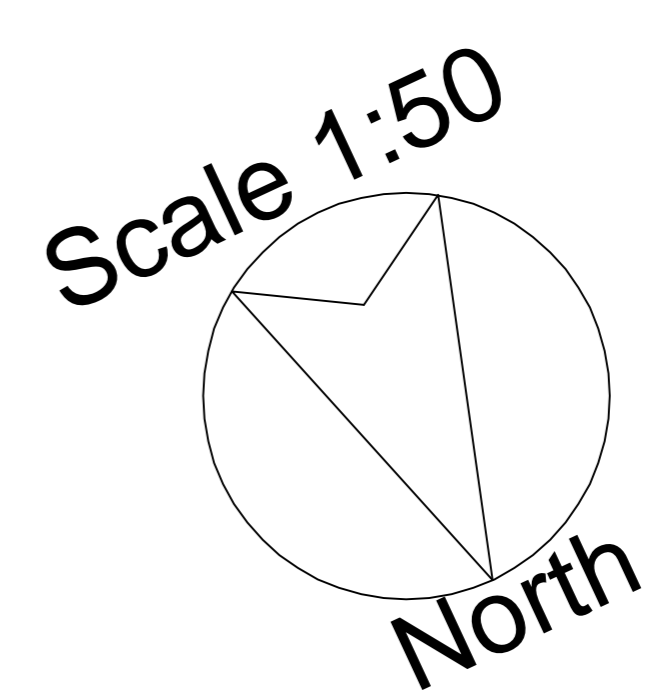


Bedding to below ground drainage to be maximum 14mm chips - Minimum unprotected cover to be no less than 600mm cover in field and garden areas; 700mm invert cover.



All work must be carried out in accordance with the Building (Scotland) Regulations 2004.

Datum Points and levels

- * The Datum Point for the site is at the base of a marked straining post, situated at the northern corner of the plot.
- * The plot has a high point at the northern corner and slopes in a uniform fashion diagonally to the southern corner by approximately 1000mm
- * The current level of the land at the northern corner of the house is approx 400mm below the Datum
- * The floor level of the garage shall be approx 400mm below the datum (as per current ground level).
- * The 'Existing Slope of Site' line is representative of the slope of the whole site.

Site Access

- * Access road to site to be minimum 3.3metres wide.
- * Access road capable of carrying a vehicle axle load of 5 tonnes.
- * Access road to have minimum of 150mm rolled and compacted hardcore.
- * Site to be Stock Proofed.
- * Access road to have minimum 50mm bitmac surface to minimum distance of 6.0m from edge of public road. Maximum gradient to be 1:20.
- * Car parking provided within the curtilage of a dwelling must allow a person to be able to alight from a vehicle directly onto the firm surface of an accessible route to the dwelling. Where a driveway or car parking space forms part of an accessible route to a dwelling, it should be at least 3.3 m wide to allow a 900 mm wide pedestrian route past a parked car. That portion of the driveway surface should be in accordance with the recommendations in clause 4.1.4.

Substructure

- * Foundations to be taken below any local excavations.
- * With regard to the existing ground conditions, the 600-800 depth of mortar material below the topsoil, visible in the S.I. trial pits, should be a suitable building strata. Where this has to be excavated to suit the house levels, the ground below is generally saturated and appears unsuitable for bearing capacity. In this case we would require that the loose material be removed, and the site refilled with a minimum 400mm depth of imported clean hardcore. In addition to this the foundations would require to have A252 mesh reinforcement throughout, and perimeter land drainage may also be required to lower the groundwater level.
- * Foundations to have minimum 450mm frost cover.
- * 650x200mm and 450x150mm vibrated concrete strip foundations on good undisturbed load bearing ground.
- * Bearing capacity of load bearing ground for strip foundations shall be a minimum of 75kN/m².
- * Steps in strip foundations must be reinforced with A393 mesh.
- * The upper level of any step in the strip foundation must overlap the lower level by twice the height of the step by the thickness of the foundation, or by 300mm, whichever is the greatest.
- * 150mm Dense Concrete Blockwork perimeter walls - to support Timber Kit Frame.
- * 100mm Dense Concrete Honeycombed Blockwork Retaining Dwarf wall.
- * 215mm Dense Concrete Blockwork substructure around the concrete floor - there will be a level difference between the slab and the adjacent solum.
- * Dry Chip Hari on Plaster
- * On Scratch coat.
- * Blockwork Movement Joints - Maximum 3m from corners, Maximum 6m apart - ties at every course to Kit frame.
- * 215 x 150mm fireclay airbricks as shown on elevation drawings.
- * Airbricks to provide permanent ventilation to underfloor spaces direct to the outside outside air in two walls on the opposite sides of the buildings.
- * Minimum of 1500mm² for at least every metre run of wall or 500mm² for at least every square metre of floor area. This area also being provided in internal sleeper walls or similar obstructions to maintain underfloor ventilation.
- * The ventilation to be 75mm in height from the site covering to the underside of any wall plate and 150mm to the underside of the floor joists.
- * Drainage passing through substructure blockwork to be protected with reinforced links.

