

THIS DRAWING IS FOR
BUILDING REGULATIONS
PURPOSES ONLY

BUILDING REGULATIONS INFORMATION:

DUO PITCHED ROOF CONSTRUCTION:
Smooth **grey** interlocking concrete roof tiles
(www.marley.co.uk/roof-tiles/concrete-roof-tiles/modern) on 50 x 25mm tanalised
sw battens @ a suitable gauge for required lap, on suitable underlay, on dual
pitched roof formed from specialist designed 'fink' type trussed rafters with 18"
pitch @ 600mm cts. Roof assembly to incorporate timber wind bracing as per roof
truss manufacturers details. Trusses sat on 100 x 75mm SW wallplates treated
with preservative. Lateral restraint to be provided as necessary. Cross ventilation
provided to whole roof area via incorporation of 25mm wide continuous strip
ventilator incorporating insect mesh at eaves level with ducted 50mm min clear
ventilated air space above insulation.

CAVITY WALL CONSTRUCTION: (max U value 0.28W/m.sq.K)
102.5mm external leaf **brickwork** (**brown to match existing**), 50mm clear cavity,
50mm partial fill Kingspan KoolTherm K108 Cavity Board insulation, 140 / 100mm
Kingspan KoolTherm K7 Pitched Roof Board insulation at ceiling level to be 1
layer 100mm between ceiling members with 1 layer 100mm above ceiling
members, ceiling members underdrawn with 500 gauge polythene vapour barrier
with taped joints, 50x50mm timber noggins provided between ceiling members to
support board edges @ perimeter & butt joints. Form 750mm x 600mm insulated
& draught stripped roof access panels.
Hyload DPC installed 150mm min. above adjacent finished ground levels & DPC
on inner leaf to be lapped with DPM in floor. Cavity filled with lean mix concrete
up to 150mm below ground level. All cavity closures, Kingspan KoolTherm Cavity
Closures, to incorporate insulated DPCs. Cavity tray / lintol stop ends
incorporated as required with weepvents @ 900mm c/c. DPC cavity trays installed
over any ducting through cavity. Cavities to be continuous with existing. New work
to be fully bonded to existing. Cavity fire barriers to be provided at first floor level.
**Existing retained single storey structure to receive smooth white render finish -
refer to elevations for exact locations** www.k-rend.co.uk

CEILING CONSTRUCTION: (U value 0.16W/m.sq.K)
Kingspan KoolTherm K7 Pitched Roof Board insulation at ceiling level to be 1
layer 100mm between ceiling members with 1 layer 100mm above ceiling
members, ceiling members underdrawn with 500 gauge polythene vapour barrier
with taped joints, 50x50mm timber noggins provided between ceiling members to
support board edges @ perimeter & butt joints. Form 750mm x 600mm insulated
& draught stripped roof access panels.

INTERNAL WALLS: [to achieve 60mm fire resisting construction (fire doors to be
self closing FD30)]
FIRST FLOOR: - timber stud partitions to be formed from 70mm deep studs at 400
cts, faced both sides with 12.5mm plasterboard with skim finish. In toilet locations,
studs to be lined with 12mm WBP sheathing prior to moisture resistant
plasterboard lining. Noggins fixed to allow full support to boards. 50mm thick quilt
insulation to be provided within cavities. Deflection heads as necessary. All
details to be in accordance with British Gypsum Ltd specifications.
Internal load bearing masonry walls to be formed from blockwork (density /
thickness as per S.E details) faced both sides with plaster / skim finish.
GROUND FLOOR: - 100mm thick blockwork built off concrete strip footings, all in
accordance with Structural Engineer's details

STAIRS:
Timber stairs to have 18No. equal risers (max rise of 170mm) with equal goings
(min 250mm), handrails both sides (50mm min hand clearance) 900 - 1000mm to
top of handrail measured from pitch line / floor. Minimum head clearance
throughout staircase to be 2000mm. Staircase width = 1200mm.

WINDOWS / DOORS:- (0.18W/m.sq.K U value)
To be **anthracite** uPVC frame sections to match existing, double glazed
incorporating low 'E' glass (Pilkington 'K' or similar). Frames to include 8000mm²
trickle vents and full draught stripping & security locking. Area of opening lights to
be nit 1/20th of the floor area it serves. All glazing in 'critical' locations to comply
with requirements of BS 6202:1981 and Approved Document N.

