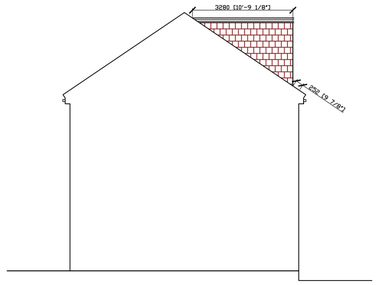
NOTES

EXISTING FRONT ELEVATION



PROPOSED SIDE ELEVATION

Install double glazed windows

Flat roof felted

Roof dormer is tiled to match existing
Flank wall to be rendered.

all materials to match existing

PROPOSED REAR ELEVATION

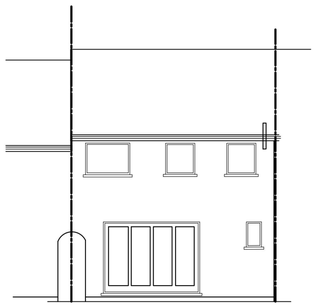
rear dormer

2.350x3.29x6.36 = 49.2m3
49.2/2 = 24.6m3

therefore loft is under 40m3

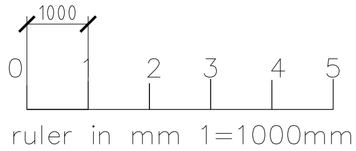
WITH DORMER SET IN FROM EAVES OVER 200mm

PROPOSED FRONT ELEVATION



EXISTING REAR ELEVATION

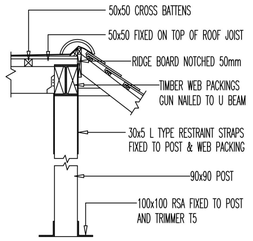
RB1 152x152x37 UC 200 x 100 x 15
LB1 152x89x16 UB 150 x 100 x 10
LB2 203x203x46 UC 330 x 100 x 20
LB3 203x203x46 UC 270 x 100 x 15
LB4 203x203x60 UC 460 x 100 x 25



ruler in mm 1=1000mm

STRENGTHEN EXISTING RAFTERS:
BOLT ON 50x150 C16 NEW ADDITIONAL TIMBER RAFTERS TO EXISTING RAFTERS. COLLAR TIES TO BE INSTALLED BELOW THE RIDGE AND BOLTED TO THE RAFTERS AT EVERY RAFTER POSITION.

ENSURE THAT FLAT ROOF IS SET BELOW RIDGE AND NOT ABOVE. DETAIL SHOWN IS TYPICAL THE HEIGHT OF THE RIDGE BEAM ABOVE THE FLOOR WILL VARY FROM ROOF TO ROOF. THE GREATER THE HEADROOM THE LOWER THE BEAM



RIDGE BINDER DETAIL (N.T.S.)

provide sound insulation to all floors as as specification.

extend soil branch up from existing s+vp to take new wc,basin wastes

structural details shown have been prepared by qualified engineer his calculation sheets should be followed at all times

install lateral restraint straps between new gable and rafters at 1200mm cts down each side and strap the floor to the wall. install solid noggings where straps are paced to screw straps to.

construct new staircase as specification width to be 700mm or wider subject to specialist contractor measuring on site.

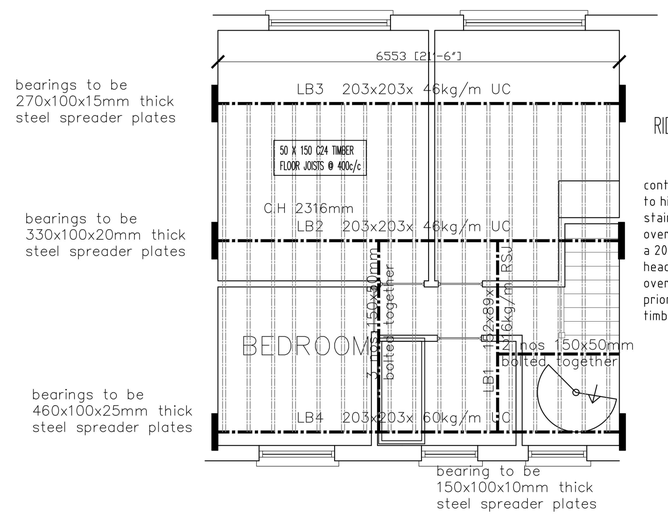
where the Showerroom is over 4m away from the soil pipe install a stub stack inside the bathroom with a air admittence valve, to take wastes from sanitary ware.

