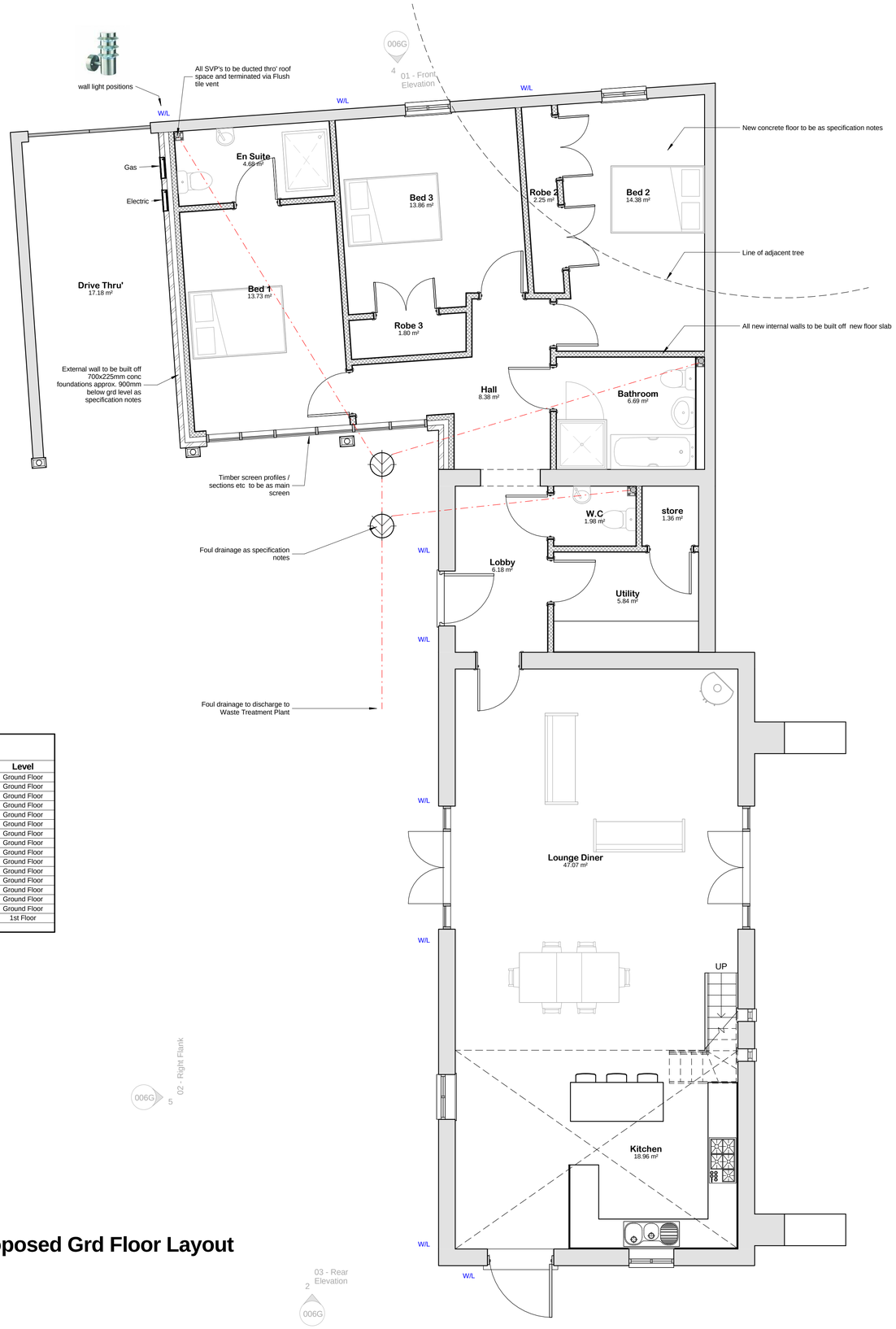


Room Schedule

Name	Area	Perimeter	Level
Bathroom	6.70 m²	10.4 m	Ground Floor
Bed 1	13.75 m²	15.0 m	Ground Floor
Bed 2	14.40 m²	16.3 m	Ground Floor
Bed 3	13.85 m²	15.1 m	Ground Floor
Drive Thru'	17.20 m²	18.0 m	Ground Floor
En Suite	4.70 m²	9.2 m	Ground Floor
Hall	8.40 m²	14.7 m	Ground Floor
Kitchen	18.95 m²	18.0 m	Ground Floor
Lobby	6.20 m²	10.4 m	Ground Floor
Lounge Diner	47.05 m²	27.9 m	Ground Floor
Robe 2	2.25 m²	8.7 m	Ground Floor
Robe 3	1.80 m²	6.2 m	Ground Floor
store	1.35 m²	4.7 m	Ground Floor
Utility	5.85 m²	9.8 m	Ground Floor
W.C	2.00 m²	5.7 m	Ground Floor
Study Area	21.35 m²	19.2 m	1st Floor
Grand total: 16	185.70 m²	209.5 m	

01 - Proposed Grd Floor Layout

1 : 50

Foundations
Existing building area to be stripped of all vegetable matter and rubbish to a min. depth of 150mm before excavation commences.