FLOOR CONSTRUCTION:
FIRST FLOOR:
Refer to 'British Gypsum Silent Floor Details'

GROUND FLOOR: (U value 0.22W/m.sq.K)
18mm SW T&G floor boarding supported on 220x72mm C16 joists @ 400mm c/c
with 100mm min. end bearings. Solid strutting to be provided between joists at
third span, lateral restraint to be provided to external walls using 38x5mm galv.
mild steel straps at 1200mm c/c max, extending 450mm down wall and across
3No. joists. Kingspan KoolTherm K103 Floorboard 110mm thick insulation
between joists supported off 25x25mm battens fixed to sides of joists. 150mm
clear depth between bottom of joist & top of 1000mm oversite concrete. Sub-floor
void to be ventilated via telescopic air vents. New finished floor level to be
continuous with existing.

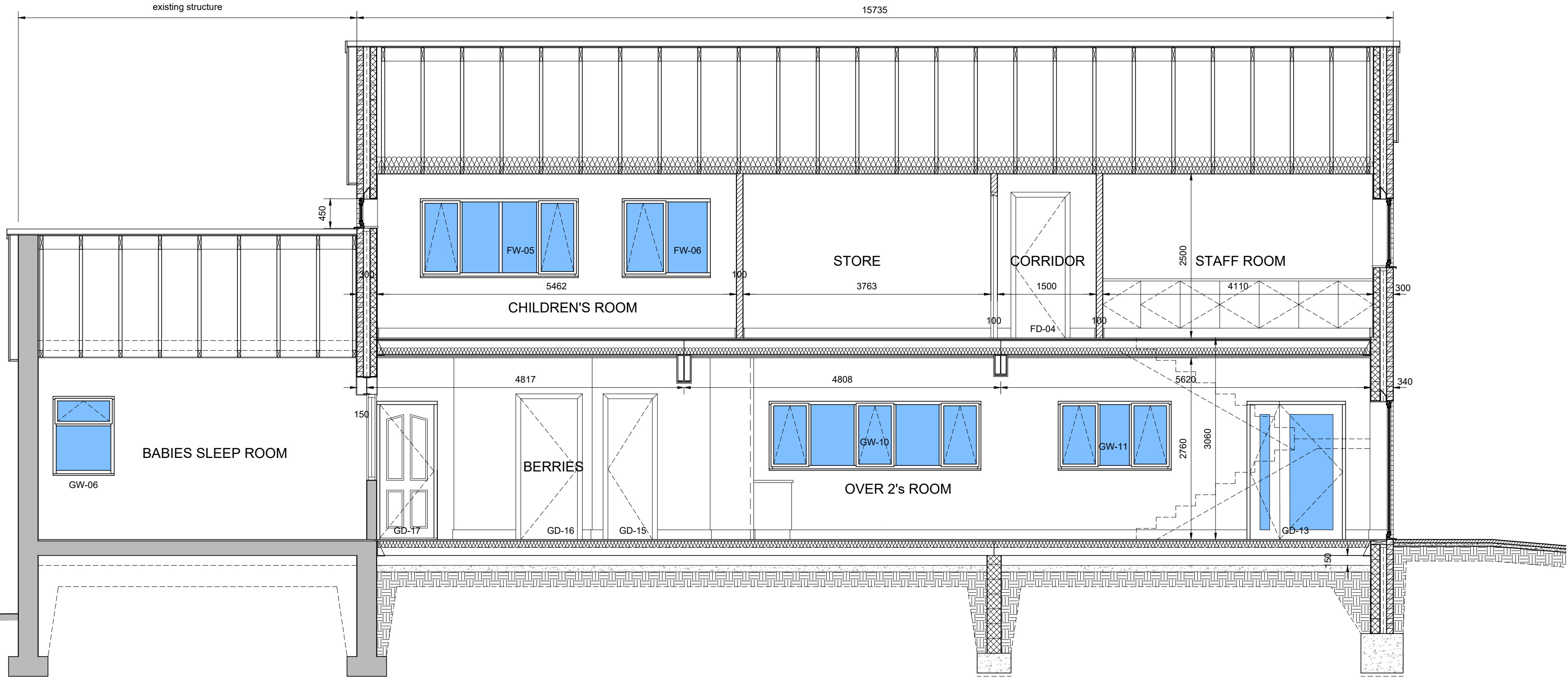
FOUNDATIONS
To be taken down 1000mm min. below ground level or until firm bearing stratum
is reached, which ever is the greater. Form 600mm wide trench, filled with 1:2:4
mix concrete up to 600mm below ground level. Any drain passing below
proposals to be encased in 150mm concrete. Cavity to be filled with weak mix
concrete up to 150mm below ground level. FOUNDATIONS SUBJECT TO
STRUCTURAL ENGINEERS DETAILS

