

SINGLE STOREY | DOUBLE STOREY

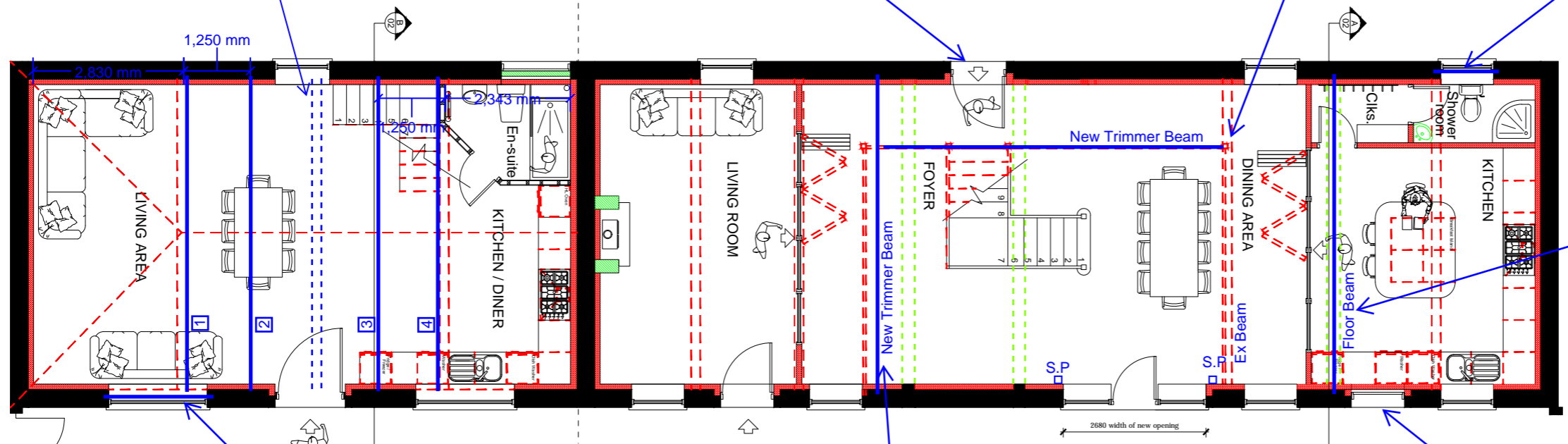
OPTION 1 (AS PROPOSED)
 1 = New floor beam
 2 = New room in roof truss
 3 = New room in roof truss
 4 = New floor beam
 NOTE: New trusses to be max 1.25m away from king post trusses.

Existing suspect scissor truss to be replaced with 2 number new "room in the roof" to reduce the loads on the existing kingpost trussed, so that they can be retained without the need to strengthen, and to allow new first floor habitable floor space.

Existing masonry arch head damaged to be rebuilt.

Existing timber floor beam to be checked for new point load from trimmer.

New window opening to be formed will require lintel beam.



King post truss currently bears onto window lintel. Steel lintel beam to be installed for adequate support.

Trimmer beam for edge of landing will need to be offset roughly 300-400mm from the window opening, making the landing wider, to prevent a bearing clash with the window lintel.

Existing masonry arch head failing with step cracking. EDC recommends masonry arch rebuilt and strengthened using helical bars.

Floor beam required to support existing floor joists due to proposed demolished solid wall.

LEGEND :

	Indicates Existing masonry walls
	Indicates Proposed Brickwork
	Indicates New Blockwork
	Indicates New Paramount walling
	Indicates New Timber Stud Walls
	Indicates Demolished Solid Walls

NOTES FOR DISCUSSION

- Using feasibility calculations, the existing timber (320x170) floor beams were not code compliant under the proposed floor loading. EDC recommends to carry out on site load testing of the existing timbers. Strengthening via steels bolted to side of timber beams may be required.
- EDC recommends new floor beams and trimmers to be steels with timber cladding to match the current aesthetic. Using an equivalent solid timber would be cost prohibitive.
- Existing timber floor joists (100x70) sections may be sufficient for the proposed floor loading for up to 2m spans. Joists will need to be doubled up under stud walls locations.
- Outer leaf masonry window lintel support can be achieved by installing helical bars into mortar joints of masonry.
- External masonry mortar joints significantly weathered away. Joints will require pointing with lime mortar.

PROPOSED GROUND FLOOR PLAN
 (As Proposed By Architect-Over marked with Structural Recommendations)
 (Scale 1:100)

PRELIMINARY ISSUE FOR PLANNING & CONSERVATION
 DISCUSSION NOT FOR BUILDING CONTROL OR CONSTRUCTION

General Notes
 Read in conjunction with notes on SK 01 & 02.
 See SK 02 for size of structural members.

	EDGE DESIGN CONSULTANCY STRUCTURAL ENGINEERING e-mail: edgcd@hotmail.co.uk	NEW BRAKES FARM, SWINE FLEET, DN14 8DZ CLIENT: Mr D Rimmington Architectural plans, over marked to show structural member sizes.
	Date 10/2022	Sheet size: A3

SINGLE STOREY DOUBLE STOREY

OPTION 2 (ALTERNATIVE - REMOVE MEZZANINE)

1 = New scissor truss
2 = New scissor truss
NOTE: New trusses to be max 1.25m away from king post trusses.

Existing suspect scissor truss to be replaced with 2 number new scissor roof trusses to reduce the loads on the existing kingpost trussed, so that they can be retained without the need to strengthen.

Existing masonry arch head damaged to be partial rebuilt / reposition 3No. bricks.

Existing internal brick wall, shown removed, but could new layout keep the same amount of wall as for opening into kitchen and living at the rear wall and one brick at the front?

New window opening to be formed will require lintel beam.

Existing timber floor beam to be strengthened for new partition wall above and fly gallery.

OPTION 2 (ALTERNATIVE)
Retain parts of the existing internal walls to minimize intervention.

New window opening to be formed will require lintel beam.

Client can choose to keep solid wall and create wider opening with min 600mm return on both sides, thus not requiring floor beam. This would slightly reduce floor space in kitchen as the proposed stud wall would be replaced by the existing solid wall. A beam will be required to support the masonry above the opening as shown.

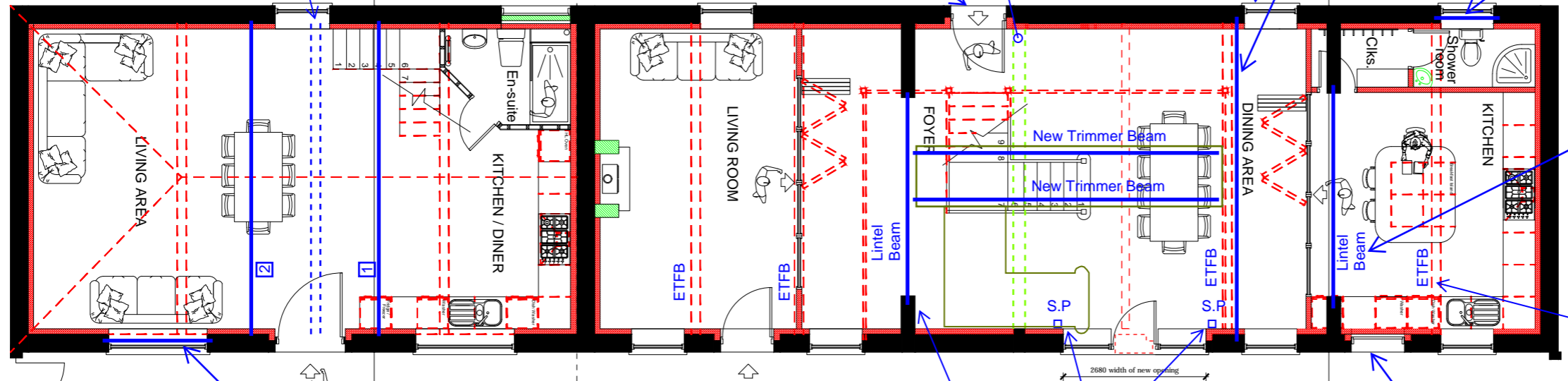
ETFB = Existing timber floor beam at 1st floor level

King post truss currently bears onto window lintel. Steel lintel beam to be installed for adequate support.

Existing solid wall to be kept to reduce the number of new beams required. Edge of landing to be supported by solid wall at ground floor level. This will also allow a larger living room space but reduce the open foyer area. Opening in solid wall to be mirrored with solid wall opening into kitchen with a lintel beam.

S.P. = Steel post / columns to be face fixed to inside face of masonry walls to restrain the existing masonry walls either side of new wider, two storey high opening.

Existing masonry arch head failing with step cracking. EDC recommends masonry arch rebuilt and strengthened using helical bars above the arch.



LEGEND :

	Indicates Existing masonry walls
	Indicates Proposed Brickwork
	Indicates New Blockwork
	Indicates New Paramount walling
	Indicates New Timber Stud Walls
	Indicates Demolished Solid Walls

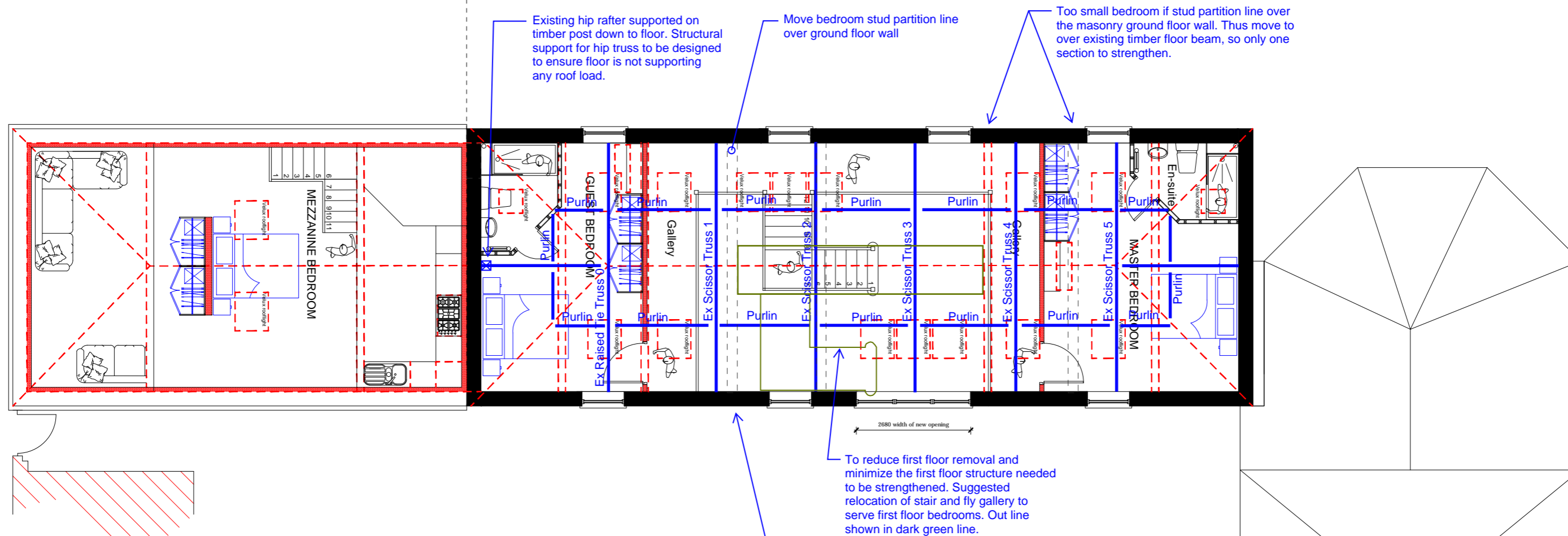
PROPOSED GROUND FLOOR PLAN
(Over marked with Alternative Layout's Structural Recommendations)
(Scale 1:100)

PRELIMINARY ISSUE FOR PLANNING & CONSERVATION
DISCUSSION NOT FOR BUILDING CONTROL OR CONSTRUCTION

General Notes
Read in conjunction with notes on SK 01 & 02.
See SK 02 for size of structural members.

	EDGE DESIGN CONSULTANCY STRUCTURAL ENGINEERING <small>e-mail: edgedc@hotmail.co.uk</small>	NEW BRAKES FARM, SWINE FLEET, DN14 8DZ CLIENT: Mr D Rimmington Architectural plans, over marked to show structural member sizes.
	Date 10/2022	Sheet size: A3

SINGLE STOREY DOUBLE STOREY



First floor section front wall to be rebuilt to correct substantial lean. Rebuilt wall width to match existing masonry width at ground floor level (360mm). At first floor level to rebuild with reclaimed brick an inner leaf would seem dishonest to the original build, but leaving would be unsafe in the long term. Recommend honest with repair by adding block leaf to inner and lime plaster over to hide new concrete block used to strengthen the existing external brick leaf. Ensure scaffolding erected before any structural works takes place including removal of roof for health and safety purposes. Existing wall width though only to be circa 110mm wide.