Concrete Lintels

- * 100mm wide by 225 mm high reinforced above all drainage passing through substructure dwarf wall blockwork.
- * 150mm wide by 225 mm high reinforced above all drainage passing through substructure exterior wall blockwork.
- * Minimum 150mm End Bearing
- * Supplied by Messer's Hunter and Morrison to their standard construction.
- * The concrete mixture consists of 10mm single sized chips, Aberdeen sand and ordinary Portland cement to a ratio of 4:2:1, giving a test strength of 38N/mm². The materials are mixed together semi-automatically in a pan/barrel mixer where water is added to form a workable texture.
- * High Yield reinforcement bars are used to give the minimum cover of which is 40mm with 25mm minimum cover to the ends. Reinforcing is kept in place using plastic spacers.
- * Reinforcing used in standard lintels 1x 16mm bar in top; 2x 16mm bar in bottom
- * Suitable Cavity Trays where concrete lintels used at external openings with stop ends and weep holes.
- * Solum
- * Minimum 50mm minimum Concrete Screed on 1000-gauge polythene on minimum 50mm compacted blinding on minimum 150 consolidated hardcore.
- * Consolidated hardcore to be made up of clean, inert material and water soluble sulphates.
- * In all cases the top surface of the solum must not be lower than that of adjacent ground.

Solid Concrete Floor Construction - Porch, Toilet and Utility Room

- * 138 x 25mm softwood perimeter kit locator plate - top used for 100mm screed (below).
- * 100mm reinforced concrete screed floor, with crack resistant floor.
- * Wirsbo Underfloor Heating System laid strictly in accordance with manufacturer's instructions.
- * 25mm Edge insulation (bitumen impregnated fibreglass) to be fitted around perimeter of floor slab.
- * On 125mm high-density EHD Polystyrene insulation.
- * On 1000 gauge polythene D.P.M.
- * On 50mm compacted blinding.
- * On minimum 150mm consolidated hardcore. Consolidated hardcore to be made up of clean, inert material and water soluble sulphates.

External Access

- * A level Plat 1200mm x 1200mm minimum shall be provided at the entrance door extending clear of the door swing.
- * Accessible thresholds shall be fitted to the accessible entrances to the building.
- * An accessible entrance to a building should have an unobstructed space to the opening face of the door, next to the leading edge, of at least 300 mm
- * When approaching a house, the effective width of a stair or ramped access, measured between handrails, should be at least 1000mm.
- * Ramped access with a maximum gradient of 1:12.
- * The length of a landing measured along its centre is 1200mm clear of the door swing.
- * External steps to be maximum 170mm rise and minimum 250mm going.
- * Handrails and guarding must be provided where there is a change in level of 600mm and over, not to be less than 1100mm high. The client is advised to make special reference of this guidance to the contractor. If deemed appropriate, a handrail may be advisable even where the difference in level is less than 600mm. The client is advised to assume a precautionary approach.
- * Minimum 1100mm high guarding, no gaps to permit passing of a 100mm sphere.
- * Ramped access with a maximum gradient of 1:12. A ramp at 1:12 must not exceed 2.0m in length without the provision of a level landing of at least 1200mm x 1200mm.
- * 1200 concrete paving around house.
- * The entrances to the building at the Utility and Porch shall have a means of automatic illumination above or adjacent to the door - Client to agree with electrical service provider.