ABOVE / BELOW GROUND DRAINAGE:
Hepworth Push-Fit Soil & Waste System [or other similar approved]. Whbs to be
fitted with anti-vac trap on 32mm dia waste into 50mm dia collection pipe
connected to 110mm dia soil pipe. Connections to soil pipe must not be made
within 200mm of WC branch. Cistern overflows to discharge through external
wall. All wastes pipes and accessories to be fitted in accordance with
manufacturer's recommendations.
Gutter profile to match existing (**clipmaster half round, anthracite colour**)
marley.co.uk to discharge to 68mm pvc RWRPs (**anthracite colour**) connected to
100mm Ø below ground supersleve pipes with suitable falls connected to existing
drainage. Drains passing under or within 1m of building and within angle of
repose of foundations, to be encased in 150mm concrete. Concrete lintols to be
provided where necessary. Rodent plates to be fitted if required by LA.
**ALL EXISTING / PROPOSED DRAINAGE RUOS TO BE CONFIRMED &
APPROVED ON SITE PRIOR TO COMMENCEMENT OF WORKS.**

VENTILATION
Windows (**Rehau, anthracite colour**)
window.rehau.co.uk/ventilation-pvc-windows-doors to provide an area of
opening light n.l.t. 1/20th of the floor area, frame to incorporate 8000mm. sq.
trickle / background ventilation and WC areas to have mechanical ventilation with
an extraction rate of 30 litres per second, Kitchens 60 litres per second.

ELECTRICS
1) All electrical work required to meet Part P (Electrical Safety), must be designed
installed, inspected and tested by a person competent to do so. Prior to
completion, client must be satisfied that either:
a) An electrical installation certificate issued under the competent person self
certification scheme has been issued
b) Appropriate certs. and forms as in BS 7671 have been submitted that confirm
that the work has been inspected and tested by a competent person.

GENERAL:
• Fire fighting equipment and signs, etc. to comply with BS5423 & BS5306
• Steelwork encased or treated to provide 1hr min. fire resistance.
• All surfaces / finishes in corridors & other means of escape to be class 0
surface spread of flame.
• All doors leading into corridors & forming sub-division to be FD30S fire
rated.
• Glazing in critical locations to comply with BS 6206:1981 and approved
document N for safety glazing requirements, including manifestation in
critical locations. Glazing in windows / external doors to be double glazed.
• All materials and workmanship to be to the satisfaction of the building
inspector and to fully comply with all relevant Building Regulations, British
Standards and Codes of Practice.
• Refer to structural engineer for all sub & super structure considerations.
• Cavity barriers to be provided in accordance with Part B of current
Building Regulations.
• All structural timber to be vac pressure impregnated.



Section C-C (1:50 @ A1)

BUILDING REGULATIONS QUERIES:
**(refer to 'Approved Inspectors Ltd' correspondence of 11/0/4/22
- Reference: AIC-22-64341-RRO)**

- 1) Structural Engineer (**Healey Consulting**) designs submitted under separate cover.
- 2) Specialist Roof Truss manufacturers details to be submitted under separate cover.
- 3) The fire alarm system (*to specialist details*) to be designed, installed and
commissioned in accordance with BS 5839-1: 2017. Means to alert for persons with
impaired hearing should be provided where they may be in relative isolation (eg.
Toilets etc), via use of visual displays. If the building is effectively managed other
systems such as vibrating papers may be used in lieu of visual displays. - refer to
Clause 18 of BS5839-1 for more info. If the fire alarm is to be interfaced with other
systems such as access control, hold open fire doors etc the guidance in BS7273
should also be followed. It is recommended a minimum Category L2 fire alarm
system be installed.

- 4) Maximum occupancy numbers:-
• GROUND FLOOR = 28 persons
• FIRST FLOOR = 26 persons

5) Doors on escape routes including external routes (whether or not the doors are
fire doorsets) should not be fitted with locks, latches or bolt fastenings but if
door fastenings are unavoidable, they must be simple fastenings operated from
the side approached by people making an escape. The operation of these
fastenings should be readily apparent without the use of a key and manipulation
of more than one mechanism.

