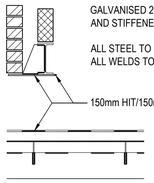
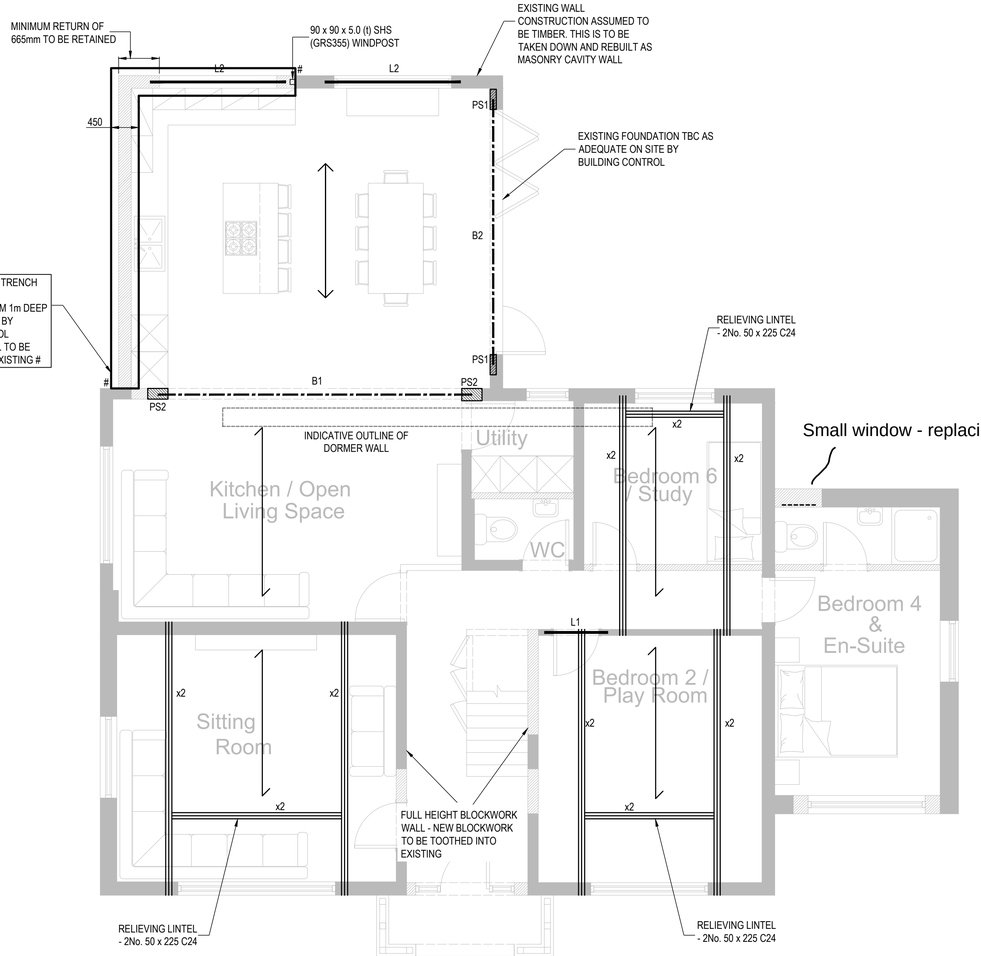
TYPICAL DETAILS



GALVANISED 203 x 102 x 23 UB, + 8mm THK MS BASE PLATE AND STIFFENERS @Max 600mm ctrs