provide anti-syphon traps to be provided to basin

Steel beams to be placed minimum 25mm above existing ceiling joists to prevent deflection

new dormer constructed as notes as specification, install windows to match existing or to clients requirements.

bolt timbers together using 12.5mm bolts and timber connectors at 600mm cts.

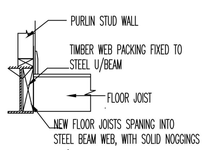


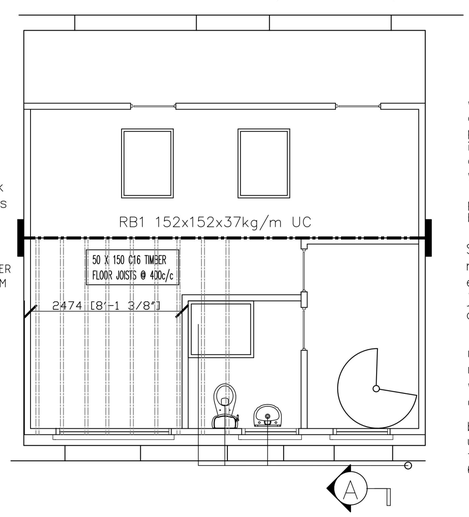
MODIFIED FIRST FLOOR LAYOUT

contractor to satisfy to himself that new staircase will fit over existing with a 2000mm clear headroom maintained over stairs at all times, prior to installing stair timbers

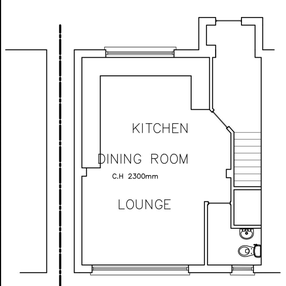
bearings to be 150x100x10mm thick steel spreader plates

ALLOW FOR A SHOWER CUBICLE IF HEADROOM PERMITS
THIS AREA SUBJECT TO HEADROOM.

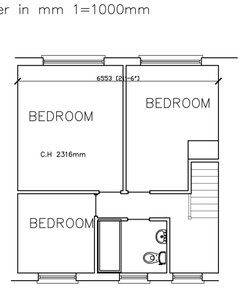




PROPOSED SECOND FLOOR LAYOUT



EXISTING GROUND FLOOR LAYOUT



EXISTING FIRST FLOOR LAYOUT

EXISTING AND PROPOSED LAYOUTS AND ELEVATION BUILDING REGULATIONS

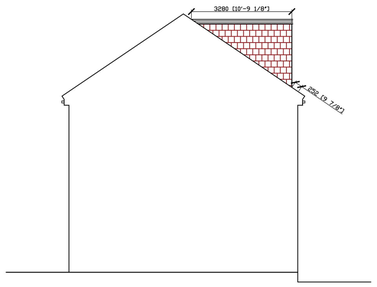
ADDRESS
34 PENRITH ROAD
RM3 9NS

JOB
LOFT CONVERSION

SCALE 1:50 1:100@A1
DATE 01/02/23
DRAWN
DRG. NOS PR 10

RAINWATER

Provide 74 half round PVC gutter
on 22 mm fascia board connected
to 63 mm PVC downpipe
discharging onto existing roof.