- 6) Inner rooms should be provided with one of the following arrangements:
• The enclosures (walls or partitions) of the inner room should be stopped at
least 500mm below the ceiling **or**
• A suitably site vision panel not less than 0.1m2 should be located in the door
or walls of the inner room to enable occupants of the inner room to see if a
fire has started in the outer room **or**
• The access room should be fitted with a suitable automatic fire detection and
alarm system to warn the occupants of the inner room of the outbreak of a
fire in the access room.

7) Every doorway or other exit providing access to a means of escape, other than
exits in obvious ordinary use (e.g Main Entrances), should be distinctively and
conspicuously marked by an emergency exit sign in accordance with BS ISO
3864-1 and BS 5499-4.

8) All escape routes should have adequate artificial lighting. If the mains electricity
power supply fails, escape lighting should illuminate the routes listed in
Approved Document B V2 Table 5.1. Escape stair lighting should be on a
separate circuit from the electricity supply to any other part of the escape route.
Escape lighting should conform to BS 5266-1 - Code of Practice for the
Emergency Escape Lighting of Premises.

9) The surface linings of walls and ceilings should meet the fire performance
classifications shown in Approved Document Part B V2 Table 6.1.

10) Cavity barriers ('Rockwool' or similar) installed in the roof space along the lines of
the protected stair enclosure shown thus:-

11) 'Imiloc building products' (or similar) Thermo-loc FR30 30 Minute Fire-Rated
Cavity Closer to be provided around external window and door openings.
Thermo-Loc FRSTOP Fire-Rated Cavity Stop Sock at the head of the external cavity
walls (to achieve a minimum of 30min fire resistance for integrity and 15min for
insulation).

12) Comments noted.

13) The sub-floor void oversite concrete must be laid to falls and a maintainable
drainage channel / gully provided to remove any seepage of water building up from
the sub-floor void area, in locations where the oversite is below the adjacent external
ground level.

14) Hot water storage and supply systems should be designed and installed in
accordance with BS 6700 or BS EN 12897, workmanship with BS 8000-15.

15) The nursery school is NOT classed as a "maintained" Nursery School part of an
educational curriculum.

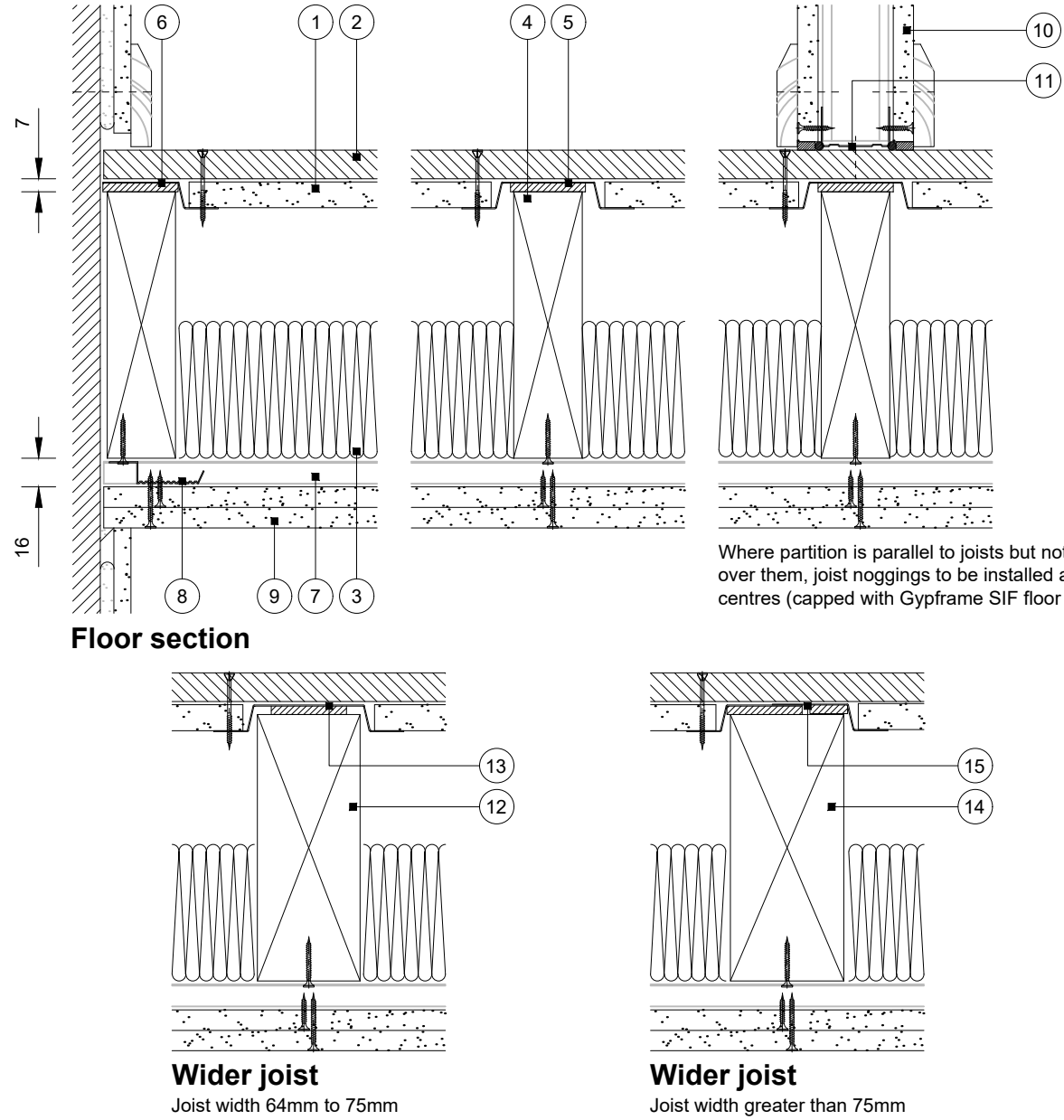
16) Noted.