ALL STEEL TO BE (GRS355)
ALL WELDS TO BE 6mm FILLET UNLESS NOTED OTHERWISE

150mm HIT/150mm MISS 6mm FW STAGGERED



GROUND FLOOR LAYOUT SHOWING STRUCTURE OVER

SCALE 1:50

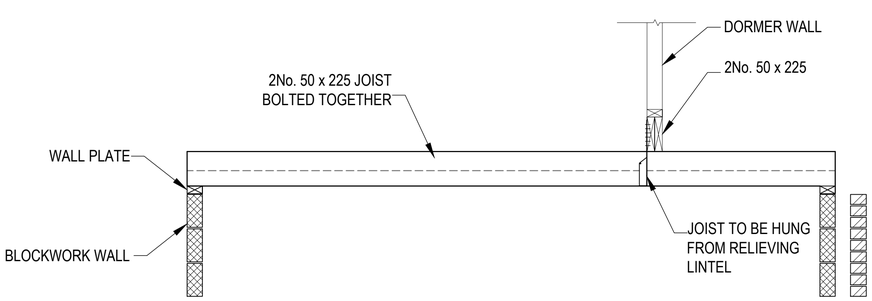
GENERAL NOTES:

(1) ALL SPANS AND SETTING OUT DIMENSIONS TBC BY CONTRACTOR
(2) ALL STEEL TO BE GRADE S355 U.N.O
(3) FINISHES AND FIRE PROTECTION REQUIREMENTS TBC BY BUILDING CONTROL
(4) ALL STRUCTURAL TIMBER TO BS 5268 Part 2 AND TO BE TREATED IN ACCORDANCE WITH NHBC STANDARDS 3.3 AND BS 8417
(5) SOLID TIMBER & I JOISTS TO HAVE STRUTTING AS FOLLOWS: *
(5)1 JOIST SPAN UNDER 2.5m = NONE
(5)2 JOIST SPAN 2.5m - 4.5m = 1 (*AT CENTRE OF SPAN*)
(5)3 JOIST SPAN OVER 4.5m = 2 (*AT EQUAL SPACING*)

(6) METAL WEB JOISTS TO HAVE STRUTTING AS FOLLOWS: *
(6)1 SOLID TIMBER 'STRONGBACK' BRACING
(6)2 JOIST SPAN 4m - 8m = 1 (*AT CENTRE OF SPAN*)
(6)3 JOIST SPAN OVER 8m = 2 (*AT EQUAL SPACING*)

(7) ALL METALWORK / HANGERS TO BE FULLY NAILED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS
(8) ALL INTERNAL / EXTERNAL FINISHES TO BUILDING DESIGNERS DETAILS/SPECIFICATIONS
(9) IF A FUTURE HOIST ROUTE IS REQUIRED, A TRAVELLING POINT LOAD OF 2.5kn AS PER THE TRA RECOMMENDATIONS SHOULD BE APPLIED TO THE CEILING CHORD AT MID SPAN OF THE ROOF TRUSSES, UNLESS SPECIFIC LOADING/ROUTE DETAILS ARE PROVIDED BY THE CLIENT/BUILDING DESIGNER

** REFER TO NHBC GUIDANCE, TRADA AND/OR SPECIALIST MANUFACTURERS/SUPPLIERS DETAILS FOR FURTHER INFORMATION*



INDICATIVE RELIEVING LINTEL DETAIL

SCALE 1:20

TIMBER SCHEDULE

EXISTING CEILING JOISTS TO BE STRENGTHENED WITH 50x 225 C24 JOISTS @ EXISTING ctrs BOLTED TOGETHER WITH M12 BOLTS @ 400mm ctrs

TYPICAL BOLTING DETAIL

ALL CUT CEILING JOISTS TO BE FIXED/HUNG IN NEW METALWORK/HANGERS FULLY NAILED TO NEW TIMBER TRIMMERS WHERE REQUIRED

TIMBER ASHLAR WALL STUD WORK TO BE 50x100 C24 CLS @ 400mm ctrs MAX, WITH 9mm CONDITIONED OSB3 SHEATHING BOARD NAILED @ 150mm ctrs ON BOARD PERIMETERS & 300mm ctrs MAX ON INTERMEDIATE STUDS

EXTERNAL PARTITIONS / DORMER CHEEKS

TIMBER FRAME STUD WORK TO BE 50x100 C16 CLS @ 600mm ctrs MAX, WITH 9mm OSB3 CONDITIONED SHEATHING BOARD NAILED @ 150mm ctrs ON BOARD PERIMETERS & 300mm ctrs MAX ON INTERMEDIATE STUDS.

