

Matthew James Design Ltd

Consulting Civil Engineers & Structural Designers

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Project Ref: 23-118

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General

1. Any discrepancies in the information provided are to be reported as soon as possible.
2. Drawings and Specification are to be read in conjunction with each other, and with other consultant's information if applicable.
3. Work is not to deviate from the drawings without written consent.
4. Setting out dimensions will generally not be shown on structural drawings. Refer to Architects drawings for setting out.
5. Where dimensions have been given on the drawings these relate to structural requirements. These are to be checked on site by the builder/contractor prior to commencement of work.
6. All work to be carried out to the satisfaction of the Building Inspector.
7. Sequence of work is the responsibility of the builder/contractor.
8. Temporary works/propping is the responsibility of the builder/contractor.
9. The Client is responsible for providing information relating to services and asbestos on the site.
10. Where the project falls under the scope of the Construction Design & Management Regulations (CDM) the client is responsible for appointing a Principal Designer to ensure the project complies with these regulations.
11. Structural alterations to existing buildings are likely to cause movement. Allow for some redecoration as required.
12. Specialist items are to be designed by others i.e. staircases, balustrades etc.

Steelwork

1. All steelwork is to be in accordance with current codes of practice.
2. All steelwork to be Grade S355 unless noted otherwise on drawings.
3. All steelwork to come from a reputable supplier and to be in accordance with Execution Class 2.
4. Top flanges of beams are to be restrained by new floors. Strapping required where floors are timber.
5. Connections are to be designed for an ultimate shear of 100kN unless noted otherwise on drawings.
6. Bolted connections are to have a minimum of 4 M20 Grade 8.8 bolts with 10thk. connecting plates unless noted otherwise on drawings.
7. Welds are to be 6mm continuous fillet welds unless noted otherwise on drawings.
8. Holding down bolts to columns to be 4 No. M20 resin anchors installed as per manufacturers requirements unless noted otherwise on drawings. Baseplates to be 300x300x12 thk. UNO on drawings.
9. Bases to columns to be shimmed on steel plates to obtain required line and level, and then grouted with non-shrink grout.
10. Where steelwork is installed to support existing elements i.e. walls and floors, steelwork is to be preloaded with either hardwood timber wedges or flat jacks prior to dry packing. This is to deflect the beam for the dead load component of the supported structure.

11. All steelwork to be thoroughly cleaned prior to receiving a coat of primer, unless noted otherwise on drawings.
12. Any steelwork in cavities or exposed to external environments to be either galvanised or painted to a suitable specification to prevent corrosion.
13. Steelwork shown as concrete encased is to have a minimum of 50 cover and is to include a D49 wrapping mesh.
14. Steel beams are to bear a minimum 150mm onto padstones or the full thickness of the padstone if less, unless noted otherwise on the drawings.
15. Beams can be spliced if required for ease of installation. Contact Engineer for loadings/details. NB – additional fee may apply.
16. Fire protection to steelwork elements by others.

Timber

1. All timber to be in accordance with current codes of practice and installed as per Building Regulations.
2. All timber to be Grade C24 unless noted otherwise on drawings.
3. All stud, noggins and battens to be in accordance with Building Regulations.
4. All timber to come from a reputable supplier and to be suitable for the intended purpose.
5. Timber is to be kept dry at all times and stored in such a way as to not warp, distort or degrade the timber.
6. Timber joists are to be supported on heavy duty joist hangers unless noted otherwise on drawings.
7. Restraint straps between floors/roofs and walls to be installed in accordance with Building Regulations.
8. Timbers joists/rafters beneath walls or adjacent to roof lights to be double up unless noted otherwise on drawings and bolted together with M10 coach bolts at 500 ctrs.
9. All new floors to receive 19 thk. plywood deck fully screwed to joists. Joints between sheets to be staggered.
10. Load bearing timber walls to be from 50x100 C24 studs @ 400 ctrs, with 9.5 ply sheathing externally and 12.5 plasterboard internally, unless noted otherwise on drawings.
11. Any notching to timbers for services to be in accordance with NHBC Guidelines unless agreed otherwise in writing by the Engineer.
12. Where rotten timbers are discovered these are to be replaced like for like or to be inspected by a Timber Specialist.

Brickwork

1. All brickwork is to be in accordance with current codes of practice.
2. Wall construction is to be to Architects details.
3. Brickwork below ground/DPC to be Class A Engineering Brick in Class I mortar.
4. Internal brickwork above DPC to be a minimum of 15N/mm² crushing strength in Class III mortar UNO on drawings.
5. Wall ties are required at a maximum of 450 vert and 900 horizontal centres.

6. All new walls to be tied at edges to surrounding structure.
7. Existing brickwork to be made good using matching bricks and mortar.
8. Dry pack to be 3 parts sand to 1 part cement, with Fosroc Cebex 100 admixture (or similar approved). Water content is to be such that mix just forms a ball in the hand. Excess water will prevent adequate compaction. Dry pack to be rammed well into gap.
9. New lintels to existing walls to create standard width door openings to be 100x100 PCC unless noted otherwise on drawings. Number to suit width of wall. Installed to manufacturers requirements.
10. New lintels to other openings are to suit the span of opening required and to support the safe working load where noted on the drawings.
11. Where Chimney Breasts are being removed, the remaining wall is to be made good by removing loose brickwork and soot debris, and rebuilding the face of the wall to establish a solid wall of similar thickness to the main wall. Bricks should be second hand to match the originals and fully bonded into the existing wall.
12. Curing to be a minimum of 4 days if no further guidance is given.
13. Brickwork is not to be laid when the temperature is below 5°C unless appropriate measures have been agreed with the Engineer in advance.

Risk Assessment

Ref	Description	Risk	Resolution	Action	OK
1	Demolition of existing structural elements	Collapse of remaining structure	Temporary works required	Contractor to be made aware that temporary works design is their responsibility. Added to Specification	Y
2	Installation of long span beams	Difficulty of installation due to weight and length of elements if craneage not available	Beams to be spliced where required	Contractor to be made aware that this is a possible option. Added to Specification	Y
3	Underpinning	Collapse of excavation and building above	Underpinning works to follow standard sequence	Work by experienced Contractor only. Added to Specification	Y
4	Stability of building during works	Collapse of building due to incomplete permanent works	Sequence of works to be considered and/or temporary works required	Contractor to be made aware that temporary works design is their responsibility. Added to Specification	Y
5	Exposure to asbestos	Inhalation of asbestos fibres	Client to provide details of any asbestos	Asbestos register to be reviewed prior to any work starting. Added to Specification.	Y