PROPOSED SIDE ELEVATION

Install double glazed
windows

Flat roof felted

Roof dormer is tiled to
match existing
Flank wall to be rendered.

all materials to match
existing

PROPOSED REAR ELEVATION

rear dormer

2.350x3.29×6.36 = 49.2m3
49.2/2 = 24.6m3

therefore loft is under 40m3

WITH DORMER SET IN FROM
EAVES OVER 200mm

PROPOSED FRONT ELEVATION

ROOF SLOPES

To achieve a u-value of 0.13W/m2K
plant 50mm battens to rafter edge
and carry out the following

Any existing roof slopes forming part
of the new roof is to be insulated
with 100mm kooltherm K107 insulation
between joists and underlined with
72.5mm of Kooltherm K118 as before
fixed to the rafter slope with taped
joints finished with 9mm plasterboard
and set. Insulation to be extended
all the way down to the eaves
level and seal between floor and
wall.
Maintain continuous ridge ventilation
and soffit ventilation to roof.

alternatively if roof is being stripped
back use breathable membrane to
roof instead of 50mm internal
battens

SMOKE ALARMS APPPB B1
SECTION 1 PARA 1.4-1.15

Interlinked smoke detectors to
comply with BS 5838-6: 2004

self contained smoke alarms are
to be positioned in circulating
areas of the property ie.
hallways and landings. They
should be situated within 7 m
of the doors to rooms where a
fire is likely to start (kitchen or
living room) and within 3 m of
bedroom doors.

Interlinked smoke detectors to
comply with BS 5838-6: 2004

All distances to be measured
horizontally. Any corridor over
15 m long should have more
than one alarm. Where more
than one alarm is installed they
should be interconnected.

Any dwelling houses which have
accommodation on more than
one storey should have at least
one SC alarm on each storey, all
being interconnected. Each SC
alarm should be fixed to the
ceiling at least 300 mm from
any wall or light fitting,
preferably central. Wall mounted
units should be fixed between
150-300 mm below the ceiling.
SC alarms are not be fixed over
a stair shaft or any other
opening between floors.

Self contained smoke alarms to
be wired permanently to a
separately fixed circuit at the
distribution board or in
accordance with the LDSA
decision pending a Department
of Environment ruling, that the
wiring can be connected to the
lighting circuit rather than to
the fuse board. Battery
operated smoke detectors are
not acceptable.

STAIRCASE

To have closed risers.

Width to be not less than 800
mm between hand rails. Risers
to be max. 190 mm and goings
to be min. 223 mm. Winders
to have min. going of 50 mm
and equal goings at centre line
of min. 223 mm. Angle of
pitch line to be 42° max.
Ballustrading to be min. of 900
mm above stair nosings and
1100 mm above landings.
Handrails are to run continuous
both sides and throughout flight
and winders. Bottom rail to be
less than 50 mm above
nosings. New and existing
staircase to have 2000 mm
min. head room vertically above
nosings.
balastrades to be vertically
installed at no more than
100mm cts.

external balastrading to have
balastrades at no more than
100mm cts including side and
bottom rails

Staircase contractor to check
dimensions on site prior to
manufacture.

INSTALLATION OF VESSELS, PIPES
AND DUCTS

Insulation of hot water vessel;
provide min. 35 mm thick factory
applied coating of PU-foam having
O ozone depletion potential and a
minimum density of 30Kg/m.
1) Pipe insulation material must
have a thermal conductivity no
exceeding 0.045 W/mK and a
thickness equal to the outside
diameter up to a maximum of 40
mm.
2) The hot pipes connected to
the hot water vessel should
be insulated for 1 m from
their connection points or up to
where they become concealed. 15
mm thick insulation with a thermal
conductivity not exceeding 0.045
W/mK should be used.
The new heating system should
have;
A thermostat which shuts off the
supply of heat when the storage
temperature is reached.
And a timer to shut off the
heating system at periods when
water heating is not required

EXISTING S.V.P.