NOTE: USE 18mm EXTERIOR GRADE WBP PLYWOOD (EN314-3 & EN636-2) IF FIXING LEAD WORK DIRECTLY ONTO WALL PANEL.

LINTELS

TIMBER LINTELS TO BE LEDGERLOKED TOGETHER

LEDGERLOKS (STRUCTURAL WOOD SCREWS) TO BE 8mm x 140mm @ 450mm ctrs

ALL TIMBER LINTELS TO HAVE MIN 1 No CRIPPLE STUD AND 1 KING STUD (UNLESS NOTED OTHERWISE)

+2 / +3 - No OF CRIPPLE STUDS

LATERAL RESTRAINT AT ROOF LEVEL TO BE IN ACCORDANCE WITH BUILDING REGULATIONS (REFER TO APPROVED DOC A FOR FURTHER INFORMATION/GUIDANCE)
MANUFACTURERS/SUPPLIERS DETAILS FOR FURTHER INFORMATION

STRUCTURAL SCHEDULE

BEAMS
B1 - 203 x 203 x 71 UC (GRS355)
B2 - GALVANISED 203 x 102 x 23 UB (GRS355), + 8mm THK MS BASE PLATE AND STIFFENERS @Max 600mm ctrs
RB1 - 254 x 102 x 28 UB OR 203 x 203 x 46 UC (GRS355)

LINTELS
L1 - CATNIC LINTEL REFERENCE BHD100
L2 - CATNIC LINTEL REFERENCE CG90/100

DENOTES SPAN OF NEW 50 x 225 C24 FLOOR JOISTS BOLTED TO EXISTING CEILING JOISTS

DENOTES SPAN OF NEW 50 x 225 C24 RAFTERS @ 400 ctrs

DENOTES SPAN OF NEW 50 x 150 C24 RAFTERS BOLTED TO EXISTING

DENOTES SPAN OF NEW 50 x 175 C24 FLAT ROOF JOISTS @ 400 ctrs

ALL STEELWORK TO BE APPROPRIATELY FIRE PROTECTED

BEAMS TO HAVE MINIMUM END BEARINGS OF 150 mm

PADSTONES

PADSTONES:

PS1 - 330 x 100 x 215 DEEP ENGINEERING BRICK PADSTONE

PS2 - 330 x WIDTH TO SUIT x 215 DEEP ENGINEERING BRICK PADSTONE

ALL PADSTONES TO BE LAID IN TYPE (i) MORTAR

FOUNDATIONS

1. FOUNDATIONS HAVE BEEN DESIGNED USING A NETT ALLOWABLE GROUND BEARING PRESSURE OF 100kN/m².

3. ALL TRENCH FILL FOOTINGS TO BE 450mm WIDE AND FOUNDED A MINIMUM DEPTH OF 1.0m BELOW EXISTING GROUND LEVEL, BEARING A MINIMUM OF 200mm INTO UNDISTURBED CLAY SUBSOILS UNLESS NOTED OTHERWISE.

4. WHERE UNAVOIDABLE CONSTRUCTION JOINTS IN MASS CONCRETE SHOULD NOT BE LOCATED WITHIN 1.0m OF A RETURN/PAD/STEP IN THE FOUNDATION. CONSTRUCTION JOINTS TO BE FORMED WITH 2No 20mmØ 1200mm LONG HIGH TENSILE BARS TOP AND BOTTOM.

5. ALL FOUNDATIONS TO BE TO BUILDING CONTROL OFFICER APPROVAL AND NHBC STANDARDS CHAPTER 4.2 'BUILDING NEAR TREES' WHERE APPLICABLE.