NOTES FOR DISCUSSION

- Outer leaf masonry window lintel support can be achieved by installing galvanized mild steel L-shaped lintel beams to support external brick. Lintels can be hidden by the window frames and arched lintels can be used to match the existing shape.
- Existing scissor trusses 3, 4 and 5 found to have major joint / top chord failed on site. EDC recommends replacement scissor trusses with same general arrangement trusses to match existing. New designed connections to remove deficiencies with original trusses and section sizes to be comparative but will marginally differ to ensure code compliance with new roof loading. This will require removing the existing roof structure which will be beneficial when correcting the lean in the masonry wall. Re roofing will be required in any case due to the lack of a breather membrane and the number of missing, broken and slipped roof tiles.
- Feasibility calculations carried out found that the existing rafter sizes would be adequate to support the roof load for a max span of 1.58m. Therefore, add in ridge purlin to strengthen roof and reduce roof spread loads on the leaning first floor walls.
- Feasibility calculations shows the existing slope purlins need to be doubled to meet code requirements for proposed roof loads, i.e. add another purlin to the side of the existing. The existing large deflections / sagging of the purlins would concur with the calculated findings. A ridge purlin is required to reduce the load on the slope purlins and to reduce the horizontal thrust at the top of the masonry walls, particularly as a timber ceiling tie are not present.
- External masonry mortar joints significantly weathered away. Joints will require pointing with NHL lime mortar.

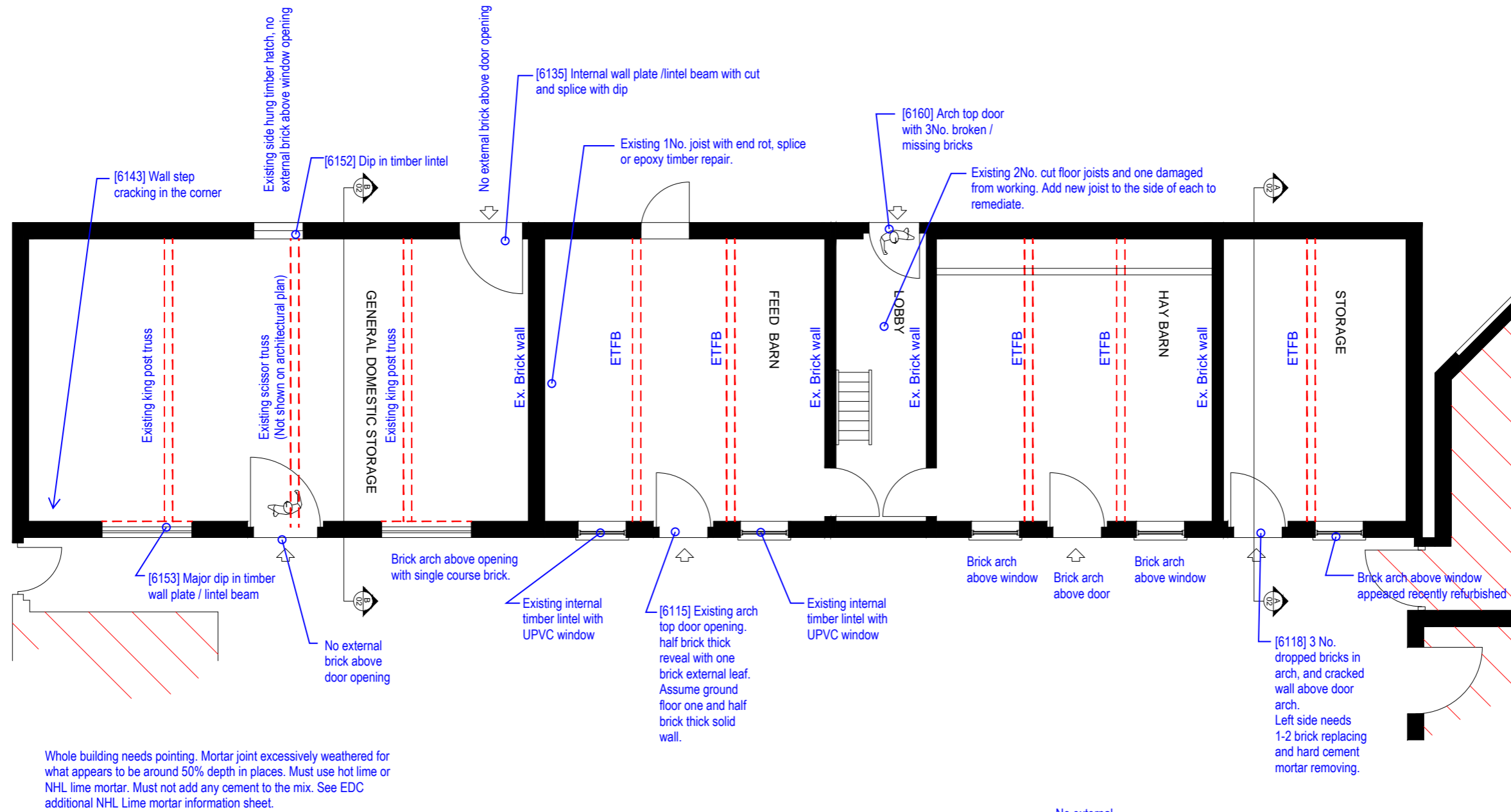
PROPOSED FIRST FLOOR PLAN
(Scale 1:100)

PRELIMINARY ISSUE FOR PLANNING & CONSERVATION
DISCUSSION NOT FOR BUILDING CONTROL OR CONSTRUCTION

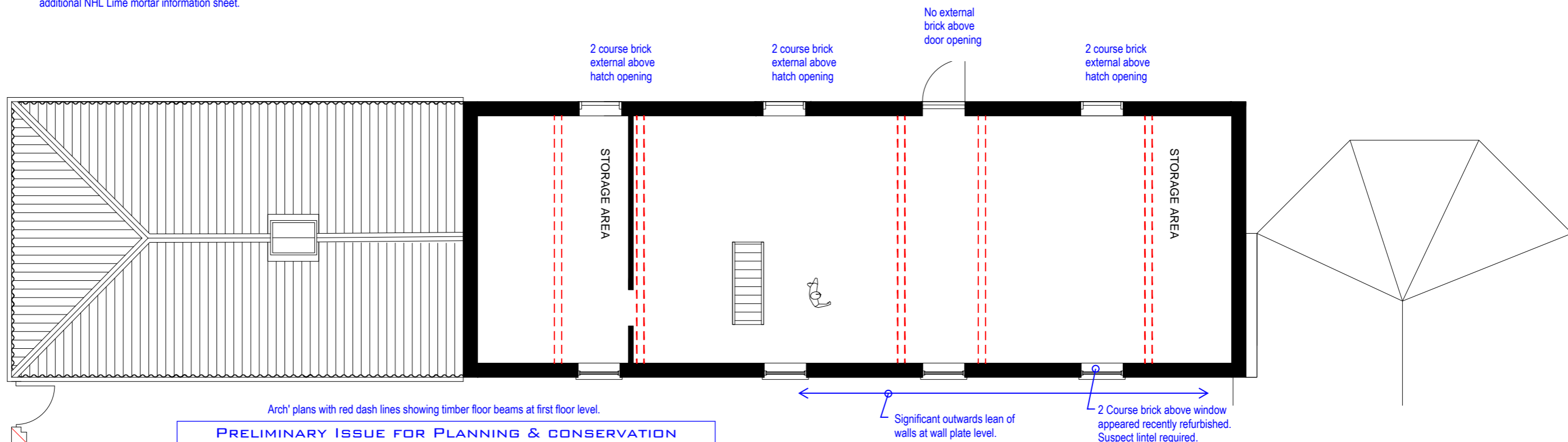
General Notes
Read in conjunction with notes on SK 01 & 02.
See SK 02 for size of structural members.

	EDGE DESIGN CONSULTANCY STRUCTURAL ENGINEERING		NEW BRAKES FARM, SWINE FLEET, DN14 8DZ CLIENT: Mr D Rimmington	
	e-mail: edgcd@hotmail.co.uk		Architectural plans, over marked to show structural member sizes.	
		Date 10/2022	Sheet size: A3	Drw No. 1852 / F03