To be extended 900 above
adjacent window heads and
re-positioned as necessary. Also
provide termination cage.

Space Heating Controls and HWS

Zone controls
Timing controls
Boiler controls interlocking

Rooms such as living area and
sleeping accommodation to have
temperature controls devices wither
via room thermostats or
thermostatic radiation.

Where one timing zone is divided
into two temperature control
sub-zones, for one dwelling no. zone
should be over 150 m 2.

Gas fired boilers should operate on
a timing device controlling the
heating period.

Boiler control interlocking should
switch the hot water control heater
off when no heating is required.
When no heating is required then
the Boiler system controlled by
thermostats should operate only
when a space heating or vessel
thermostat is calling for heat.

Where it is proposed to effect
control by thermostat radiators
valves, a room thermostat or other
device such as a flow switch should
also be provided to switch off the
boiler when there is no demand for
heating or hot water.

Hot Water System

All hot water systems installed to
meet the insulation requirements of
BS 1566, BS 699, BS 3198 or BS
7206 or in most cases the use of
35 mm thick factory applied coating
of PU-foam having a minimum
density of 30 kg/m3 will be
satisfactory.

All pumped primary systems to be
pumped in accordance with relevant
BS as above. Also indirectly heated
hot water storage systems heat
exchanges to be sized in accordance
to the relevant British Standard.

Property storage system to meet
the required in 1999 WMA.

All heating and HWS systems to be
inspected at completion and
commissioned with details recorded
and self-certified by competent
persons.

All instructions are to be supplied
by the owner/occupier providing
details of routine maintenance and
efficient operations, details together
with a commissioning certificate.

Insulation of Pipes and Ducts

All external heating pipe work to be
insulated with an insulating material
equal to the thickening of the
pipework including hot pie
connections to hot water storage
vessels including the vent pipes.

FLOOR CONSTRUCTION

22mm tongue and groove floor grade
chipboard on 150 x 75mm and C24
joists at 400 centres set 25 clear of
existing ceiling joists. Joists under
partitions to be doubled up. Lay
100mm reinforced fibre glass quilt for
fire protection and sound insulation,
supported on chicken mesh stapled to
new joists, minimum density 15kg/m3.
extend into roof voids and continue
t and g boarding through.

Existing 1st floor is 175 x 50 joists
with 25 plain boards and lath and
plaster to have 4.5mm hardboard laid
over the top

where chipboard flooring where used
in bathrooms and wet rooms to be
waterproof type in accordance with
BS7331: 1990 and clause 4.15 of
Approved DOC C

DRAINAGE

Sanitary pipework to be BS 5572. Any
new stub-stack to have access for
bath, WC and basin wastes. Waste pipe
sizes to be as follows :- WC 100 mm
and 50 mm trap, basin 32 mm shower
to be 38 mm pipe. 75 mm deep seal
traps to be used. 50 mm combined
wastes to kitchen, sinks, dishwasher and
washing machine connections, except
where the waste is more than 1.6 m
provide an anti-syphon trap. Wastes
not to discharge into soil and vent pipe
within 200 mm below WC branch.
Access points to be provided to waste
pipes at all changes of direction.
Rainwater to be dispersed into 100 mm
gutter into 63 mm drain pipe into
existing rain water system. Provide
rodable gullies at base of all rainwater
downpipes. All pipework within roof
space to be fully insulated.