HEALTH & SAFETY INFORMATION

IN ADDITION TO THE RISK NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DESIGN, NOTE THE FOLLOWING SIGNIFICANT RISKS AND INFORMATION

CONSTRUCTION RISKS:

DEMOLITION - THE CONTRACTOR IS RESPONSIBLE FOR AND MUST TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE STABILITY OF EXISTING STRUCTURES AND THE WORKS AT ALL TIMES DURING CONSTRUCTION.

ALL SERVICES ARE TO BE LOCATED AND PROTECTED AS NECESSARY BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF THE WORKS.

TEMPORARY WORKS - THE CONTRACTOR IS TO CARRY OUT ALL AGREED PROPPING TO/OF WALLS, FLOORS & ROOFS PRIOR TO THE REMOVAL OF ANY WALLS/PARTITIONS ETC.

TEMPORARY WORKS - NEW BEAMS TO BE TEMPORARILY PROPPED DURING INSTALLATION.

MANUAL HANDLING - CONTRACTOR TO ADOPT APPROPRIATE LIFTING MECHANISM / PROCEDURE FOR HANDLING BEAMS

WORKING AT HEIGHT - CONTRACTOR TO ADOPT ALL NECESSARY SAFETY PROCEDURES WHEN WORKING AT HEIGHT

THE DESIGN TEAM HAVE HIGHLIGHTED UNUSUAL AND SIGNIFICANT RISKS ONLY THAT MAY NOT BE OBVIOUS TO A COMPETENT CONTRACTOR. THEY ARE TO ASSIST WITH RISK REDUCTION ONLY AND ARE NOT NECESSARILY COMPREHENSIVE. IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING TO AN APPROPRIATE RISK ASSESSMENT AND METHOD ON SITE

Notes

GENERAL

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERS AND, ARCHITECTS AND SPECIALISTS DRAWINGS AND THE SPECIFICATION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORKS.

2. ALL WORKMANSHIP AND MATERIALS ARE TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT EUROCODES, CODES OF PRACTICE AND GOOD BUILDING PRACTICE.

3. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER AND THE LOCAL AUTHORITY.

4. SETTING OUT DETAILS ARE SHOWN ON THE ARCHITECTS DRAWINGS UNLESS NOTED OTHERWISE. ENGINEERS DRAWINGS INDICATE STRUCTURAL ELEMENTS ONLY.

5. DO NOT SCALE THIS DRAWING. ALL DIMENSIONS ARE IN MILLIMETRES. THE CONTRACTOR IS TO CHECK ALL DIMENSIONS ON SITE BEFORE CARRYING OUT ANY WORKS.

6. ALL EXISTING DETAILS AND DIMENSIONS INDICATED ON THIS DRAWING ARE FOR GUIDANCE ONLY AND ARE TO BE CHECKED ON SITE BY THE CONTRACTOR.

7. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE STABILITY OF EXISTING STRUCTURES AND THE WORKS AT ALL TIMES DURING CONSTRUCTION.

8. ALL SERVICES ARE TO BE LOCATED AND PROTECTED AS NECESSARY BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF THE WORKS.

9. THIS DRAWING IS FOR THE PRIVATE AND CONFIDENTIAL USE OF THE CLIENT FOR WHOM IT WAS UNDERTAKEN AND IT SHOULD NOT BE REPRODUCED IN WHOLE OR IN PART OR RELIED UPON BY THIRD PARTIES FOR ANY USE WITHOUT THE EXPRESS WRITTEN AUTHORITY OF J P CHICK AND PARTNERS LIMITED.

STEELWORK

1. ALL MATERIALS ARE TO COMPLY WITH MATERIAL (STEEL) BE EN 10025. FABRICATION & ERECTION BS EN 1090-2 : 2008 (EXECUTION CLASS 2), BS EN 1090-3 : 2008 (ALUMINUM) 'TECHNICAL REQUIREMENTS FOR THE EXECUTION OF STEEL STRUCTURES'.