EXISTING GROUND FLOOR LAYOUT PLAN



EXISTING FIRST FLOOR LAYOUT PLAN

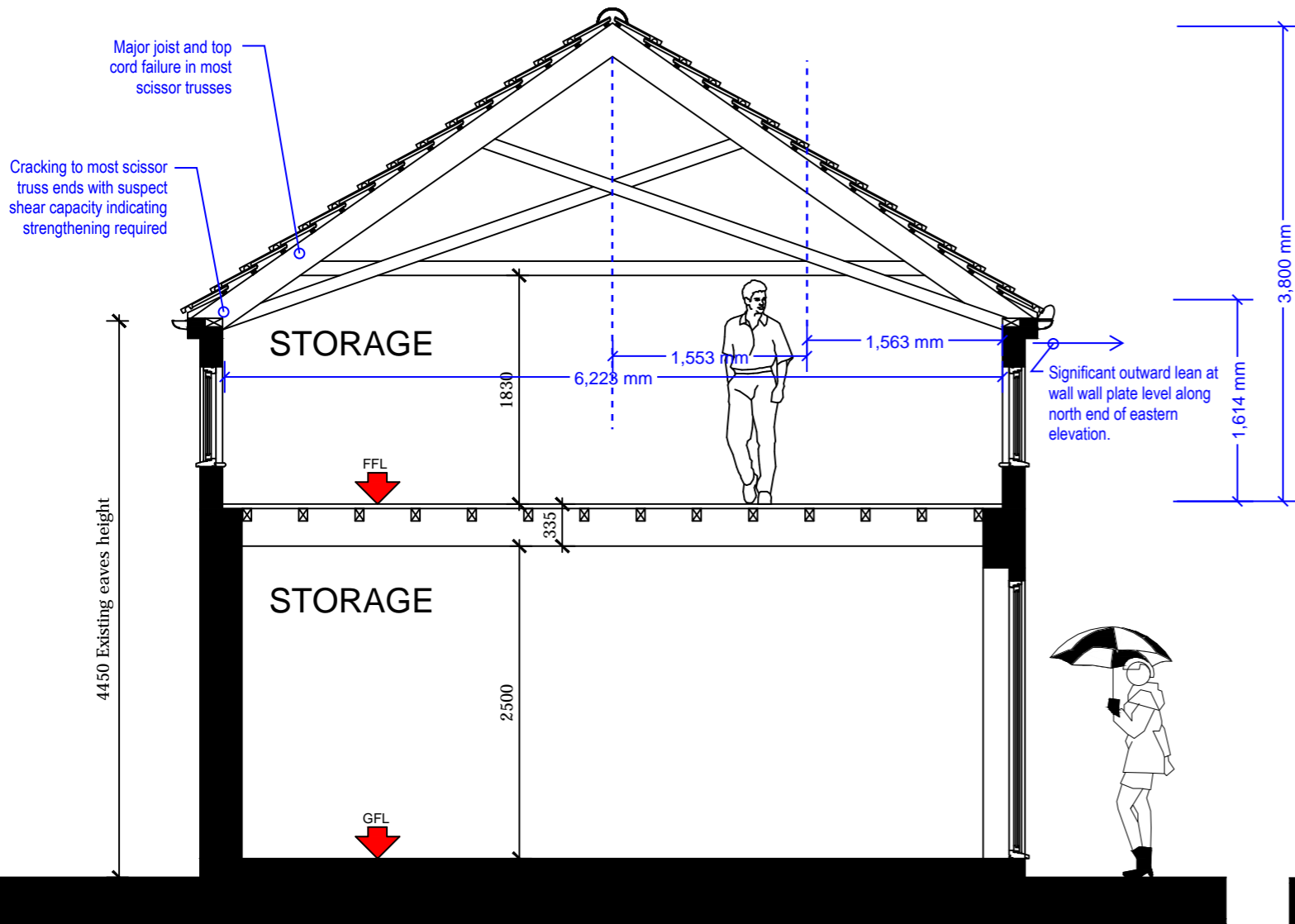


**PRELIMINARY ISSUE FOR PLANNING & CONSERVATION
DISCUSSION NOT FOR BUILDING CONTROL OR CONSTRUCTION**

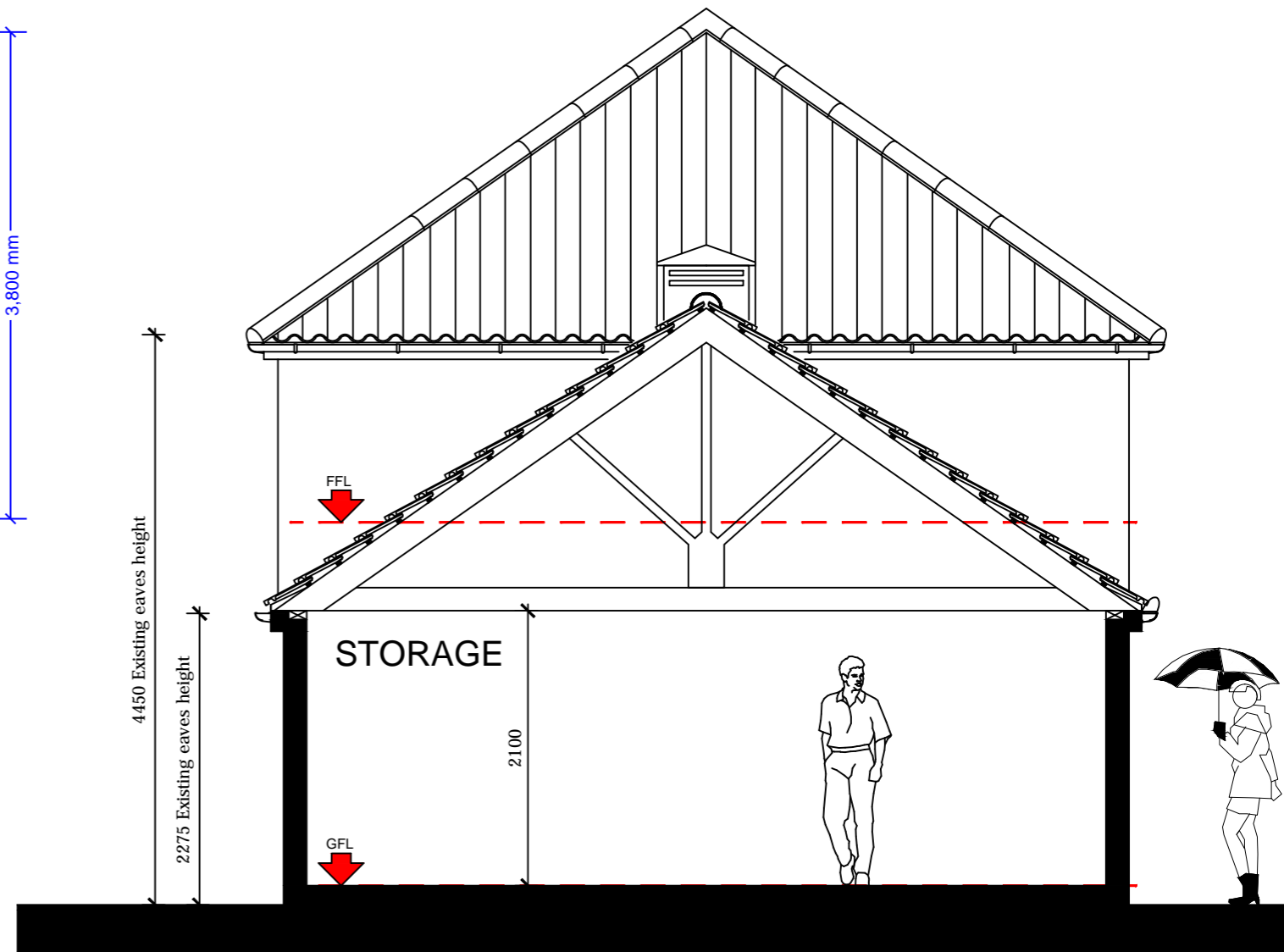
General Notes
Read in conjunction with notes on SK 01 & 02.
See SK 02 for size of structural members.

EDGE DESIGN CONSULTANCY
STRUCTURAL ENGINEERING
e-mail: edgedc@hotmail.co.uk

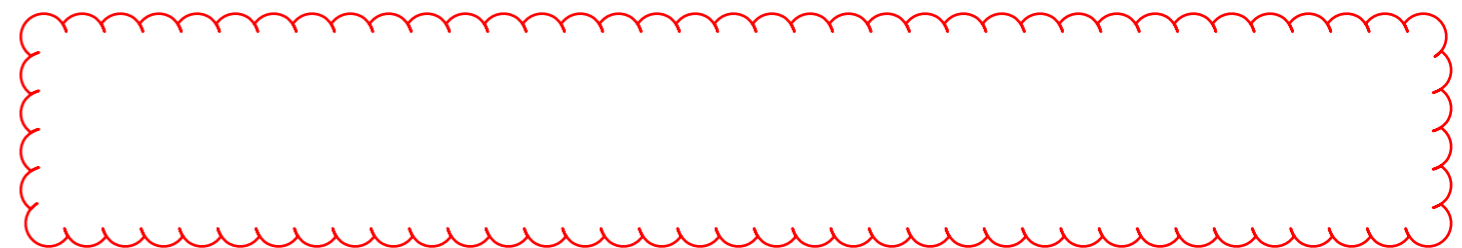
NEW BRAKES FARM, SWINE FLEET, DN14 8DZ		
CLIENT: Mr D Rimmington		
Architectural plans, over marked to show structural comments on existing structure.		
Date 10/2022	Sheet size: A3	Drw No. 1852 / F04

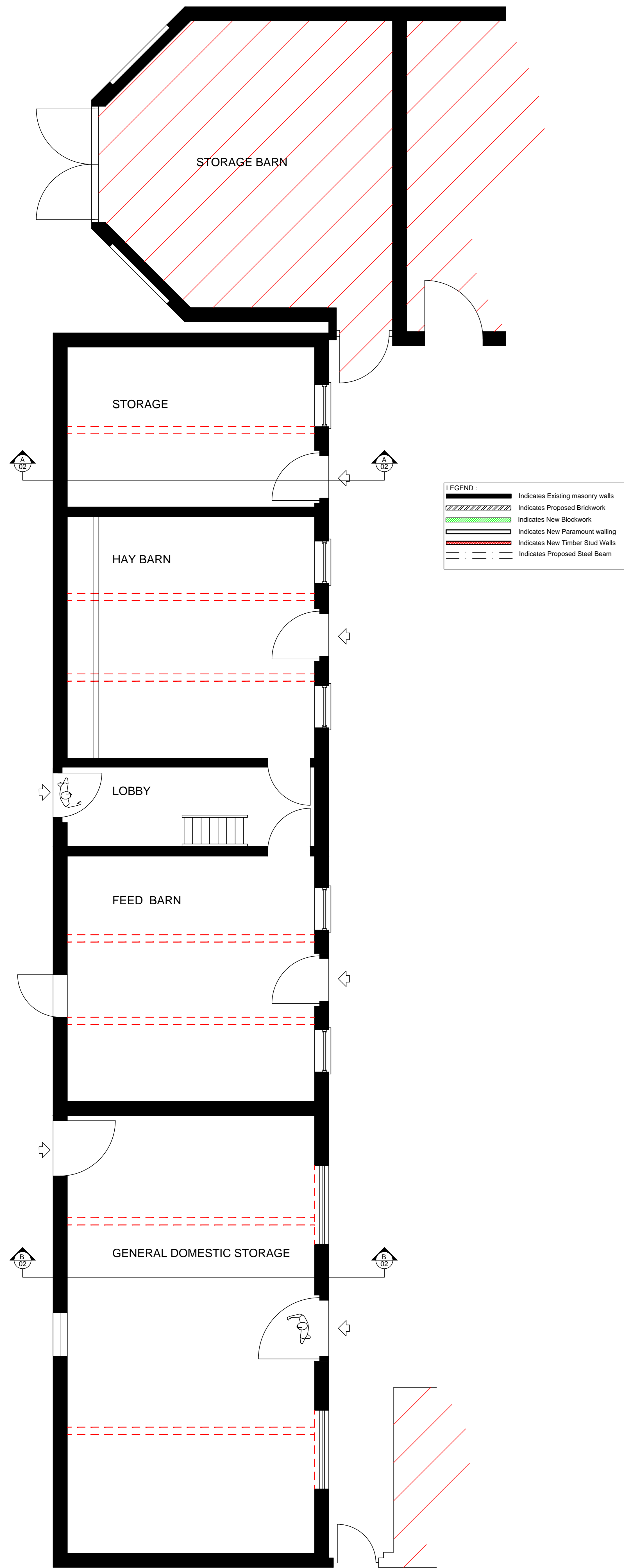


SECTION A-A

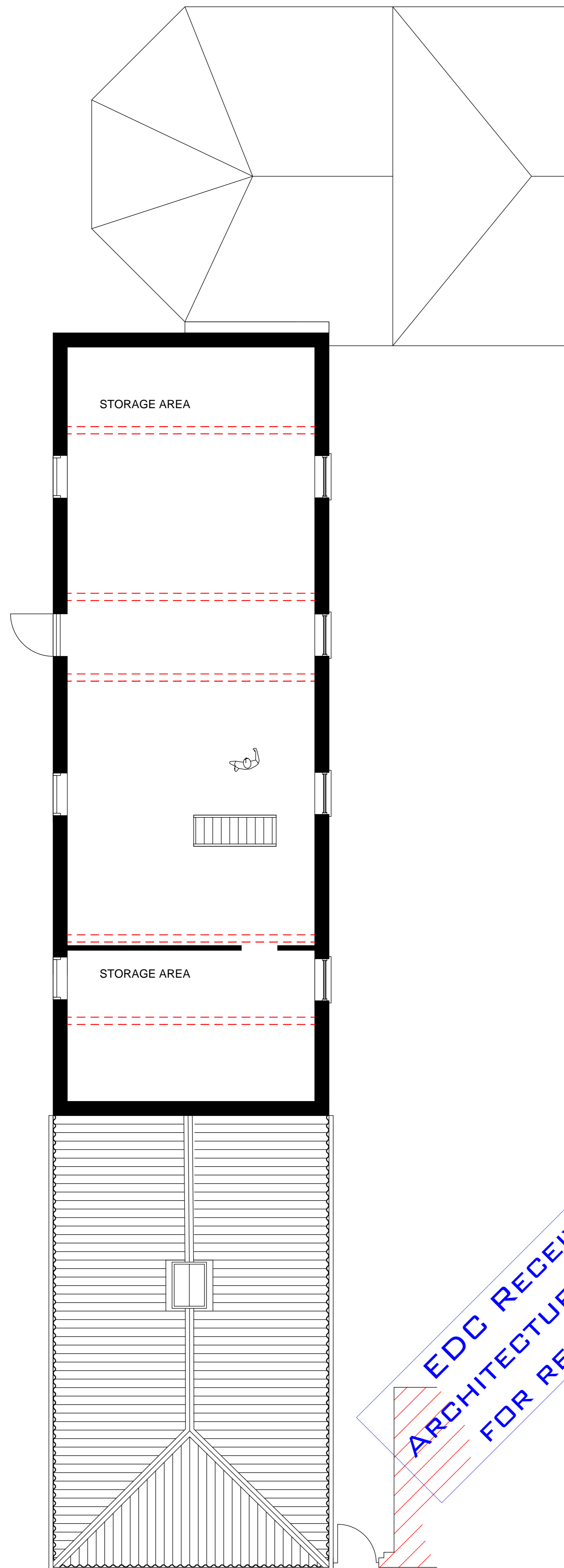
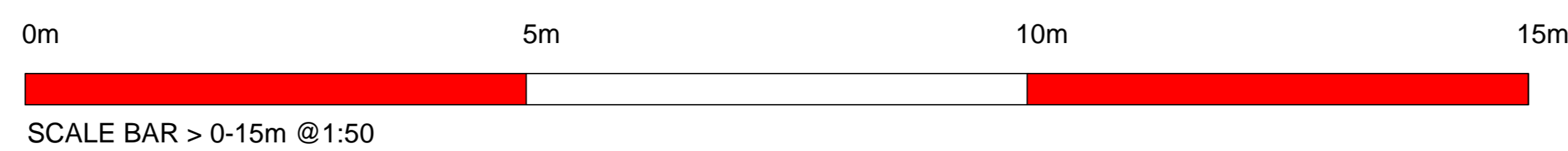


