New and altered steel stanchions and roof rafters and cross bracing sizes are indicative and require Portal Frame Design by Specialist Consultant.

Trimming Out Steelworks through First Floor Structure to suit Clients Disabled Platform Lift equipment, 1250mm wide x 1560mm deep including motor gear at rear end of the lift

1200mm wide steel fabricated staircase with handrails at 900mm high above stair pitch line and achieving min 1000mm wide between handrails on each side of the staircase.
16 no. risers at 170mm each x 250mm long goings.
Total Stair Rise = 2720mm

PROPOSED EXTENSIONS AND ALTERATIONS TO BRONINGTON VILLAGE SHOP PREMISES AT SCHOOL LANE, BRONINGTON, NR. WHITCHURCH, WREXHAM, SY13 3HN FOR MESSRS R. MILLERCHIP AND P. HUXLEY.

DRAWING NO. 325 / 002 AUGUST 2024
SCALE OF DRAWING :- 1 : 50 at A3

FIRST FLOOR GENERAL BUILDING, STEELWORKS ARRANGEMENTS PLAN

ORCHARD STRUCTURAL DESIGN LTD
EMAIL :- orchard.structures@gmail.com
WEB :- orchardstructures.com
TELE :- 07970-308358

Kingspan QuadcoreKS1000 RW composite wall panels with 73mm core (104mm thk overall) to achieve a U value of 0.25 W/m2k OR Equivalent. to comply with Welsh Govt Building Regulations - Approved Document L2.

Albion 14620 x 4.62 kg/m OR Equivalent Single Span Butt side rail system to walls, fixed between columns complete with inset cleats as per BS EN 1993-1-3 : 2006.

Gridline 1 External Wall Construction in close proximity to neighbouring boundary to be constructed to provide 60 minutes Fire Resistance, full height, as per Appendix Table A2 of the Welsh Govt Building Regulations Approved Document B, Vol 2

Existing dual pitched steel beam rafters to Gridlines A and G to be removed and the stanchions increased in height to suit 4700mm eaves height above existing floor slab level with new sections welded in.

Existing 152 x 89 steel stanchions and dual pitched rafters at Gridlines C and D to be cut out + removed. Use the existing steel sections to form the cut-down version, forming a steel frame structure for the Entrance Porch Extension to the premises

A B C D G

4590 4590 4450

13719 OVERALL LENGTH OVER STEELWORK

Existing 152 x 89 steel corner stanchion remains and extended in height up to 4700mm eaves height above existing floor slab

Existing 152 x 89 steel corner stanchion remains and extended in height up to 4700mm eaves height above existing floor slab

External Wall Face of New Panels

1 2 3 4 5 6 7 8

1324 1800 1800 1324 1400 1800 1800 1400

6400 OVERALL LENGTH OF STEELWORK

Steel Bay Cross Bracing

New 254 x 146 x 37 UB Stanchion to replace existing 152 x 89 column

100mm thk metal or timber stud framed and insulated separating partition wall to be constructed to provide 60 minutes Fire Resistance as per Welsh Govt Building Regulations Approved Document B, Volume 2

Install New Window 675mm wide x 900mm high

LANDING

LIFT

152 x 89 x 16 UB Stanchion

1100mm high Balustrade and Handrail

1500

FD60s Fire Door with Vision Panel 838mm wide

STORE ROOM

Ridge Line over

Steel Cross Bracing between Portal Rafters

First Floor Construction to be constructed to provide 60 minutes Fire Resistance, as per Appendix Table A2 of the Welsh Govt Building Regulations Approved Document B, Volume 2

16 no. risers staircase UP 170mm risers x 250mm goings

FD60s Fire Door with Vision Panel 838mm wide

STAFF ROOM

152 x 89 x 16 UB Stanchion

Install New Window 1650mm wide x 1100 high

Install New Window 1650mm wide x 1100mm high

Existing 152 x 89 steel corner stanchion remains and extended in height up to 4700mm eaves height above existing floor slab

Install New Window 1800 wide x 900 high

New 254 x 146 x 37 UB Stanchion to replace existing 152 x 89 column

Steel Bay Cross Bracing

Existing TP

Install New Window 1100mm wide x 900mm high

Dual Pitched Roof over single storey Entrance Extension

4300

1700

E F

Note :- The existing Telegraph Pole (TP) is located close to the existing building and will clash with the alignment of new eaves rainwater guttering to the Gridline 6 Elevation.

SCALE 1:50

0m 1m 2m 3m 4m 5m