Solid Waste Storage Point

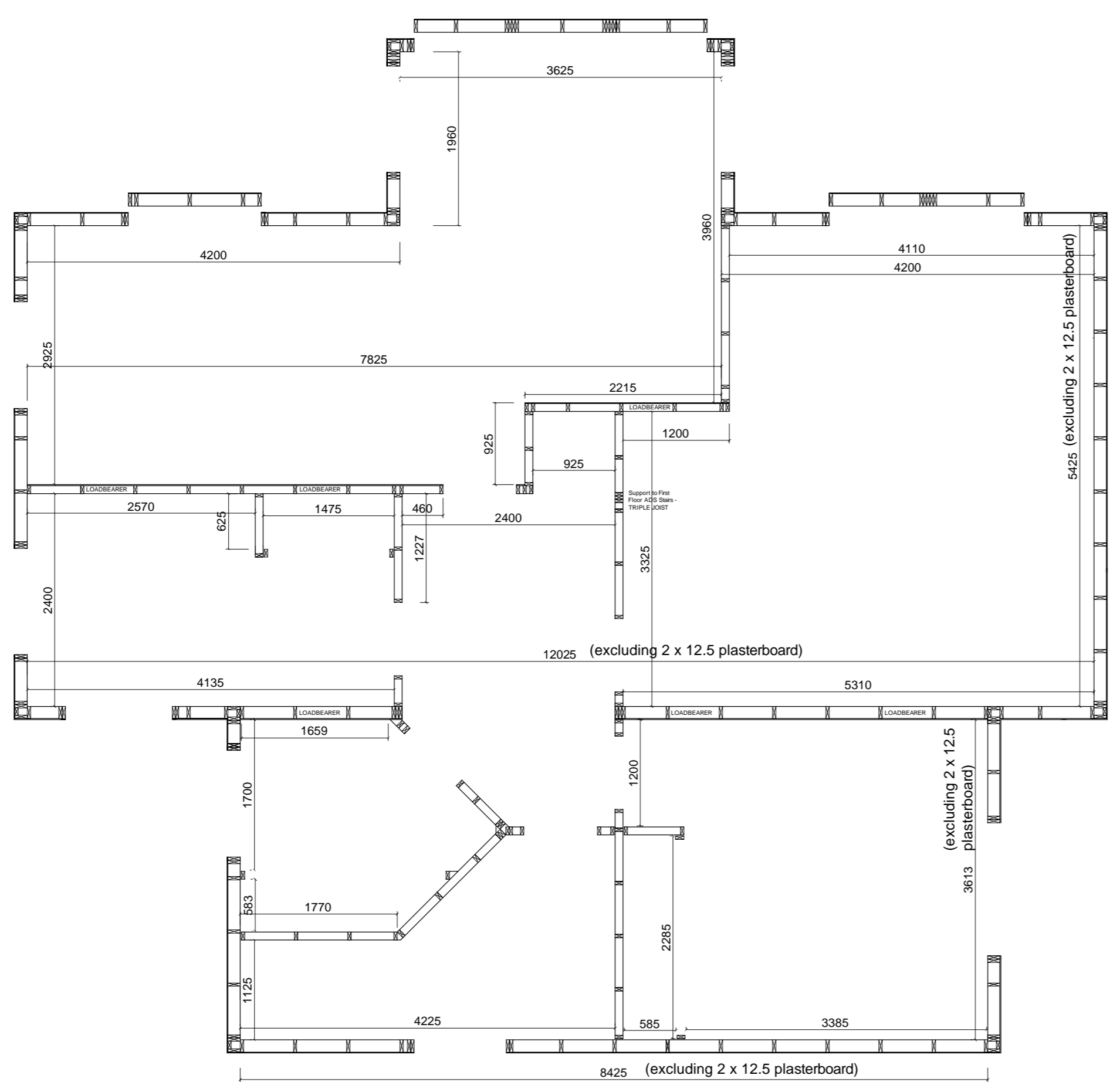
- * A solid washable hardstanding large enough to accommodate a waste container such as a wheeled bin, or any other container which is deemed safe proof whilst awaiting the essay cart.
- * Minimum 1200mm x 800mm x 100mm concrete pad.
- * Any enclosure must be vermin proof.
- * The enclosure must not allow a sphere of 15mm diameter to pass through at any point, except for the lid, which must be large enough for a black bag. The lid must be fitted with stainless hinges and catch.

Rainwater

- * Polypipe (p.o.e.a.) Deep Flow 110mm PVC rainwater system.
- * 68mm downpipes to 110mm PVC surface water drainage connections, to connect into pipe to drainage soakaway-as per site plan.
- * Surface water to be collected from five r.w.p.'s through graded silt trap set flush into pavement, to connect into pipe to drainage soakaway-as per site plan.
- * All gutters and rainwater pipes should be constructed and installed in accordance with recommendations described in BS EN 12056-3: 2000.
- * The surface water shall run to the Hoswick burn. A retention chamber shall be constructed in accordance with Clause 3.6.5, the BRE Digest 365, 'Soakaway Design' or National Annex NG2 of BS EN 752-4:1998