SECTION B-B

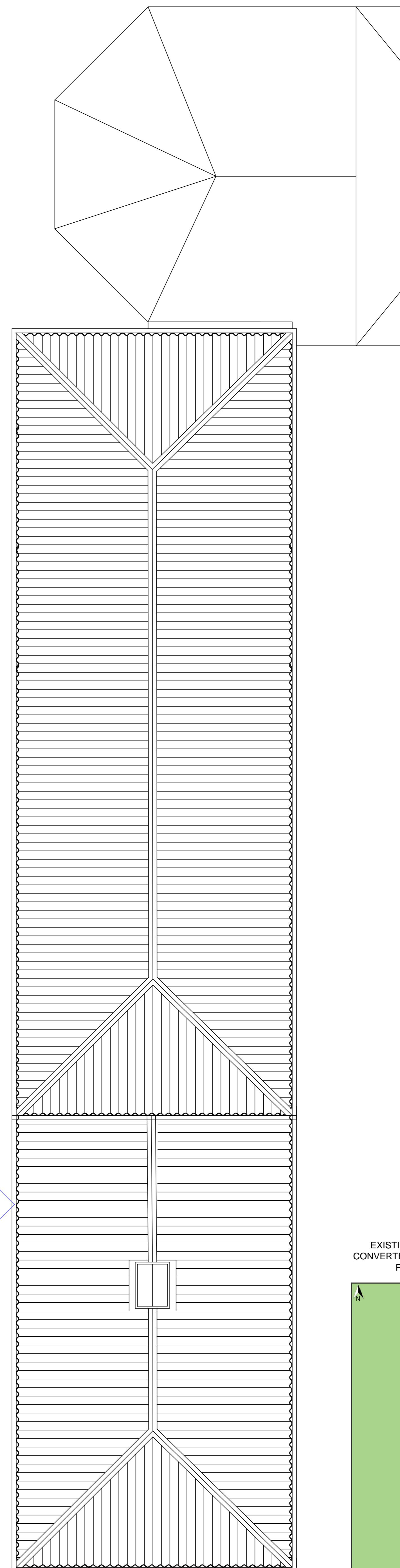




EXISTING GROUND FLOOR LAYOUT PLAN



EXISTING FIRST FLOOR LAYOUT PLAN



EXISTING ROOF PLAN

EDC RECEIVED ARCHITECTURAL PLANS FOR REFERENCE

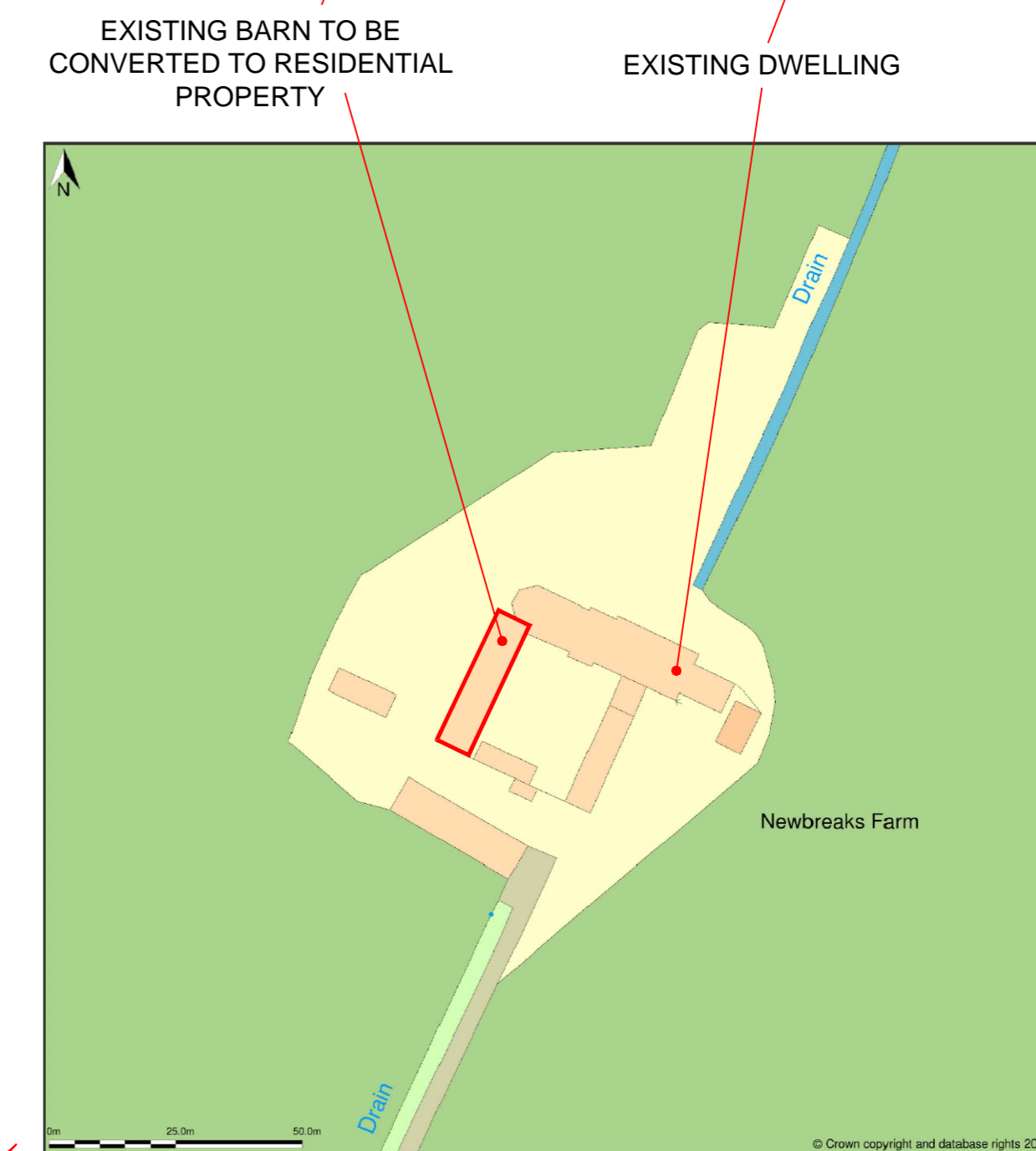
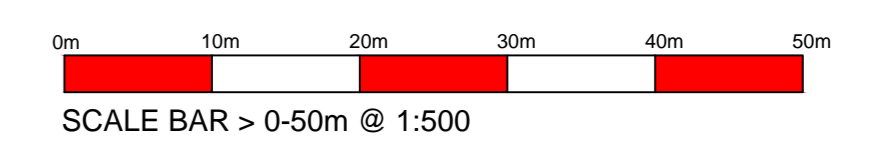
EXISTING LAND REGISTRY BOUNDARY LINE
PROPOSED APPLICATION SITE



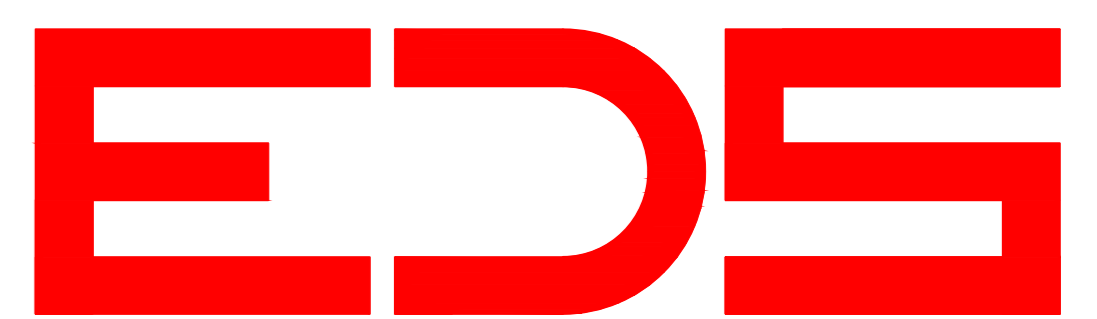
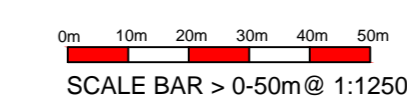
AERIAL VIEW (NTS) to show highways information.



PROPOSED BLOCK / ROOF PLAN : 1:500



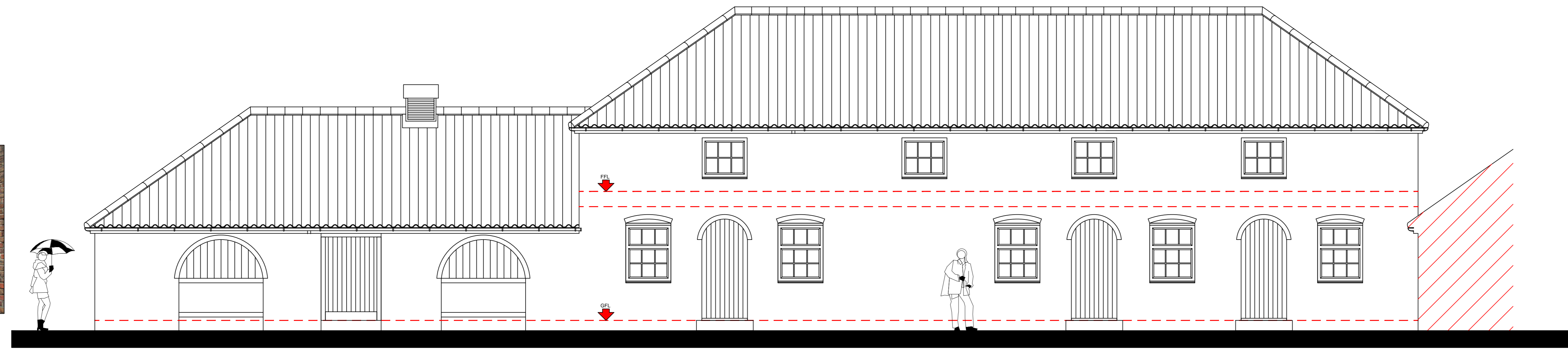
LOCATION PLAN : 1 / 1250



Client:	MR & MRS D.RIMMINGTON
Site Address :	NEW BREAKS FARM, SWINEFLEET, NR. GOOLE, DN14 8DZ.
Project:	PROPOSED BARN CONVERSION.
Drawing Title:	PLANNING STATUS : SCHEME "A" EXISTING GENERAL ARRANGEMENT OF SITE / FLOOR PLANS & ELEVATIONS.
Drawing Scale :	Date :
1:50 / 1:500 / 1:1250	APRIL 2022
Drawing Number:	Rev:
H.CON.04.22.01	-



Image 01



EXISTING EAST ELEVATION

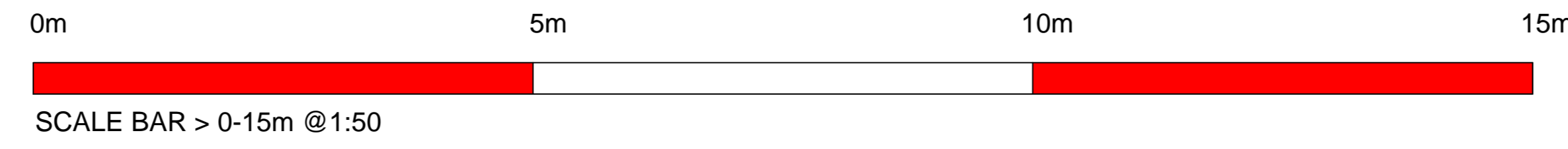
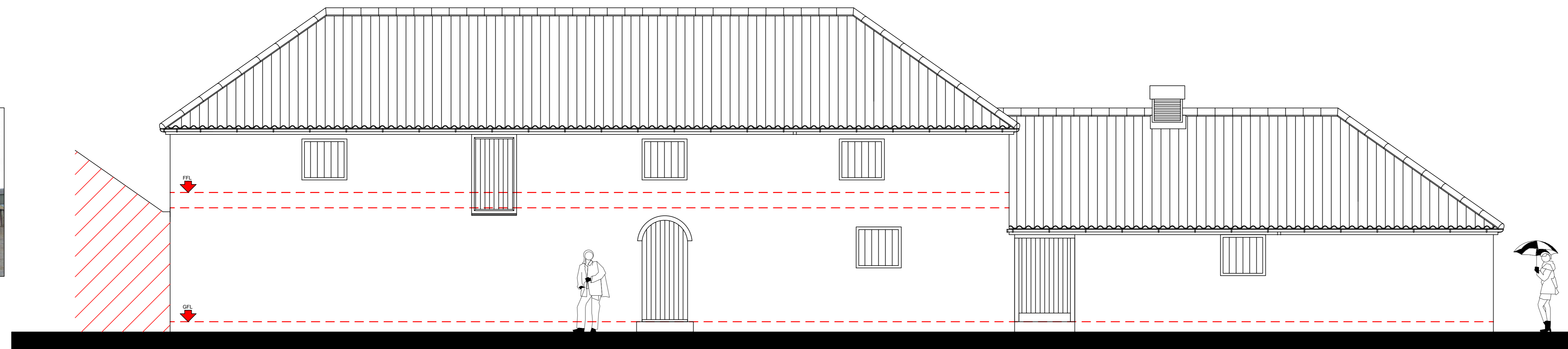