PRELIMINARY NOTES

All dimensions to be checked on site
before commencement of work. All work
on site to be carried out to the
relevant code of practice and to the
Building Regulations. All stated
dimensions to take preference over
scaled dimensions, any unforeseen
problems to be discussed with agent
before works commence. All work to
be safely constructed under the
Construction (Design & Management)
Regulations 1994 with the main
contractor being responsible for site and
construction safety. Any design faults
which occur regarding CDM Regulations
are to be brought to the attention of
the agent. It will be the responsibility
of the Contractor to set out and
co-ordinate all services in accordance
with the drawings and to obtain
Architect's agreement if any changes
required before installation commences.
Please note the services layout shows
design intent only - contractor will be
responsible for adapting, designing,
routing and sizing the installations,
ensuring it is suitable for intended
purpose and complies with current
British Standards, Codes of Practice and
installed in accordance with all industry
rules and regulations. Please note any
valves, stop cocks, rodding eyes or
similar critical fittings and junctions are
to be located so that they are easily
accessible. Contractor must familiarise
himself with the position and capacity
of existing services to ensure they are
compatible and capable of providing new
services. All services to be tested
before concealment of pipework cables
etc.
The client should be aware of his
responsibilities under the Party Wall etc
Act. where building within 3m of the
party wall or within 4m of your
neighbours property and with
foundations at a lower level or if the
works constitute cutting into the party
wall, then notices will need to be served
under the act.
The contractor should satisfy thereselves
that this is in place prior to
comencement.
The client should be aware that where a
building over a sewer exists,that is a
drain serving more than one property
a Thames water agreement may be
required. If you have any doubt to this
then consult thames water direct

Internal Lighting for loft conversions

All dwellings and extensions should
have efficient lighting. A minimum
of 75% energy efficient light fittings,
in accordance with Table 40 f the
Domestic Building Srvices Compliance
Guide. CLG 2010
The loft is to have a minimum of
at least 3 in every 4 energy
efficient light fittings

Roof Construction (warm) 2022

12.5 mm spar chippings on hot
bitumen, bedded on three layers of
roofing felt to BS 747 bonded to CP
144 or GRP fibre glass roof on 18mm
plywood decking on Kingspan Thermaroof
TR26 Zero ODD 130mm total thickness,
to achieve a u-value of 0.15 W/MK on
vapour barrier, on 19 mm exterior grade
plywood on firrings to 1:60 fall on Class
3 joists 175 x 50 mm at 400 cts. with
plasterboard and skim to underside of
ceiling. Felt to be tucked up parapet
walls covered with lead Code 4 flashing
minimum 150 mm upstand. Parapet
walls to have coping stones on top with
DPC underneath lapped to flashing.

ROOF (ALTERNATIVE COLDECK) 2022

12.5 mm chippings bedded in bitumen
on three layers of felt to BS 747 and
laid to CP144 on 18 mm external
quality plywood on 50 x 50 mm cross
battens(if required) on firing pieces
to 1 in 60 fall. Roof joists 175 x 50
mm at 400 mm centres insulated with
Kooltherm K107 120 mm between
joists and close to ceiling line and 50
mm gap ove with 52.5mm Kooltherem
K118 with 12.5mm plasterboard finish
underneath to achieve a u-value of
0.18 w/mc. Provide ventilation to roof
void by a continuous 25 mm vent
along soffit with fly screen. Install 3
no. ridge vent to ridge.
Existing roof to have ridge vents
equivalent to at least 5,000 mm2
continuous ventilation.

TIMBERS

Use metal joist hangers. Joist to
beam connections use jiffy hangers.
Post to beam connections. Bar
multi-grip frame connectors. All
timbers where bolted with M12
bolts at 600cts. to have timber
connectors and washers. All
timber to be kept 50 mm away
from chimney stacks. All timbers
to be hem-fir (1) GS grade
(Building Regs. Class 3) unless
otherwise specified.

provide a continuous gap of 25mm wide at eaves level
and 5mm at ridge level,with 50mm void above insulation.

construct cold deck
roof maintaining
50mm clear
ventilation gap over
roof insulation

install lateral restraint
straps between new gable
and rafters at 1200mm cts
down each side and strap
the floor to the wall. install
solid noggings where straps
are paced to screw straps
to.

