

PROPOSED ELEVATIONS | 1:100

**PLAN KEY**

- Indicative concrete foundations to load bearing walls - subject to final confirmation on site due to distances to trees
- Internal loadbearing / buttressing walls
- External facing brickwork
- Non load bearing internal walls
- Insulated non load bearing internal walls
- Denotes structural support

Structural details to be in accordance with / subject to Structural Engineers & Manufacturers information

**FIRE/SMOKE DETECTION KEY**

- Denotes automatic Smoke Detector
- Denotes automatic heat detector
- Denotes carbon monoxide detector
- Denotes 30 minute fire separation
- Denotes 30 minute fire door

**FD30**  
Fire Alarm system to be provided in accordance with the recommendations of BS 5839-4:2004 to at least a Grade D Category LD3 standard. Smoke and heat alarms should be mains operated and conform to BS EN 14604:2005 or BS 5446-2:2003. Detection should have a standby power supply, such as a battery or capacitor. The detector type (e.g. ionization chamber or optical) should take into account the type of fire that might be expected and the need to avoid false alarms.

**FOUL WATER DRAINAGE KEY**

- foulwater inspection chamber/manhole with access cover - invert to be determined on site
- 110mm Ø sp / svp (Hepworth or similar) internal SVPs to be boxed in
- 38-50mm above ground plastic pipework
- 100-110mm above ground plastic pipework
- 100-110mm below ground plastic pipework
- P Trap gully discharging to drains

**SURFACE WATER DRAINAGE KEY**

- Inspection chamber for surface water drainage
- rainwater pipe to discharge into a trapped gully with grating.
- Linear level threshold drain to provide level threshold to door and retaining wall
- Rodding point

Below Ground Drainage & Main Connections to be in accordance with Drainage Engineer's design details and specification

**FLOOR AREAS**  
Building Footprint = 155m<sup>2</sup>  
Perimeter = 55m  
Ground Floor Gross Internal Area = 140.0m<sup>2</sup>

Dimensions - Internal dimensions are shown for construction purposes. Following final finishing these may vary slightly on site. External dimensions are shown to external masonry.

**GENERAL NOTES**

- SAP calculations are to be in accordance with assessors calculations and information. LDC should be informed by the assessor of any necessary changes to the drawings to conform to their spec.
- Obscure glazing to be installed to bathrooms and WC's (in the form of etched glass)
- Any structural steel elements are to be stichy in accordance with the Structural Engineers and Steelwork Fabricators details and specification.
- Entrance doors are to provide a minimum clear width of 800mm (structural openings shown as 1022.5mm). Entrance thresholds to have no upstand greater than 15mm.
- All Internal Ground Floor doors shown as 910 x 2100mm structural openings. First floor internal doors generally shown as 910 x 2100mm structural opening or as noted on the plans, although 810mm structural opening may be provided to contractor / clients approval.
- Any structural steel elements are to be stichy in accordance with the Structural Engineers and Steelwork Fabricators details and specification.
- For Interior Design details and specification see clients consultant drawings and information
- All finishes to be in accordance with the clients / occupants instructions and preferences. These are to be discussed with the contractor to ensure a satisfactory solution can be met prior to the works starting.

**APPROVED DOCUMENT PART P - ELECTRICAL SAFETY**

All electrical installations are to comply with I.E.E. Wiring regulations and require an appropriate 187671 electrical installation certificate issued, in order to satisfy Approved Document P (Electrical Safety) and prove the work has been designed, installed, inspected and tested by a person competent to do so. Electrical sockets and lighting switches to be positioned in a zone 450mm above FFL and 1200mm above FFL respectively. Final electrical details are subject to client approval prior to installation on site - Contractor is responsible for providing these layouts for approval.

Consumer units are to be mounted so that the switches are between 1350mm and 1450mm above floor level. Consideration to be given to ensure compliance with all other statutory requirements relating to consumer unit position such as British and European standards.

**APPROVED DOCUMENT Q**

Windows & Doors to be certified to PAS24 in accordance with Approved Document Q

**FIRST FLOOR JOISTS**  
Final details of the first floor joists shall be confirmed within the Manufacturers design and calculations. Joists noted as metal web (e.g. joist / eco joist). Where indicative sizes are noted these are based on Domestic loadings, with joists having 97 x 47mm top and bottom chords, and spaced at 400mm centres (we would advise joist centres are no further apart than 400mm in all cases).