Image 02



Image 03



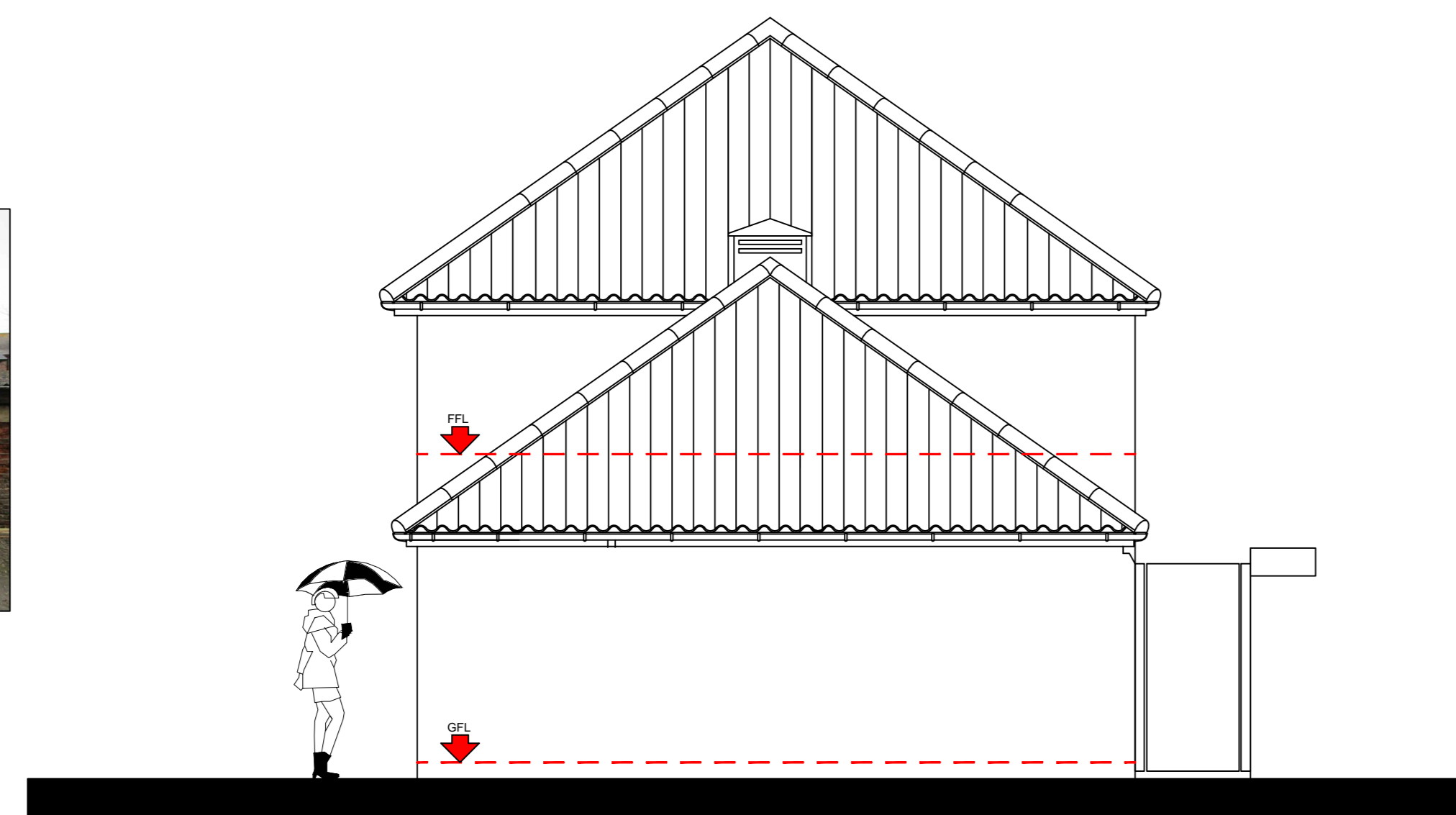
EXISTING WEST ELEVATION



Image 04



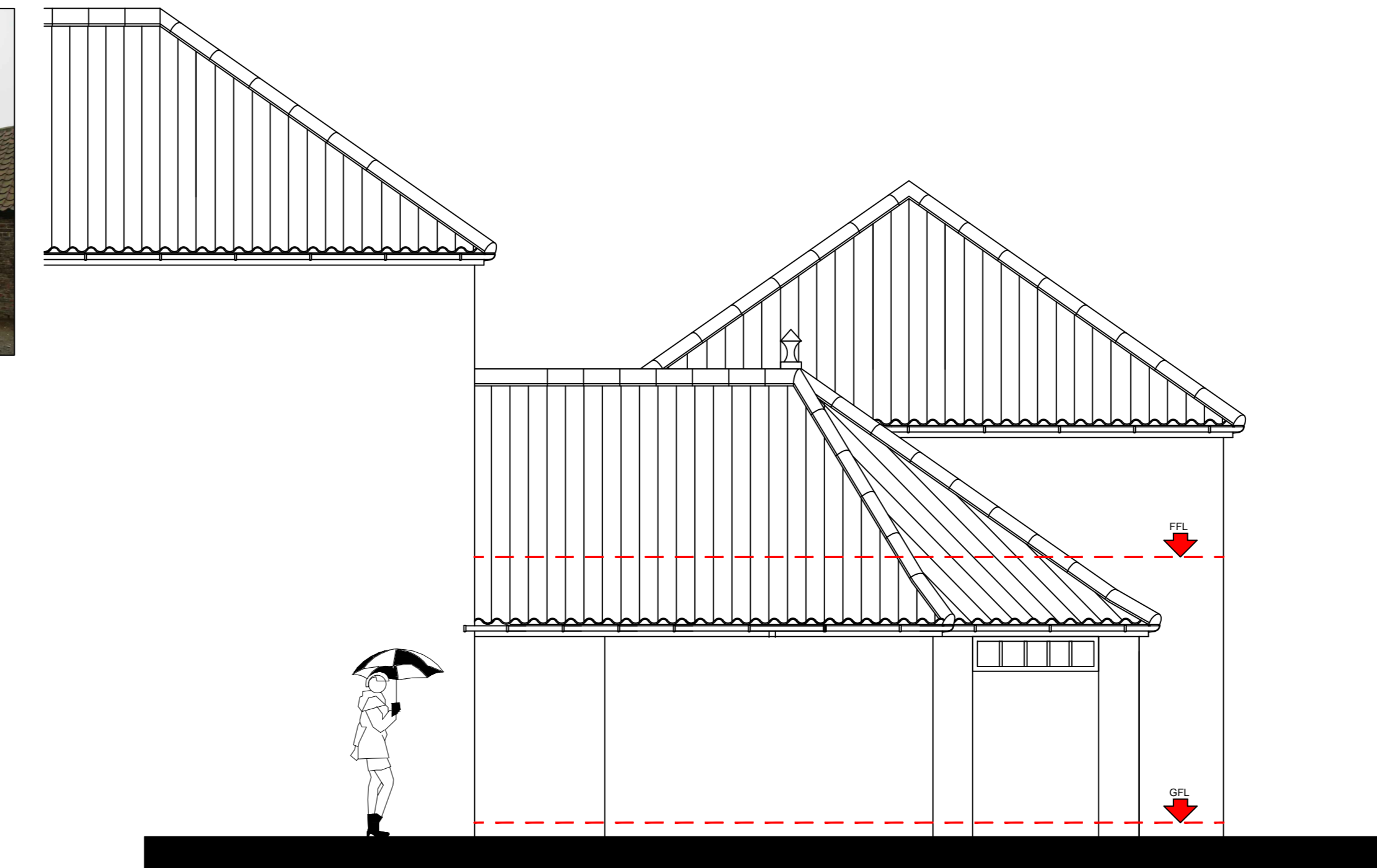
Image 05



EXISTING SOUTH ELEVATION



Image 06



EXISTING NORTH ELEVATION



Image 07

EDC RECEIVED
ARCHITECTURAL PLANS
FOR REFERENCE

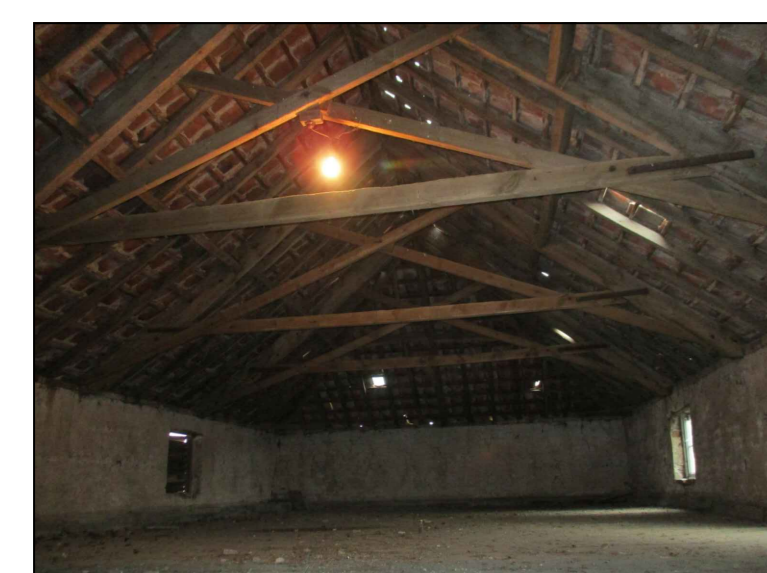
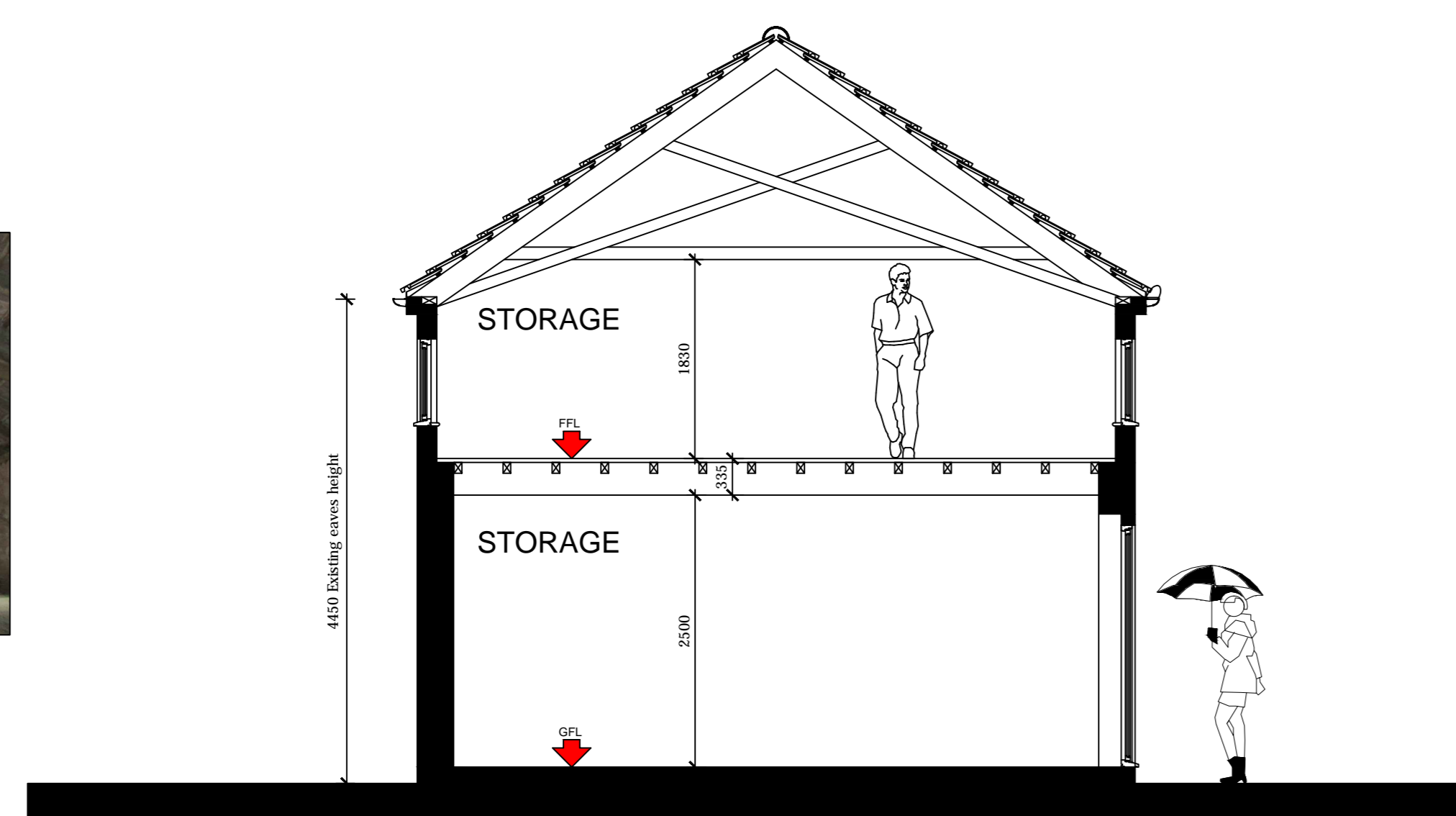