provide ridge ventilation
as notes

FLAT ROOF JOISTS
50x150 C16 TIMBER
@ 400mm CENTRES

RIDGE BEAM 152x152x30UC
ON 330x100x20mm(th)
MS BEARING PLATES

EXISTING TO HAVE 150X50mm
RAFTERS BOLTED TO SIDE OF THEM.

line of rafters

bolt new roof joists to
remaining rafters

new flat roof to be
vented via ridge vents
and over rafters. alternatively
install breatherable
membrane

insulated new timber
wall as usual, see
dormer notes.

bolt down timber
plate to wall every
400mm cts.

install lateral restraint straps
down to every second rafter
foot.
Install 100mm celotex between
and 40m
across the inside facer so as
to maintain a 50mm
ventilation gap over insulation.

install 150x50mm new floor
joists at 400mm cts

BED
ROOM

if new joists are to span on
to external wall plate check
existing lintols to take
additional loads

KITCHEN

HALL

BRICKWORK PARTY WALL INSULATION
2022 to achieve a u-value of
0.18.w/degrees c

Solid walls: Internal dry lining - fixed to

Install Mannok Therm MW or
laminate-foil PIR insulation 100mm thick
insulation board on battens fixed over
dpc with a 12.5mm plasterboard and
with a 5mm skim lightweight plaster
finish internally.

any new boilers to have a SEBDUK condensing
with a rating of 90% (2005 standard) or 88%
(2009 standard) inaccordance with the domestic
building services compliance guide CLG 2010
with an approved flue sleeved through the
vairous parts of combustible structure and
discharging in accordance with Approved
doc L and J
Any new or relocated boiler to be installed and
tested and on completion a copy of the
installation and test certificate is to be
submitted to Building Control, signed
by a Gas Safe registerd installer

SECTION A-A

Dormer Cheeks 2022

Dormer cheeks To be tiled to match
existing. Dormers to be overlaid in
20 mm e.q.wbp ply (and 12.5mm
masterboard if within 1000mm of
boundary) on 100x50 SC3 grade sw
treated timbers at 400c/c max,
supported over window on 150x50
(x2) SC3 grade timbers. Timber fixed
to side cheeks with proprietary galv.
steel frame clips. 100 x 50 SC3
grade sw treated timber framing
securely spiked to rafters as described
above. Flat roof joists to be fixed to
dormer wall studwork using steel
frame clips. Trimming rafters to be
doubled up under Dormer walls. To
achieve 0.18W/m2K Install 100mm of
KOOLTHERM K112 - BETWEEN TIMBER STUDS
11.4% wall timber fitted between
studs and Internal lining to be 1 layer
of KOOLTHERM K118 52.5mm and
plasterboard internal finish and
5mm skim
ashlar walls to be insulated as above
with void side with layer of 12.5
plasterboard thick with a 5mm skim.

NEW WINDOWS (unless shown
otherwise)

Double glazed aluminium thermal
break with white PVC finish, all set
in timber sub-frame. Openable
windows to have a clear opening of
850 x 500 mm window cill height to
be 900-1000 mm max. from floor.
doors to rear dormer to act as
means of escape if agreed by local
authority

contractor to satisfy
to himself that new
staircase will fit
over existing with
a 2000mm clear
headroom maintained
over stairs at all times,
prior to installing stair
timbers

see specification for details
of floor and wall construction

FIRE

All existing doors leading off hall
and landings to habitable rooms
and kitchen to be half hour fire
doors and smoke seals. Any new
partitions or doors enclosing new
and existing staircase to provide
half hour fire protection. New
doors to ground floor, first floor
and new habitable rooms in loft
to be half hour resistance and
have 35 x 25 stops screwed and
glued. First floor to be covered
with 5 mm dense hardboard.
Ceiling to first floor is 16 mm
lath and plaster. Any glazed
areas within staircase enclosure
to be changed to wire cast glass
with panels not exceeding 0.37 m.
roof void side of partitions to be
lined with 12.5 mm plasterboard.
Ceiling over bay at front to be
lined with 12.5 mm fireline board
and 5 mm set if required by local
authority.