Concrete mix for foundations to be GEN3 in accordance with BS5328:1981.

Foundation widths to the external walls to be min.700mm wide x 225mm deep and 450mm x 225mm to any internal load bearing walls.

Excavate down to solid firm strata i.e. 750mm deep (min.1000mm if soil is of a shrinkable nature).

Width of foundation to be consistent at both the base and top of the trench after excavation

Remove all mud, rock projections, boulders and hard spots and replace with well consolidated granular fill.

Harden local soft spots by tamping in granular fill.

Keep trenches free from water at all times and the exact depth to suit conditions on site and to the strict approval of the L.A Building Inspector.

Any irregularities in the subsoil during the excavation should be brought to the immediate attention of the Building Inspector & advice to be sought from a Chartered Structural Engineer. Precautions against root damage to be agreed on site with the Inspector and in accordance with NHBC Standards Chapter 4.2 "Building near Trees"

Ground Floor Construction
Floor to achieve a min 'U' Value of 0.20w/m²K.

-65mm mortar screed with a light gauge reinforcing chicken wire
-500 gauge polythene separating layer
-100mm Xtratherm Thin R rigid insulation board or similar approved, provide 30mm thick perimeter insulation between screed and floor insulation up to d.p.c level
-100mm thick GEN3 concrete sub-floor on a 1200 gauge DPM lapped onto DPC within walls
-150mm clean and well compacted hardcore. Depth of hardcore must not exceed 600mm and must be compacted in 150mm thick layers.

All service entries to be sealed with pressure sensitive tape.

Floor Insulation Installation guidelines (under screed)
1. Install a Damp Proof Membrane (DPM) below the slab OR apply a liquid waterproofing material to the top surface of the slab.
2. The DPM must provide continuity with DPCs installed within the surrounding walls.
3. Level the surface of the slab; it should be smooth and free of projections.
4. Use a thin sand blinding on a rough tamped slab to ensure that boards are continuously supported. Cut strips of board as upstands to fit around floor perimeters to eliminate heat bridging at screed edges.
5. Upstand depth should equal the sum of the slab insulation and screed thickness.*
6. The upstand thickness should not exceed the combined thickness of wall plaster and skirtings.
7. Lay boards directly onto the prepared slab, cutting infill boards as required. Joints must be tightly butted. The use of a polythene vapour control layer over the insulation is recommended by the BRE to minimise the risk of condensation forming at the insulation/slab interface.
8. Apply a sand/cement screed over the GA3000Z boards to a minimum thickness of 65 mm. Use scaffold boards or other protection to prevent wheelbarrows and other traffic damaging boards.
9. Allow screed to dry thoroughly before an impermeable surface, such as a vinyl floor finish, is applied.
10. These recommendations are suitable for normal domestic floor loadings. If higher loadings are required it may be necessary to increase screed thickness and provide reinforcement within the screed

Installation guidelines (under slab)
Insulation under the slab must have: Level and well blinded hardcore.
DPM (Damp Proof Membrane) placed under insulation.
Insulated upstand = thickness of slab + screed.
DPM continuous with the DPCs.
Vapour control layer (e.g. 1000 g polythene) laid directly over insulation.

Soakaways
All rainwater to discharge into soakaways and to be min.of 5m from any building & a min.of 1m³ filled with rubble to within 450mm of external ground level.

Overlay rubble with polythene sheet and backfill with clean topsoil.

Note the soakaway inlet pipe must discharge to the centre of the soakaway in all directions.

The contractor should carry out percolation tests to determine the feasibility prior to constructing the soakaways.

Detailed below is brief guidance on how to carry out the tests:
1. Excavate a trial pit to the same depth as the anticipated soakaway below the invert of the drain.
2. The trial pit should be 300mm - 1000mm wide and 1000 - 3000mm long.
3.It should have vertical sides trimmed square and, if necessary for stability filled with granular material.
4.When no granular material is used, it is advisable to place pegs into the trial pit at the 75% & 25% levels. This allows the water level readings to be taken accurately.
5.The trial pit should then be filled and allowed to drain three times to near empty, with readings taken for:
-The time taken for the water level to lower to the 75% level
-The time taken for the water level to lower to the 25% level
6.When granular material is used, a full height, perforated, vertical observation tube should be positioned in the pit so that the water levels can be monitored with a dip tape
7.The trial pit should be filled on three separate occasions to give a true reading on the ground conditions
Available at this office is a Soil Infiltration check sheet to be completed on site and a copy issued to the L.A Building Control Officer upon completion.

Foul drainage
The following information is based on the recommendations in BS 5955: Part 6 'Installation of PVCu pipework for gravity drains and sewers' and BS EN 1610 'Construction and testing of drains and sewers' and is intended as a general guide to good practice in the selection of bedding andbackfill materials for Marley solid wall and Quantum underground drainage systems.