Image 08



SECTION A-A

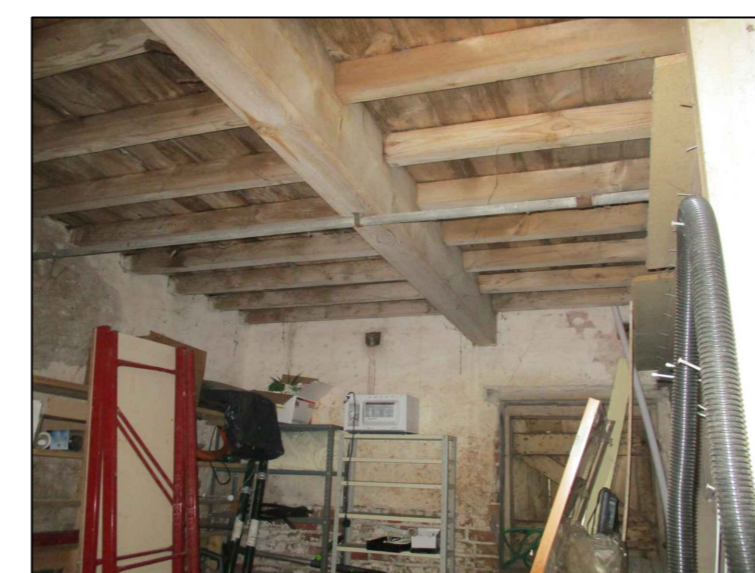


Image 09

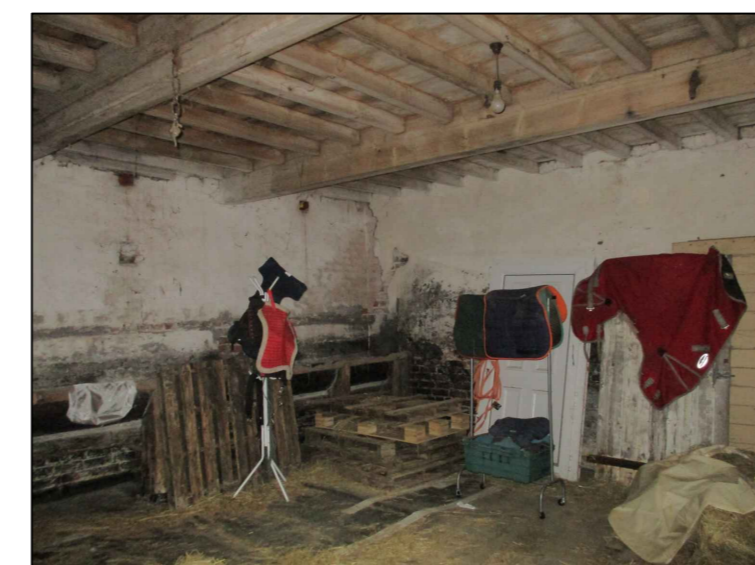
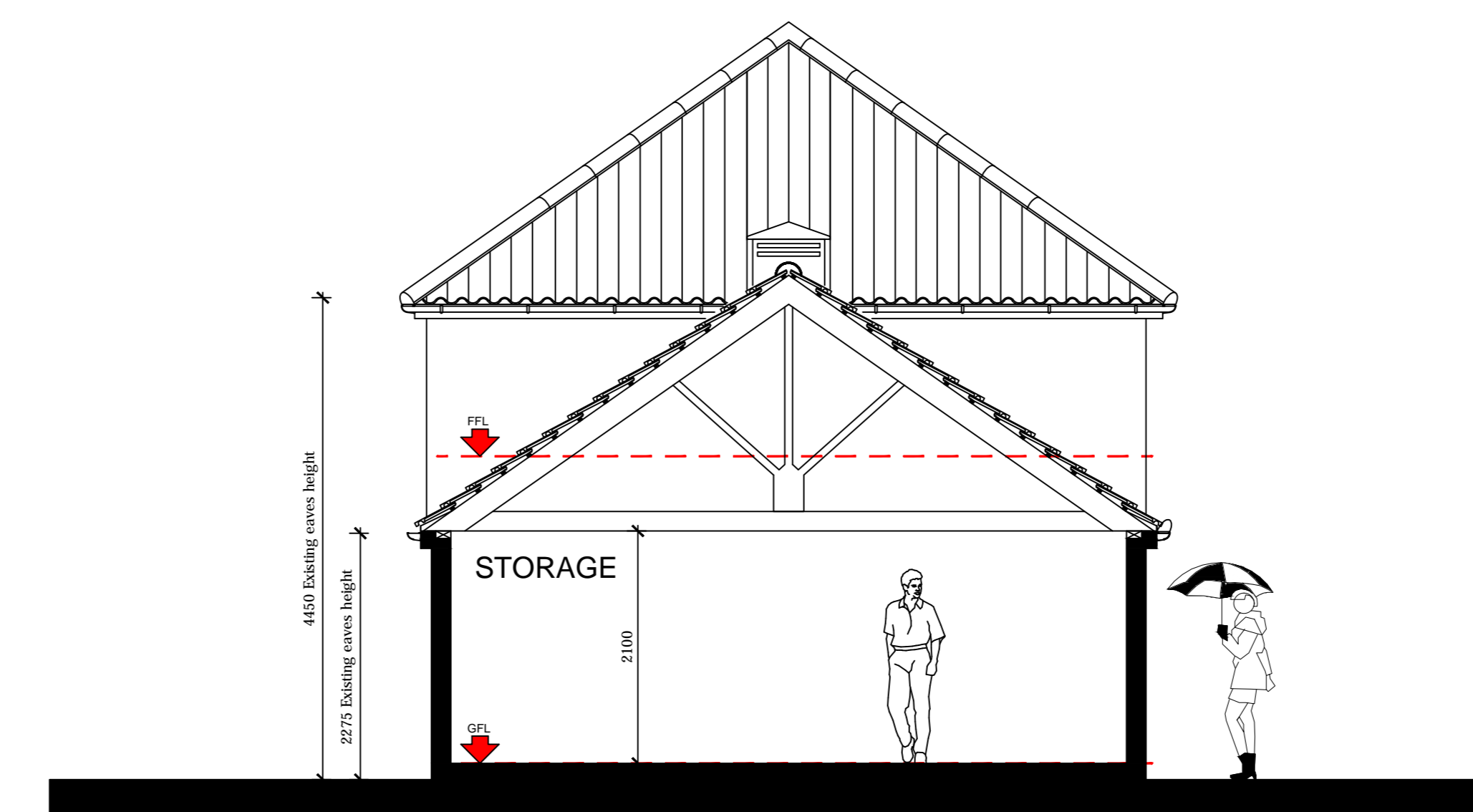


Image 10



SECTION B-B

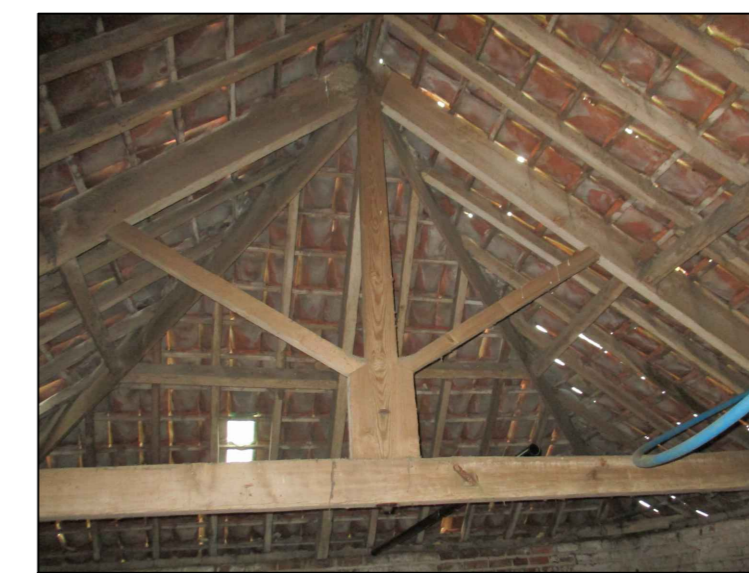
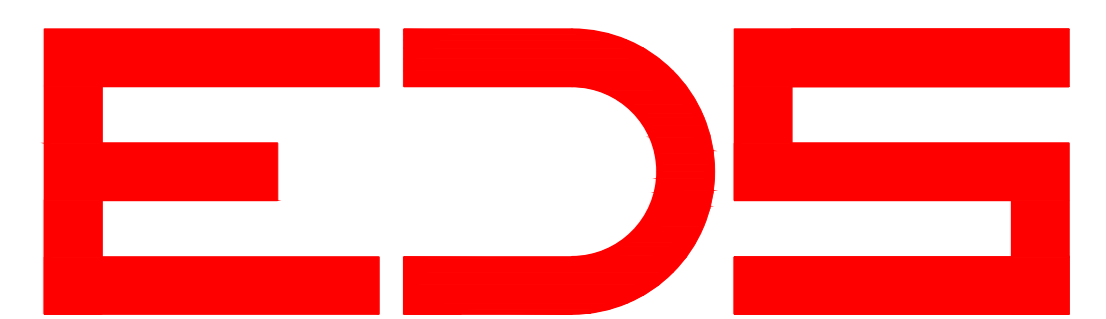


Image 11



Client:
MR & MRS D.RIMMINGTON

Site Address :
NEW BREAKS FARM,
SWINFLEET,
NR. GOOLE,
DN14 8DZ.

Project:
PROPOSED BARN CONVERSION.