all rooflights to be AA fire rated

INTERNAL PARTITIONS

Stud wall to be 100 x 50 mm
timber construction, lined with 10
mm plasterboard and 5mm
plaster finish. On roof space side
of wall and walls around staircase
use 12.5 mm foil backed
plasterboard with 5mm plaster
finish. Provide double joists under
partitions or cross noggins.
In partition cavity install 25mm
minimum thick mineral wool batts
or quilt with a minimum density
of 10kg/m3

NEW WINDOWS (unless shown
otherwise)

Double glazed aluminium thermal
break with white PVC finish, all set
in timber sub-frame. Openable
windows to have a clear opening of
850 x 500 mm window cill height to
be 900-1000 mm max. from floor.
doors to rear dormer to act as
means of escape if agreed by local
authority

EXTERNAL TIMBER

Timber receives dark oak stain wood
preserver with two subsequent coats
of external.

WINDOWS

All new windows to provide 1/20th of
the floor area ventilation and to have
ventilation capable of providing 8000
mm2 background ventilation. (eg. to
window sash) ie. at least one per
window per room. Kitchen - cooker
hood to extract 30 litres/second and in
addition window opening of at least
4000 mm2. Bathrooms and utilityrooms
- extractor fan to extract 15 litres per
second ie. Xpelair DX 100 ducted as
shown to outside air. Connected to
light switch with three air changes per
hour and 15 minute overrun connected
to light switch. Passive stack
ventilation - where installed to comply
with Approved Document part F of the
Building Regulations. All new windows
to be double glazed. all bedroom
windows to have 850x500mm clear
opening window for means of escape
purposes. A minimum of 450mm wide
opening

VENTILATION

Ventilation to rooms to be 1/20th
of the floor area. WC/shower
room to have mechanical
ventilation operated by light switch
to give 3 air changes per hour
with 20 minutes over run at 15
litres per second. All rooms to
have 8000 mm2 background
ventilation.

STEELWORK

Steelwork to be encased in 19mm
plasterboard binded at 100 mm cts.
with 1.6 mm wire binding with 7 mm
gypsum plaster or skim or paint with 2
coats intumescent paint (Nullifier or
similar). Supported on concrete
padstones 150 mm deep x 225 x wall
width or on 150 mm x 100 mm lintels
600 mm long.

Structural Timber

Structural timber to comply with GS,
MGS, M75 or no. 2 and 3 stress graded
and pressure impregnated with
preservative and in all respects to BS
5268 pt. 2:1984.

Part P Electrical Safety

All new electrical work is to be
designed, installed, inspected and
tested in accordance with BS 7671
(I.E.E Wiring Regulations 16th Edition).
The works are to be undertaken by an
installer registered under a suitable
electrical self-certification scheme, or
alternatively by a suitably qualified
person, with a certificate of
compliance produced by that person
to Building Control on completion of
the works.

GLAZING

Glazing to all doors to be safety glass
to BS 6206 and Building Regulations
Part N. That is glass between floor
level and up to 800 mm in partitions
and walls to be toughened glass. Door
glazing to be toughened up to 1500
mm above the floor and up to 300 mm
wide in side panels. Glazing to internal
and external doors throughout to be
toughened glass to BS 6206 1981
Clause 5.3. Glazing to all timber and
UPVC windows to be sealed glazed units
with a U-value of 1.6W/m sq.k. or to
achieve a WER rating of Band C
achieved by having a 16mm air gap
with argon fand aluminium spacer bar
with an outer pane of pilkington
Enerikare Optiwhite and an inner pane
of K glass achieving a u value of 1.4