As a general rule maximum spans for metal web joists based on depth are as follows: 219mm = Max. span 5170mm; 253mm = Max. span 5620mm; 304mm = Max. span 6250mm

**CRITICAL GLAZING**

Windows / Doors / Glazing are to be in accordance with the contractor / manufacturers details and final design. In accordance with BS 6262: Part 4: 1994 Code of Practice for Glazing for Buildings' All glazing between finished floor level and 800mm high and between finished floor level and 1500mm high in a door, or in a side panel within 300mm of either edge of the door to be laminated or toughened glass to BS 6206: 1981 with all panes marked accordingly by the manufacturer.

**WATER USAGE**

Water use of the dwelling should be less than 125 litres/person/day in accordance with Approved Document G. Detailed calculations cannot be provided until such time that all fittings and fixtures are known. As a general rule the plot should comply provided the maximum consumption of fittings is as below:

Shower	10 l/min
Bath	185 litre capacity
Basin Taps	6 l/min
Sink Taps	8 l/min
Dishwasher	1.25 l/place setting
Washing Machine	8.17 l/kg
WC	4/4 litre for dual flush 4.5 litre for single flush

**ACCESSIBILITY NOTES**

Entrance doors are to provide a minimum clear width of 800mm (structural openings shown as 1022.5mm). Entrance threshold to have no upstand greater than 15mm.

Ground floor WC to be Approved Document M compliant with outward opening door.

**COMMISSIONING**

The building services (including intermittent extract ventilation) systems should be commissioned so that completion of the system and their controls are left in working order and can operate efficiently for the purposes of the conservation of fuel and power. Commissioning Certificates are to be provided to the Building Inspector within 5 days of completion of the works or as otherwise agreed.

**BACKGROUND VENTILATION**

It is important to ensure background ventilation is calculated prior to the manufacture of windows and doors.

Additionally, Provide intermittent extract fan to the utility space with a rate no less than 30 l/s, and cooker hood extract at a rate no less than 30 l/s The Building Inspector may request a commissioning certificate for the installation of any new fans prior to a completion certificate being issued.

Background Ventilation will be required as described below:  
3 Bedroom single storey dwelling of approx 140m<sup>2</sup>, table 5.2a (Approved Document F) shows an equivalent background ventilator area of 65,000mm<sup>2</sup> + 28,000mm<sup>2</sup> (additional floor area) = 93,000mm<sup>2</sup> with any design air permeability.

The new dwelling will be subject to air pressure testing - the design rate of which will be detailed in the SAP Calculations (Assumed Design value 6m<sup>3</sup>/hr/m<sup>2</sup>)

It is the responsibility of the window/door manufacturer to ensure the minimum amount of background ventilation is met (e.g. using vents with an equivalent area of 5000mm<sup>2</sup> a minimum of 19 vents would be required overall in the window and door installations). Failure to meet the requirement through background vents will require the installation of further mechanical ventilation.

**EMERGENCY ESCAPE WINDOWS**

Bedroom windows are to be escape windows (as and where shown on plans). Emergency Egress windows and doors - window should have an un-obstructed openable area that is at least 0.33m<sup>2</sup> and at least 450mm high and 450mm wide (the route through the window may be at an angle rather than straight through). The bottom of the openable area should be not more than 1100mm above the floor. Windows should be designed such that they will remain in the open position without needing to be held by a person making their escape. Locks (with or without removable keys) and stays may be fitted to egress windows, subject to the stay being fitted with a release catch, which may be child resistant.

**WINDOW SCHEDULE**

W01 & W07	1247.5mm (W) x 2100mm (H)
W02	1697.5mm (W) x 2100mm (H)
W03 Square bay	2485mm (W) x 2100mm (H) x 574 (D)
W04	685mm (W) x 1275mm (H)
W05	1247.5mm (W) x 1275mm (H)
W06	1247.5mm (W) x 1050mm (H)
W08	685mm (W) x 1050mm (H)

**DOOR SCHEDULE**

D01	1457.5mm (W) x 2100mm (H)
D02	4060mm (W) x 2250mm (H)
D03	1922.5mm (W) x 2100mm (H)
D04	1022.5mm (W) x 2100mm (H)

Level threshold shown to secondary entrances to dwelling. Refer to Construction Details for further information. Alternatively, stepped threshold can be used which would eliminate the need for threshold drains.