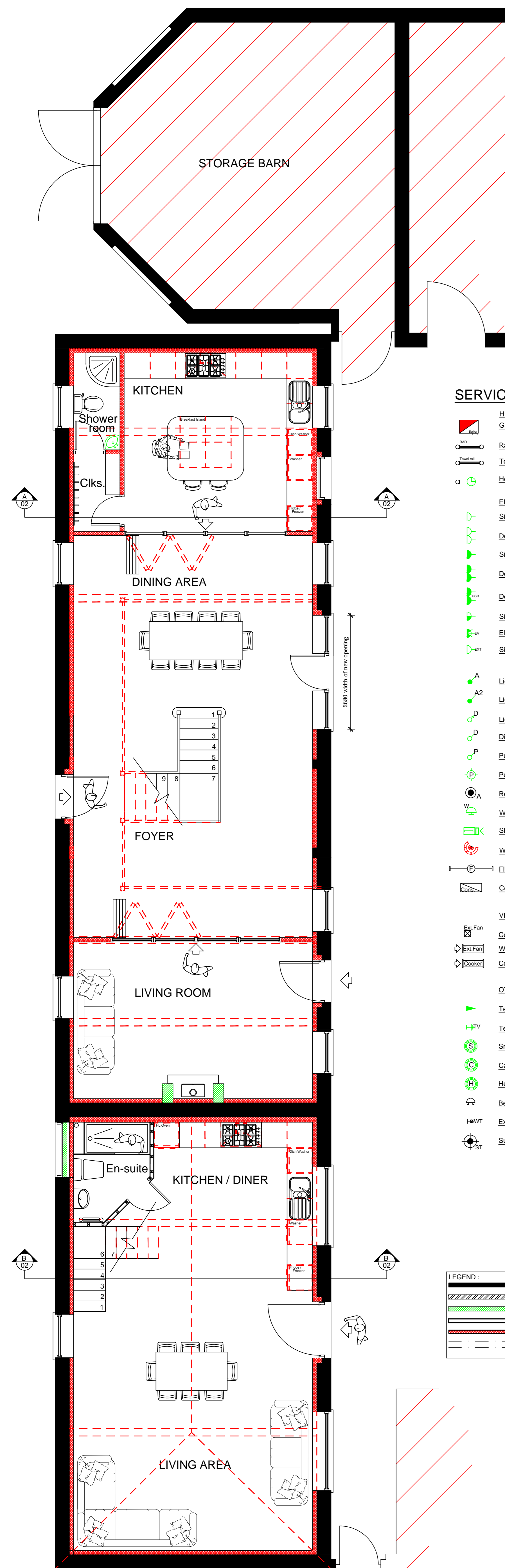
Drawing Title:
PLANNING STATUS : SCHEME "A"
EXISTING GENERAL ARRANGEMENT OF
SITE / FLOOR PLANS & ELEVATIONS.

Drawing Scale : Date :
1:50 / 1:500 / 1:1250 APRIL 2022

Drawing Number:
H.CON.04.22.02

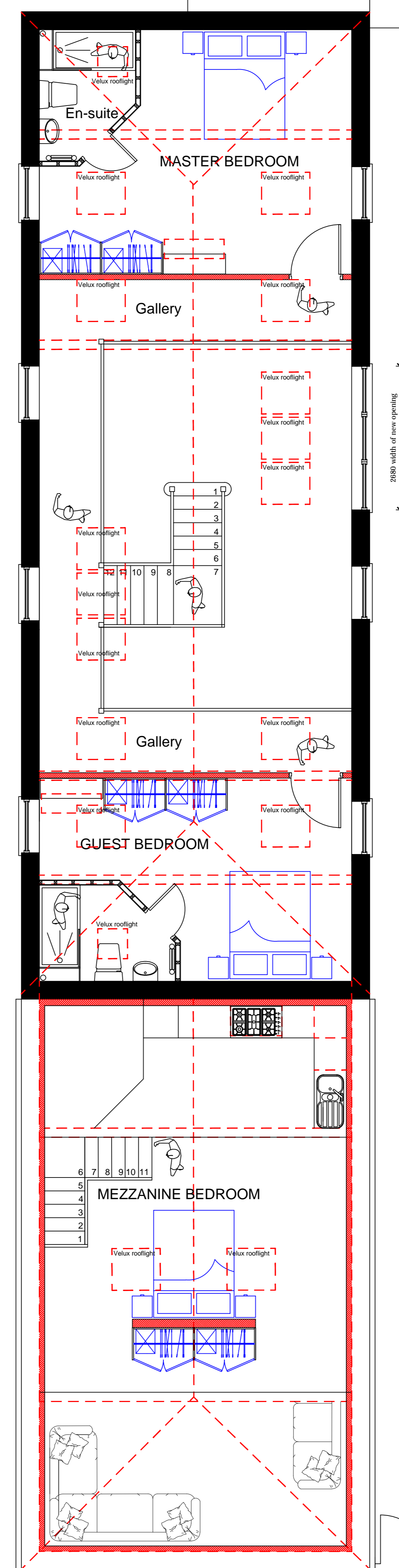
Rev:

-

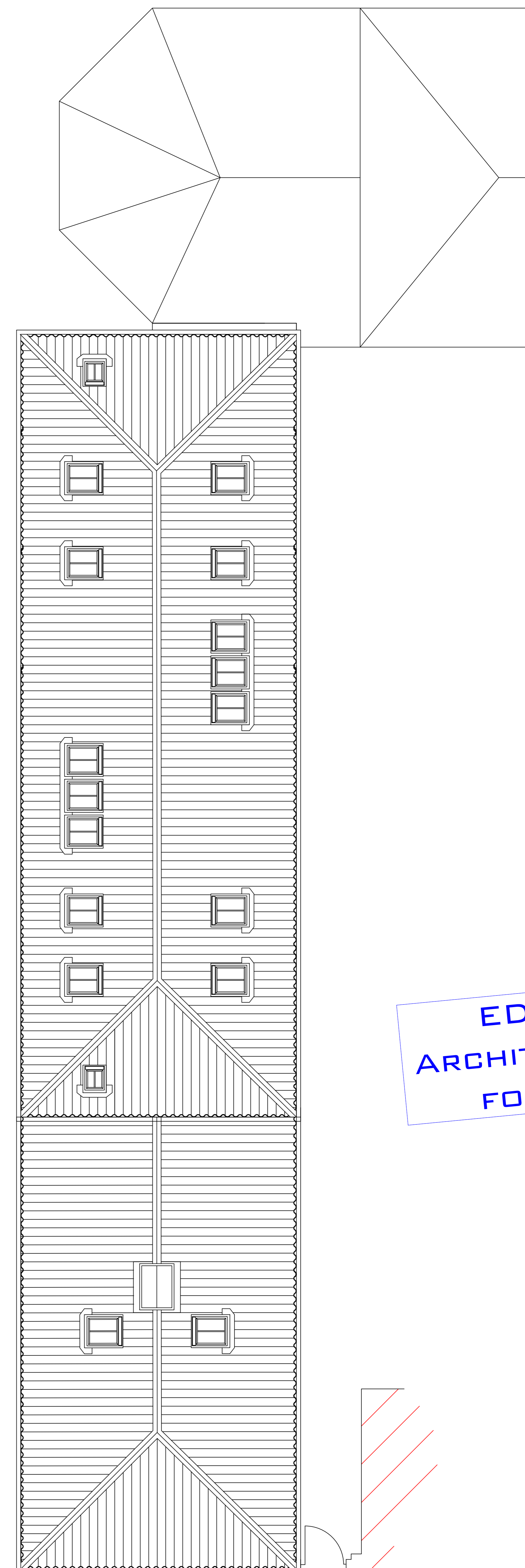


PROPOSED GROUND FLOOR LAYOUT PLAN

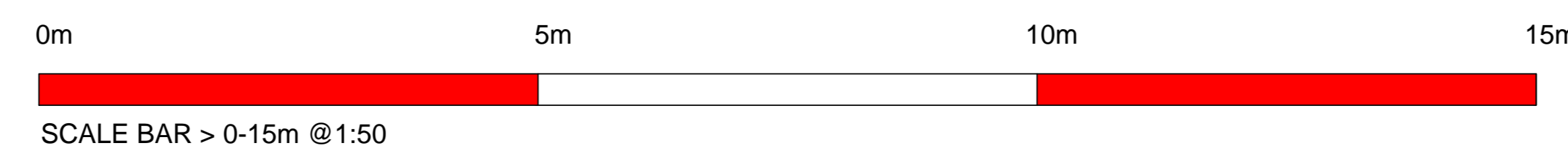
- SERVICES KEY :**
- HEATING :**
 - Gas or Oil fired boiler
 - Radiator
 - Towel Rail
 - Heating control
 - ELECTRICS :**
 - Single socket low level
 - Double socket low level
 - Single socket high level
 - Double socket high level
 - Double socket high level (with USB)
 - Single socket low level with HL switch
 - Electrical Vehicle high level charging socket
 - Single external high level socket with cover
 - Light switch (one gang)
 - Light switch (two gang)
 - Light switch pull cord (one gang)
 - Dimmer switch
 - Push button time switch
 - Pendant light fitting
 - Recessed down lighter
 - Wall mounted light fitting
 - Shaving single socket
 - Wall mounted light movement sensor
 - Fluorescent tube lighting
 - Consumer Unit
 - VENTILATION :**
 - Ceiling mounted extract fan
 - Wall mounted extract fan
 - Cooker hood extract fan
 - OTHER SERVICES :**
 - Telecom
 - Television Aerial socket
 - Smoke Detector
 - Carbon monoxide alarm
 - Heat sensor
 - Bell chime
 - External water tap
 - Sun-Tunnel
- LEGEND :**
- Indicates Existing masonry walls
 - Indicates Proposed Brickwork
 - Indicates New Blockwork
 - Indicates New Paramount walling
 - Indicates New Timber Stud Walls
 - Indicates Proposed Steel Beam



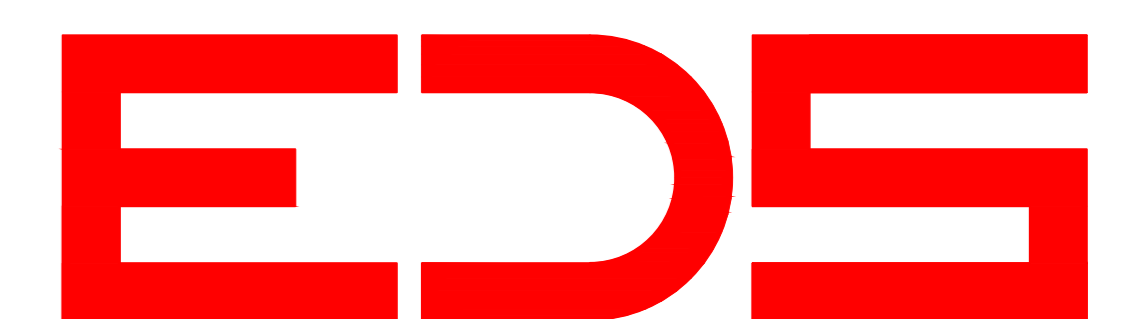
PROPOSED FIRST FLOOR LAYOUT PLAN



PROPOSED ROOF PLAN



**EDC RECEIVED
ARCHITECTURAL PLANS
FOR REFERENCE**



Client:
MR & MRS D.RIMMINGTON

Site Address :
NEW BREAKS FARM,
SWINFLEET,
NR. GOOLET,
DN14 8DZ.

Project:
PROPOSED BARN CONVERSION.

Drawing Title:
PLANNING STATUS : SCHEME "A"
PROPOSED GENERAL ARRANGEMENT OF
SITE / FLOOR PLANS & ELEVATIONS.