Balanced flues should be sited at the following distances:-

	Natural	Fan Assisted
Above an opening	600 mm	300 mm
Below eaves	300 mm	200 mm
Below an opening	1500 mm > 32 kw	300 mm
Below guttering and downpipes	2000 mm >32kw	75 mm
From an internal or External Corner	600 mm	300 mm

section and specification
BUILDING REGULATIONS

EXISTING AND PROPOSED
LAYOUTS AND ELEVATION
BUILDING REGULATIONS

ADDRESS

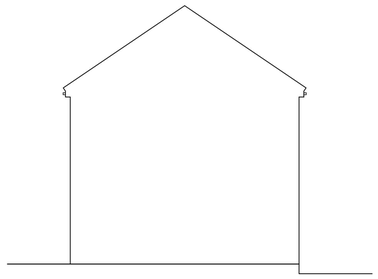
34 PENRITH ROAD
RM3 9NS

JOB

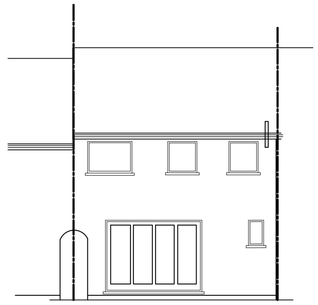
LOFT CONVERSION

SCALE	DATE
1:50 1:100@A1	01/02/23
DRAWN	DRG. NOS PR 11

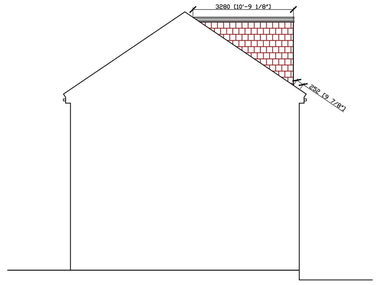
NOTES



EXISTING SIDE ELEVATION



EXISTING REAR ELEVATION



PROPOSED SIDE ELEVATION

Install double glazed windows

Flat roof felted

Roof dormer is tiled to match existing
Flank wall to be rendered.

all materials to match existing

PROPOSED REAR ELEVATION

rear dormer

2.350x3.29x6.36 = 49.2m3
49.2/2 = 24.6m3

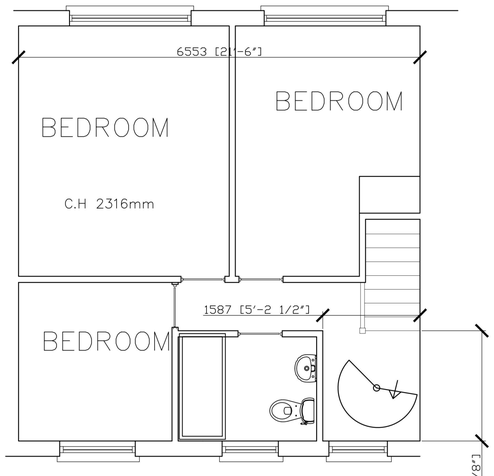
therefore loft is under 40m3

WITH DORMER SET IN FROM EAVES OVER 200mm

PROPOSED FRONT ELEVATION

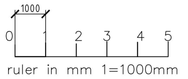
ruler in mm 1=1000mm

EXISTING FRONT ELEVATION

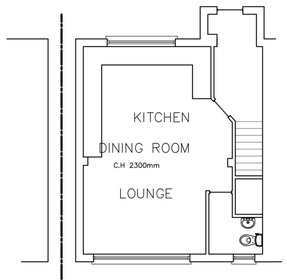


MODIFIED FIRST FLOOR LAYOUT

PROPOSED SECOND FLOOR LAYOUT



ruler in mm 1=1000mm



EXISTING GROUND FLOOR LAYOUT

EXISTING FIRST FLOOR LAYOUT

A	24.04.25	windows changed

EXISTING AND PROPOSED LAYOUTS AND ELEVATION PLANNING APPLICATION

ADDRESS
34 PENRITH ROAD
RM3 9NS

JOB
LOFT CONVERSION

SCALE 1:50 1:100@A1	DATE 15/04/25
DRAWN	DRG. NOS PR 01a