See notes on Critical Glazing for low level screens / windows

Calculations to be provided for all structural support beams / lintels to openings greater than 3m. Should steel be used full engineers calculations should be provided prior to installation. Lintels generally to have minimum end bearings of 150mm.

Support subject to truss manufacturers details. If further support is required - beam must be installed to engineers details.

Masonry cavity wall construction to external walls (see construction details)

Lintels to be Catic CG-50/100 standard duty lintels assuming standard lengths and loadings (to manufacturers detail and approval) or similar approved (e.g. IG)

Denotes indicative span of Pre-fabricated roof trusses (to be in accordance with the manufacturers details and design)

If Building Control and/or roof truss manufacturer do not require any internal load bearing walls for roof support and stability then all first floor internal walls can be constructed from studwork (see typical detail) load bearing walls are indicative only. Plywood faced buttressing studwork may be required to provide stability for external walls.

Internal load bearing walls to be constructed from suitable foundations. Walls to be concrete blockwork (see construction details)

Foundations shown as 600mm wide (450mm to single skin walls) x minimum 300mm deep in situ concrete strip foundations, minimum 1m deep in clay, GEN1 (S12) mix to BS8500 for concrete. Foundations subject to Building control inspectors approval prior to pouring concrete in relation to distances to existing removed / proposed / remaining trees. See Notes on site plan adjacent.

Trench fill foundations may be utilised subject to ensuring suitable depths for the floor building up and prevent cold bridging. Coarsing subject to contractors preference

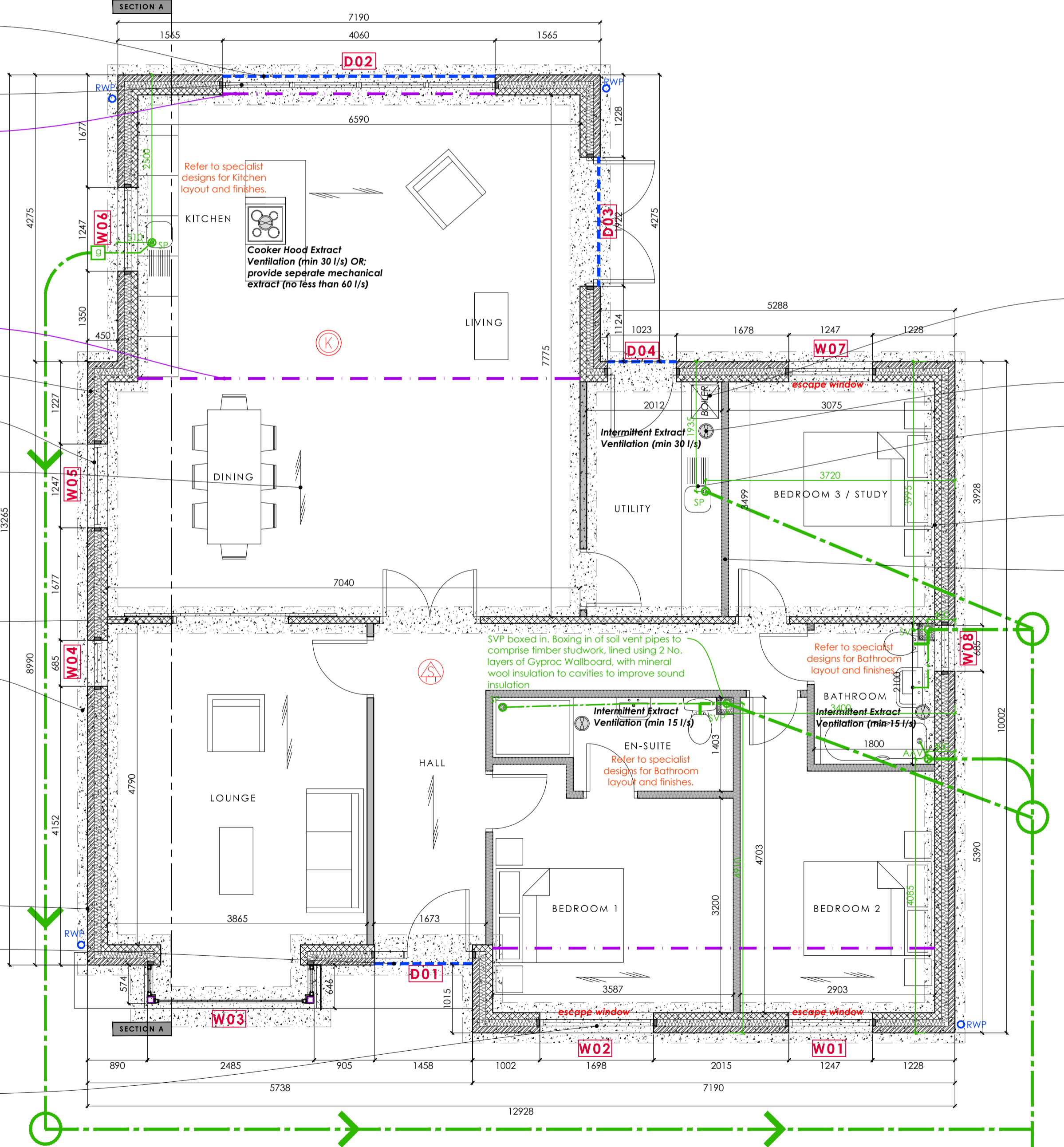
Subject to Building Control confirmation in accordance with NHC standards (building near trees) prior to commencement of pouring concrete, and if necessary any structural engineers details / design