17) Noted.

18) Glazing in critical locations (Approved Document Part K Diagram 5.1) should be
provided with one of the following safety measures: Safety Glazing, Toughened
Glazing or be Permanently protected (Para 5.1 to 5.8, BS EN12600 and BS6206). If
there is a difference in levels of more than 380mm where glazing also provides the
function as a barrier (Glazing less than 800mm from FFL, then this glazing should
also be designed to BS EN 1991-1-1 with its National Annex and PD 6688-1-1.

GypFloor Silent

- 1 19mm Gyproc plasterboard cut to fit between floor channels with
3mm gap to vertical flange of floor channel
- 2 Minimum 2mm chipboard or softwood flooring fixed through
plasterboard to one side of channel with GypFloor SIF5 Floor
Screws
- 3 100mm Isover insulation
- 4 Timber joist width less than 64mm
- 5 Gyproframe SIF1 Floor Channel located centrally on joist
- 6 Gyproframe SIF2 Floor Channel in place of SIF1 where joist
is within 30mm of wall
- 7 Gyproframe RB1 Resilient Bars at max. 450mm centres fixed to
each joist with suitable British Gypsum screws
- 8 Short lengths of Gyproframe RB1 Resilient Bar fixed to joist with
suitable British Gypsum screws
- 9 2 layers Gyproc plasterboard or Glasroc specialist board fixed with
suitable British Gypsum screws at 230mm centres in field of board
and 150mm centres at board ends (1 hour fire resistance required)
- 10 Indicative non-loadbearing metal stud partition
- 11 Channel suitably fixed to flooring at 600mm centres (ensure
fixings do not penetrate SIF floor channel)
- 12 Timber joist width 64-75mm
- 13 Gyproframe SIF4 Floor Channel located centrally on joist
- 14 Timber joist width greater than 75mm
- 15 Two Gyproframe SIF2 Floor Channels located on joist (width
greater than 75mm) with foam inlay cut away to facilitate overlap
(2-3mm clearance gap between channel and side of joist)



First Floor Detail - 'GypFloor Silent' (1:5 @ A1)