2. ALL STRUCTURAL STEEL TO CONFORM TO BS EN 10025 GRADE S355 UNLESS SPECIFIED OTHERWISE HOLLOW SECTION HOT FINISHED TO BS 10210.

3. ALL NUTS AND BOLTS TO BE SHERADISED AND OF STRENGTH GRADE 8.8 UNLESS NOTED OTHERWISE.

4. THE STEELWORK CONTRACTOR IS TO FULLY ACQUAINT THEMSELVES WITH THE SITE CONDITIONS, DETAILS AND DIMENSIONS PRIOR TO THE FABRICATION OF ANY STEELWORK.

5. FABRICATION DRAWINGS FULLY ILLUSTRATING ALL ASPECTS OF THE ERECTED STEELWORK TOGETHER WITH CONNECTION CALCULATIONS ARE TO BE SUBMITTED TO THE ENGINEER FOR COMMENTS PRIOR TO ANY FABRICATION.

6. ALL STEELWORK SHALL BE BLAST CLEANED TO BS EN ISO 8501-1-2007 PREPARATION GRADE Sa2½ TO REMOVE ALL GREASE, DIRT, RUST AND MILL SCALE etc.

7. INTERNAL STEELWORK TO BE PAINTED WITH ZINC PHOSPHATE EPOXY PRIMER DRY FILM THICKNESS 80 MICRONS.

8. STEELWORK BELOW GROUND LEVEL OR WITHIN MASONRY WALL CAVITY TO BE SITE PAINTED WITH 2 COATS OF BITUMINOUS PAINT. STEELWORK BELOW GROUND TO HAVE A MINIMUM OF 100mm CONCRETE ENCASEMENT.

9. GALVANISED STEELWORK TO BE ACID PICKLED AND HOT DIPPED GALVANISED TO BS EN ISO 1461 WITH MINIMUM AVERAGE COATING 85 MICRONS.

10. THE FINISH OF ANY VISIBLE STEELWORK MUST BE AGREED WITH THE ARCHITECT AND SUBSEQUENTLY THE FABRICATOR MUST ENSURE PRIMER USED IS COMPATIBLE WITH SUBSEQUENT COATINGS.

TIMBER

(1) ALL SPANS / DIMENSIONS TBC BY CONTRACTOR
(2) ALL STRUCTURAL TIMBER/STUD WORK TO BS 5268 Part 2 AND TO BE TREATED IN ACCORDANCE WITH BS 8417
(3) CONDITIONED OSB3 SHEATHING TO BS EN 300 (USE CLASS EN 335 1 & 2)
(4) EXTERIOR GRADE WBP PLYWOOD TO EN314-3 & EN636-2
(5) ALL STUD WORK NAILING TO BE 90 x 3.1 DIA PLAIN ROUND (GALVANISED/SHERADISED OR SIMILAR)
(4) ALL NAILING TO SHEATHING TO BE 50 x 3.1 DIA ANNULAR RING SHANK (GALVANISED/SHERADISED OR SIMILAR)
(5) ALL METALWORK / HANGERS TO BE FULLY NAILED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS
(6) ALL INTERNAL / EXTERNAL FINISHES INC FIRE PROTECTION REQUIREMENTS TBC BY BUILDING DESIGNER AND BY BUILDING CONTROL
(7) IF SPANS / LAYOUT REQUIREMENTS CHANGE PLEASE ADVISE ENGINEERS IMMEDIATELY

Rev.	Date	By	Amendment	Chk	App
P2	21.10.22	LH	WINDOWS AMENDED	LRC	LRC
P1	31/01/22	LH	PRELIMINARY	LRC	GLB

Status: PRELIMINARY

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Client: MS ANNA WELHAM

Project: THE CHESTNUTS, BEDFIELD, WOODRBRIDGE

Drawing Title: GROUND FLOOR STRUCTURE

Scale	Checked	Date
AS SHOWN @ A1		

Date	Drawn By
JAN 2022	LH

Drawing Number: IG22-003-100 Rev: P2

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