Gas and Electric meter positions / entry points subject to confirmation with the Contractor on site.

External ground built up at main entrance door to enable 900 x 1200mm minimum level platform to entrance, with level access into the dwelling. Ramps shall be no steeper than 1 in 12 gradient. Ramps to have an unobstructed width of 900mm minimum, and surfaces are to be firm and even (landings to be minimum 1200mm deep).

Main entrance to incorporate a level threshold with level threshold drainage channel and DPC tray or suitable system to prevent water ingress DPC to be stepped accordingly

See notes on Escape Windows for information. All bedrooms are shown to have an escape window. Size and opening subject to final manufacturers confirmation.



Wall mounted boiler (fuel as specified in the SAP Calculations) - full details of the system are to be confirmed prior to installation and approved with Building Control. The choice of fuel is likely to effect the SAP Calculations and should be discussed with designers.

Extract ventilation to be commissioned pre completion with test certificates approved by Building Control

Radiators throughout or as otherwise agreed - Radiators sizes and positions to be confirmed with the subcontractor prior to installation. All radiators to incorporate TRVs.

Insulation provided to internal stud walls where shown. See Specification & Construction Details for further information on the requirements. Generally: Timber / metal stud systems should include plasterboard layers with a minimum mass per unit area of 10 kg/m<sup>2</sup>; have a minimum distance of 5mm between linings (e.g. stud width); and include a minimum 25mm thick absorbent material to the cavity with a minimum density of 10 kg/m<sup>3</sup>. All joints to be well sealed.

GROUND FLOOR PLAN

Foul drainage to be discharged to mains sewer. Refer to ADC drainage design.

- Rev D | General Internal Amends | 09.08.2022
- Rev C | Amends to Window openings | 15.06.2022
- Rev B | Drainage Dims Added | 22.03.2022
- Rev A | Client Amends | 20.12.21

**DRAWING ISSUES AND REVISIONS**  
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**PROJECT** Residential Development  
Willingham Road  
Market Rasen

**DATE** | Nov 2021  
**TITLE** | House Type 5 (Hands)  
**SCALE** | As Shown  
**ORIGINAL SIZE** | A1 (Landscape)  
**DRAWING NUMBER** | LDC3371-BR-37D

This drawing is the copyright of LDC Design Consultancy and must not be reproduced without written consent. The contractor is responsible for checking all dimensions on site prior to commencement and reporting back to the architect/consultant of any discrepancies. All materials specified on this drawing are to be used in strict accordance with manufacturers' instructions and current codes of practice.

All details and Specification on this drawing and in relation to the specific project should be obtained to. If any deviation occur the contractor / client should inform LDC Design Consultancy immediately as we cannot be held responsible for errors resulting from uncorrected detail and specification changes

Subject to Structural Engineers Details

Subject to Building Control Approval

Subject to Manufacturers Details