-**Excavation:**
Trenches should not be open for extended periods in advance of pipe laying and should be backfilled as soon as possible. It is essential that the sides of the trench are adequately supported during pipe laying.
Trench widths should be as narrow as is practicable but not less than the pipe diameter plus 300mm to allow adequate sidefill to be placed.

Deeper excavations should ideally incorporate a sub-trench in accordance with the diagram below:

-**Granular material for bed & surround of PVCu drains and sewers:**
Suitable imported granular material for bedding and surrounding PVCu solid wall and Quantum Pipes for private and adoptable sewer applications is detailed in the table below:

Grading complying with the requirements of BS EN 1610. Granular material also includes aggregates for concrete to BS EN 12620.

-**Bedding & backfill:**
Where the as-dug material is suitable, the bottom of the trench may be trimmed to form the pipe bed and the as-dug soil used as sidefill and backfill in accordance with BS EN 1610 bedding construction type B

*Suitable material is defined as material in accordance with the recommendations of BS 5955: Part 6: 1980 Appendix A, having a maximum particle size not exceeding 20mm.

Where the as-dug material is un-suitable as bed and surround installation should be carried out in accordance with BS EN 1610 bedding construction type 1, as shown below:

Trenches should be excavated to allow for the depth of bedding material. Before any pipework is installed the bedding material should be laid evenly along the bottom of the trench.
The sidefill material must be the same as the bedding material and extended to the crown of the pipe and be thoroughly compacted.
Where the backfill above the pipe contains stones larger than 40mm or where the pipe work is deeper than 2m in poor ground, the granular material must extend at least 100mm above the pipe crown.
Alternatively, backfill material can be graded to eliminate stones exceeding 40mm and this selected material used for the first 300mm above the pipe.
When the pipes are to be laid in rock, compacted sand or gravel, or in very soft or wet ground requiring mechanical means of trimming, the bedding should be a minimum of 100mm.

Shallow domestic drains:
Pipes laid at depths less than 600mm and which are not under a road should, where necessary, be protected against damage by placing over them a layer of concrete, paving slabs or similar.
A minimum 75mm cushioning layer of granular material must be laid between pipes and the slabs or concrete.
Where drains are laid in fields, additional protection may be required from heavy vehicles and equipment.
It is recommended that the installation is carried out with a concrete slab spanning the trench for drains under private roads.

Drains under solid ground floors:
Drains often have to be laid under buildings in order to connect sanitary pipework which has been positioned some distance from the outer walls. Where this occurs, deep hardcore within the foundation boundaries should be compacted first.
The trench for the pipe should then be excavated and suitable material employed for the bedding and backfilling operation. If trenches are dug from original ground, pipes may be laid and surrounded as necessary before the top layer of hardcore is formed.
Where a pipe passes through a wall or foundation of a building, a lintel or sleeve should be built-in to provide clearance around the pipe.

Concrete bed & surround:
The flexible nature of PVCu pipes enables them to accommodate ground movement and other differential settlement that may occur under normal conditions.
Therefore, the use of concrete bed and surround is not recommended and only under special circumstances, at very shallow cover depths or where it is necessary to safeguard foundations, should it be used.
Where the use of concrete bed and surround is unavoidable, it is recommended that pipes are laid in 3 metre lengths and a compressible board is shaped to fit around each joint.
Pipes should also be wrapped with polythene to prevent the ingress of cement slurry into ring seal joints.

General Drainage Note:
110mm diameter main foul water drains that carry the discharge from multiple soil stacks and buildings may be laid at a fall of not less than 1:80 (12.5mm fall per metre). However, branch drains from individual gullies, sanitary fittings or soil stacks should be laid at a steeper gradient of 1:40 (25mm fall per metre).All drains passing thro' walls to have concrete lintel over with 50mm space around filled with compressible material and opening masked with durable rigid sheet to prevent ingress of vermin or back fill.Drain runs must not be any lower than foundation depth unless min.of 1m from any building.Provide roddable access to all change in bends and junctions.Contractor to ensure no live drains run beneath proposed works.New I.C less than 650mm deep and only one branch connection to be 225mmØ and I.C between 600mm and 1000mm deep to be 450mmØ uPVC Marley or equal approved.I.C over 1000mm deep to be 1200x750 on 150mm C20P concrete base with 215mm Class B brick walls with Grade B medium duty cover.

Due to areas of the structure being covered, unexposed or otherwise inaccessible the notes / specifications of existing materials are subject to confirmation of site when it is feasible to expose the relevant areas of construction.

GENERAL CONDITIONS
Contractors are responsible for checking all dimensions on site when work commences and before ordering any materials.Any discrepancies should be brought to the attention of the Client for remedial action before commencing further.
All materials not specified to be of a standard suitable for the work proposed and be fit for purpose.All work to be in accordance with good building practise and all necessary BS codes for Workmanship on Building Sites.

Client:
Mr K Crick

Site:
Ravens Bank
Whaplode St Catherine

Drg Title:
Proposed Grd Floor Plan

remway Design Ltd
"Treetops" The Racegrounds, Spalding, PE11 3AP Tel : 01775 768 921

Date	Contract No	Drg No
13.03.15	2339	004E