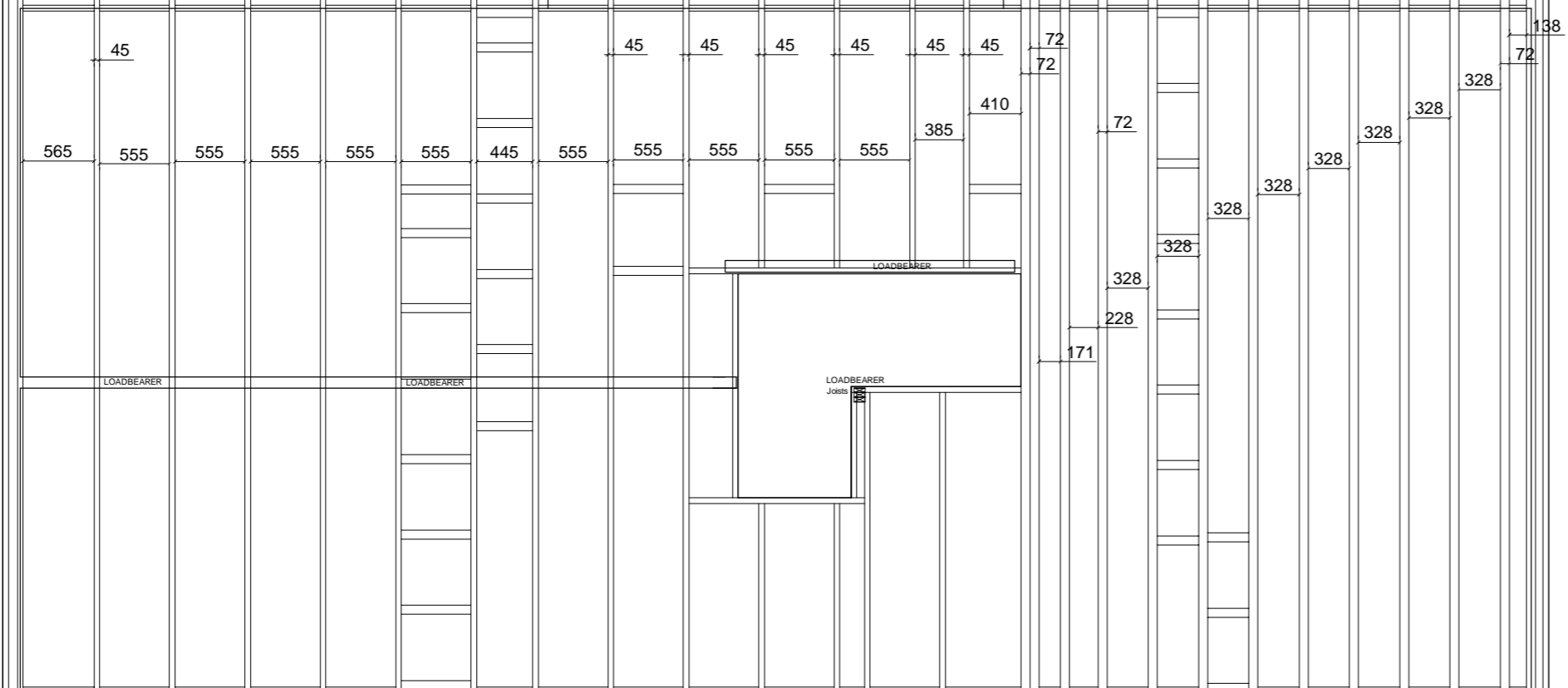
Foul Water

- * Foul drainage above ground level to be 30-35-50mm PVC solvent welded.
- * Foul drainage from sanitary appliances and sinks connecting to 100mm PVC foul drainage system connecting to existing mains drainage system - Sandwick Sewerage Scheme.
- * All sanitary pipe work should be constructed and installed in accordance with the recommendations in BS EN 12056-2:2000.
- * Minimum distance from Rodding Eye to Inspection Chamber should not exceed 45 metres.
- * Minimum 600mm Cover at all times
- * Minimum 700mm Invert Cover
- * Maximum bedding chip size 14mm
- * Foul water reaches existing Sandwick sewerage scheme, as per site plans.
- * A drainage system outside a dwelling should be constructed and installed in accordance with the recommendations in BS EN 12056-1: 2000, BS EN 752-3: 1997 (Amendment 2), BS EN 752-4: 1998 and BS EN 1610: 1998.



Preliminary Design - FIRST FLOOR Pasquill Ltd

* Fitch beam lintel over Dining Area, supporting trusses to be formed using 3no. 200mm x 38mm C24 timbers C/W 1No 180mm x 8mm MS Plate with M20's @ 400mm c/c Staggered and 2No. Bolts at supports. On to 2No. supports on to triple cripple stud supports.



Client Details	Title	Scale
Mr and Mrs R Munro	Proposed Dwelling House	Foundation and Underbuilding Plan 1:50
	Description	Drawn By
	Foundation and Underbuilding Plan	Dwg No./File Name
		Date
		© Copyright David Polson 2009

David Polson
Scarpas,
North Votter,
Cunningsburgh,
Shetland ZE2 9HF

Telephone - 01350 477370
Facsimile - 08712 439 246
Mobile -
Website - www.davidpolson.co.uk
e-mail - polson@clara.co.uk

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