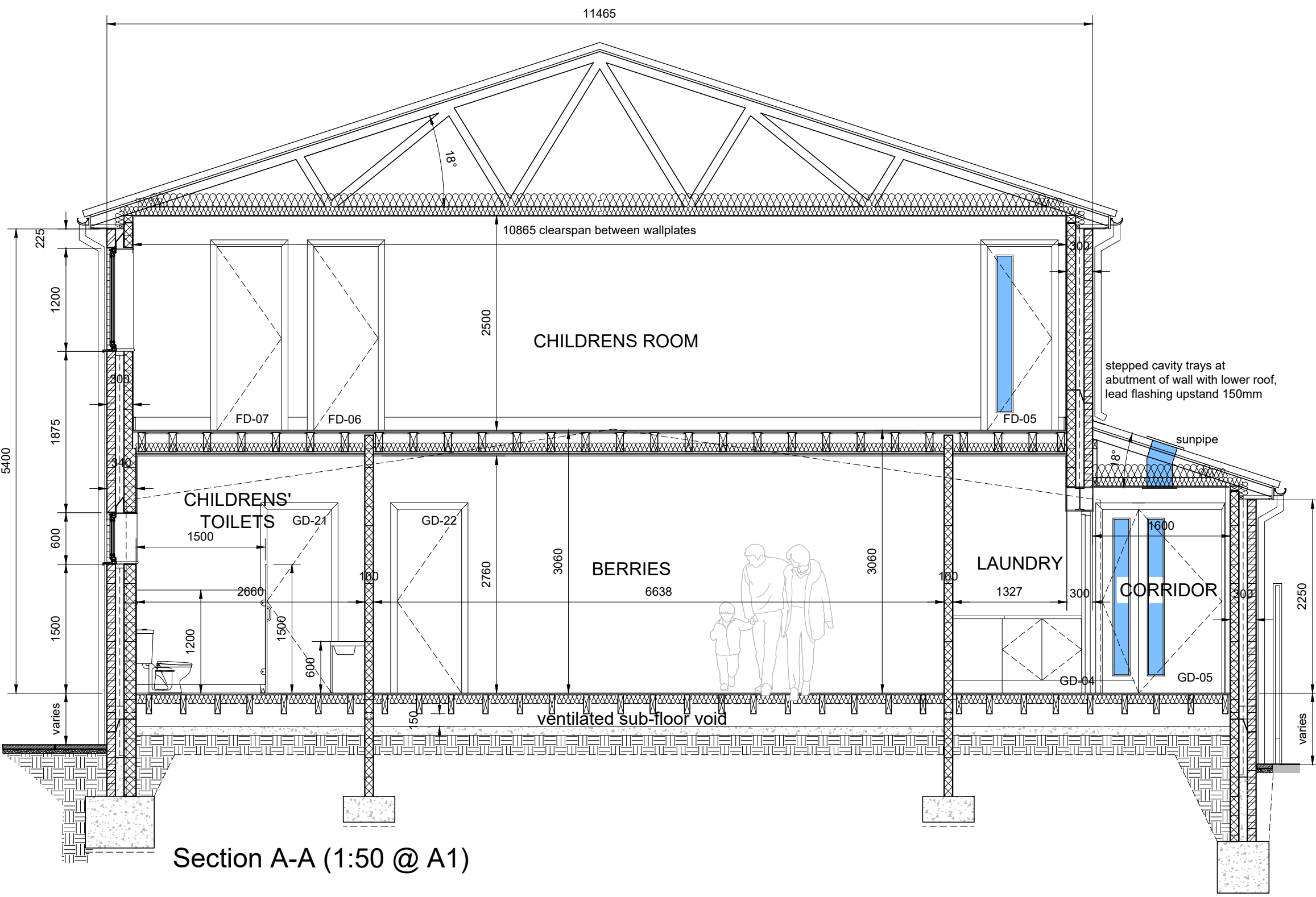
19) Doors should be provided with vision panels to protect occupants against
impact from doors. Vision panels should provide between a zone of visibility
between 500mm & 1500mm. See Approved Document Part K Diagram 10.1 for
further info. (Excluding some external escape doors and sanitary rooms)

20) SBEM calculations to follow under separate cover.