Drawing Scale : Date :
1:50 / 1:500 / 1:1250 APRIL 2022

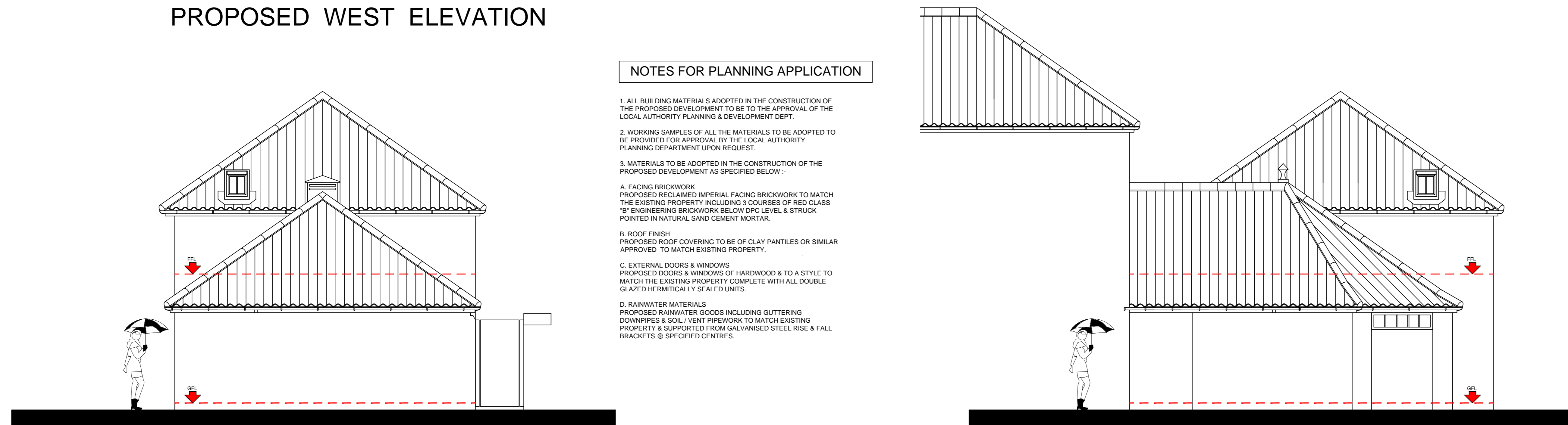
Drawing Number: Rev:
H.CON.04.22.03 -



PROPOSED EAST ELEVATION



PROPOSED WEST ELEVATION

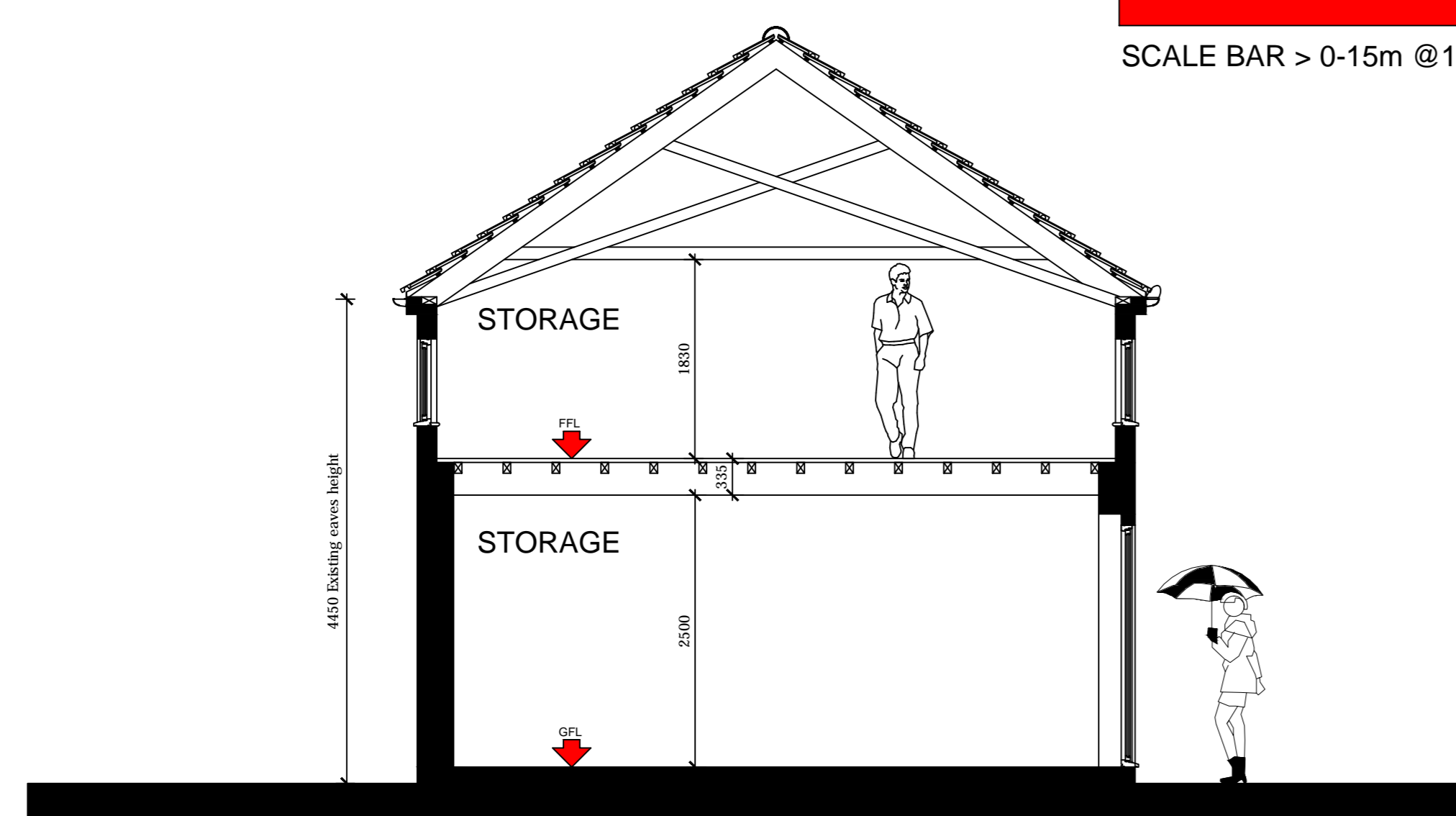
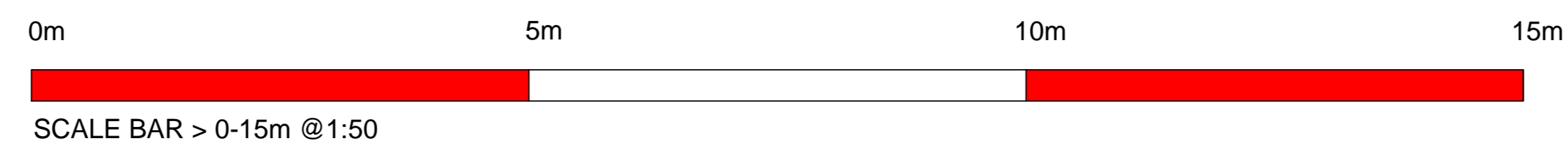


NOTES FOR PLANNING APPLICATION

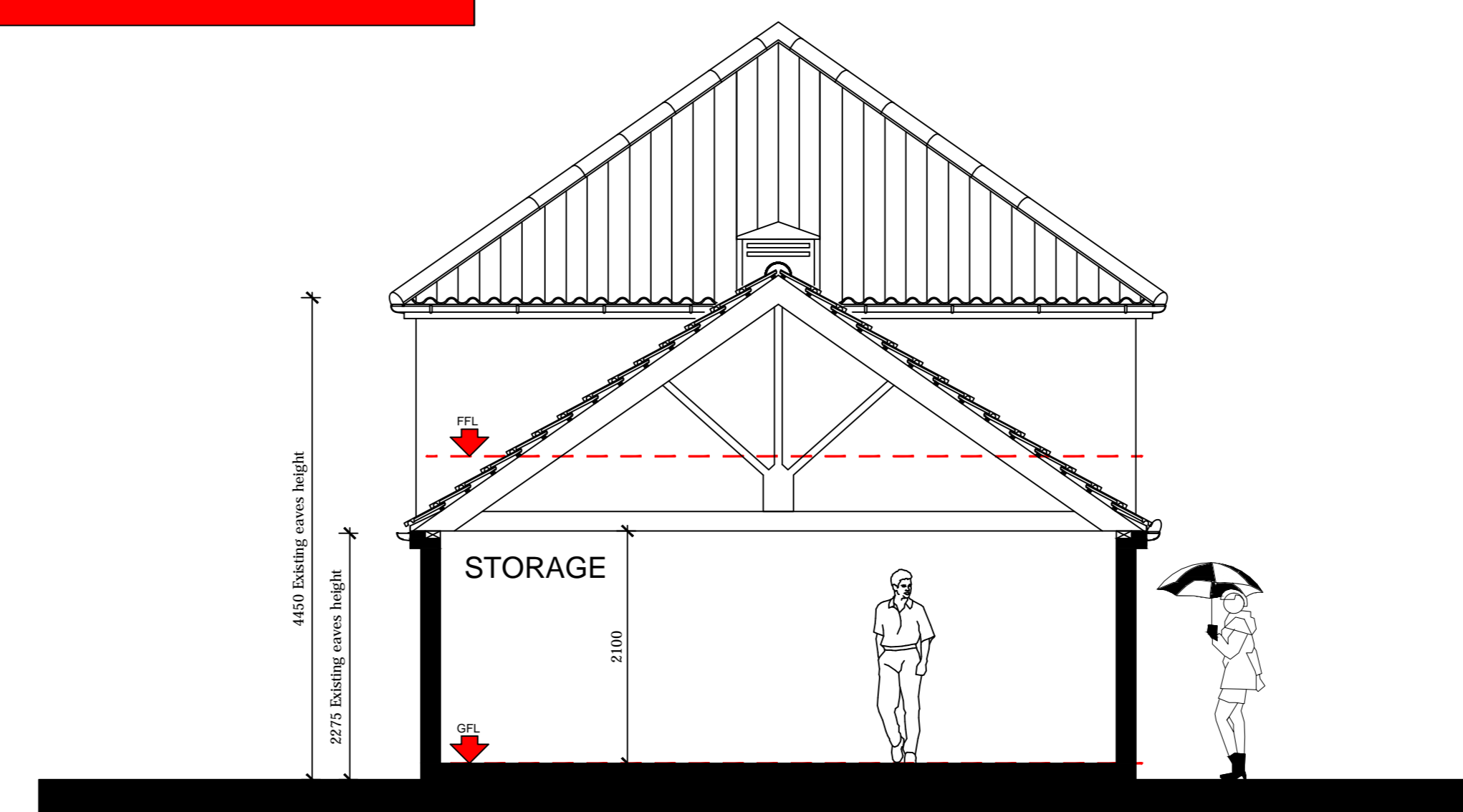
1. ALL BUILDING MATERIALS ADOPTED IN THE CONSTRUCTION OF THE PROPOSED DEVELOPMENT TO BE TO THE APPROVAL OF THE LOCAL AUTHORITY PLANNING & DEVELOPMENT DEPT.
2. WORKING SAMPLES OF ALL THE MATERIALS TO BE ADOPTED TO BE PROVIDED FOR APPROVAL BY THE LOCAL AUTHORITY PLANNING DEPARTMENT UPON REQUEST.
3. MATERIALS TO BE ADOPTED IN THE CONSTRUCTION OF THE PROPOSED DEVELOPMENT AS SPECIFIED BELOW:-
 - A. FACING BRICKWORK
PROPOSED RECLAIMED IMPERIAL FACING BRICKWORK TO MATCH THE EXISTING PROPERTY INCLUDING 3 COURSES OF RED CLASS 'B' ENGINEERING BRICKWORK BELOW DPC LEVEL & STRUCK POINTED IN NATURAL SAND CEMENT MORTAR.
 - B. ROOF FINISH
PROPOSED ROOF COVERING TO BE OF CLAY PANTILES OR SIMILAR APPROVED TO MATCH EXISTING PROPERTY.
 - C. EXTERNAL DOORS & WINDOWS
PROPOSED DOORS & WINDOWS OF HARDWOOD & TO A STYLE TO MATCH THE EXISTING PROPERTY COMPLETE WITH ALL DOUBLE GLAZED HERMETICALLY SEALED UNITS.
 - D. RAINWATER MATERIALS
PROPOSED RAINWATER GOODS INCLUDING GUTTERING DOWNPIPES & SOLI VENT PIPEWORK TO MATCH EXISTING PROPERTY & SUPPORTED FROM GALVANISED STEEL RISE & FALL BRACKETS @ SPECIFIED CENTRES.

PROPOSED SOUTH ELEVATION

PROPOSED NORTH ELEVATION

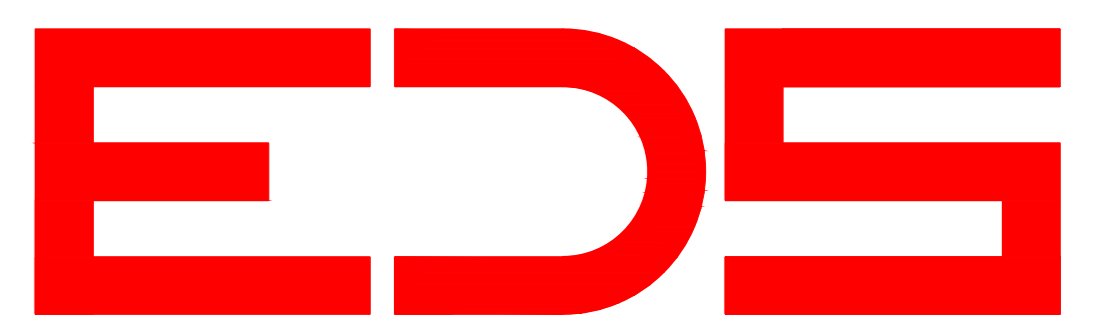


SECTION A-A



SECTION B-B

EDC RECEIVED
ARCHITECTURAL PLANS
FOR REFERENCE



Client:
MR & MRS D.RIMMINGTON

Site Address :
NEW BREAKS FARM,
SWINEFLEET,
NR. GOOLET,
DN14 8DZ.

Project:
PROPOSED BARN CONVERSION.

Drawing Title:
PLANNING STATUS : SCHEME "A"
PROPOSED GENERAL ARRANGEMENT OF
EXTERNAL ELEVATIONS.

Drawing Scale : 1:50
Date : APRIL 2022

Drawing Number:
H.CON.04.22.04

Rev:

-