

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