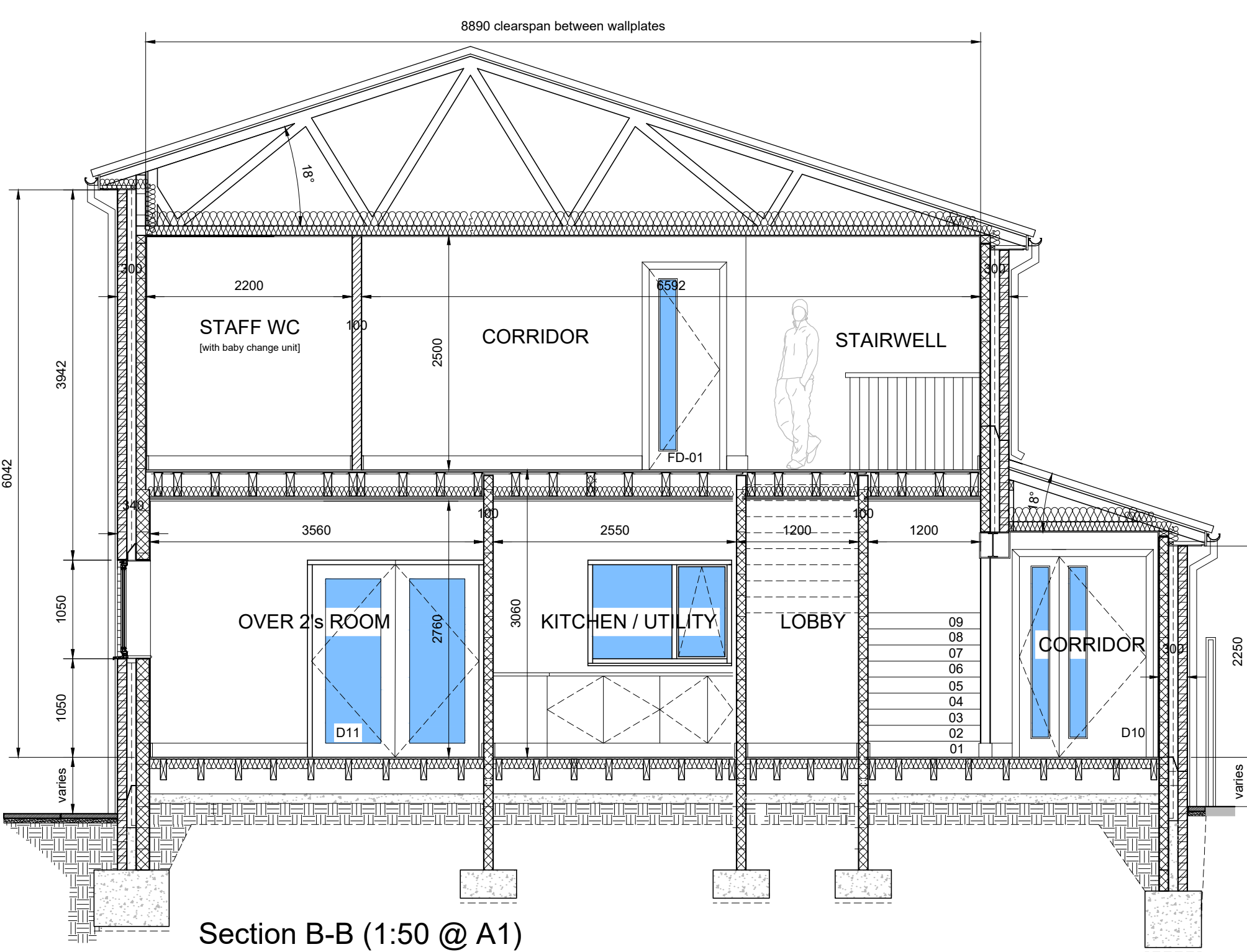
21) Access Strategy to follow under separate cover.

22) Building to be equipped with a high-speed-ready in-building physical
infrastructure to enable a network connection point for high-speed electronic
communication networks (broadband speeds greater than 30 Mbps).

23) All fire safety information for the building to be given to 'the responsible person'
(end user / building manager) prior to occupation.



Section A-A (1:50 @ A1)



Section B-B (1:50 @ A1)

F	16/07/23	Additional information re; external materials.
E	28/06/23	Updated following Client revisions
D	03/05/22	Inner leaf of blockwork thickness revised as per S.E. details. Building Regulations revisions.
C	08/04/22	Design Development
B	04/04/22	Design Development
A	30/03/22	Building Regulations Issue
Rev	Date	Description

Site: Aunt Marys Day Nursery Taylor Street Heywood. OL10 1EF	
Project: Ground Floor Entrance extension / internal alterations / partial re-build of external walls / first floor extension / external works to form additional covered play areas	
Drawing Title: Proposed Sections A-A, B-B & C-C, First Floor Detail & Construction Notes	
Date: 18/03/22	Scale: 1:50 / 1:5 @ A1
Drawing Number: LM-01/08	Revision: F