

# **Preliminary Outline Specifications** **for Budgeting Purposes ONLY**

**Housing Development**  
**(Demolition of Industrial Unit/s)**  
**Land at**  
**Horton Industrial Park**  
**613 Great Horton Road**  
**Bradford BD7 4ED**

**September 2007**

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## **General**

All works to be in accordance with the current building regulations and all relevant British Standards and subject to a Building Regulations submission.

In addition to the above, all details where appropriate will be based on the “robust building details” in order to meet Part E of the Building Regulations Approved Document E.

### **1.0 Sub-structure and Foundations**

The contractor shall construct mass and/or reinforced concrete foundations to the required depths determined by the Structural Engineer, including removing any soft spots or existing foundations.

All foundations are to be constructed to suit the Building Regulations and as detailed by the Structural Engineers drawings and specification, and always subject to suit above and below ground conditions, and loadings. Any alternative design proposed by the Contractor/Specialist sub-contractor shall take all of the Employers Requirements into account and in no way be inferior.

#### **Foundations**

600mm & 900mm wide (minimum) traditional mass concrete trench fill foundation to clay or other good bearing soil but not less than 1200mm deep.

Sub-structure walls to be built of the new foundation supporting ground floor beam & block floor & screed.

Foundations to be inspected and approved by local authority building control officer.

#### **Dpcs, dpms**

Cavity trays type c tray dpc to window/door heads with stop ends.

Cavity trays type u tray dpc to window/door sills with stop ends.

Cavity trays type b vertical dpc to window/door jambs

Cavity trays caviroll dpc to new party walls.

Cavity trays type w weepvents to ends of all cavity trays.

Visqueen 2000 gauge dpm below beam & block ground floor slab.

RIW sheetseal 226 self-adhesive tanking membrane to be lapped onto dpm turned up the internal face of the external walls and lapped onto the dpc.

### **2.0 Structural Frame/Members**

The structural frame/members will be formed from structural steel components to BS 4360, and BS 5950.

All steel beams to “bear” on Naylor concrete lintels as padstones.

The Contractor shall include for the structural steelwork members to the approval of the Structural Engineer. Any areas of steel, which are damaged during erection, shall be repaired/replaced as instructed/agreed by the structural engineer. The steelwork members will be fire protected where required, in accordance with current Building Regulations.

Steelwork to be blast cleaned to SA 2.5 or to the Structural Engineers approval. Steelwork to be encased in concrete to be left unpainted, but all other steelwork to be provided with one coat of high build zinc phosphate to 75 microns thickness DFT at works.

Steelwork to be encased within external masonry or within the cavity of external walls is to be painted with two coats of heavy-duty bitumen paint to achieve a total bitumen paint thickness of 75 micron.

### **3.0 Floors**

#### **Ground floor**

The ground floor slab to be in beam & block flooring system with 65mm screed (min. Penetration to floor slab) on 500g separating membrane/layer on 75mm thick

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Kingspan insulation on 1200g membrane laid over the beam and block flooring. A minimum of 160mm ventilated sub-floor void over 100mm thick oversite concrete over single size hardcore (150mm).

#### **Upper floors**

All upper floors to be in timber joists through out the area to be either 50x225mm deep at 450mm centres for spans up to 3m (max) and 63x220mm at 450mm centres for spans up to 4m (max) all in grade c16 timber with 22mm chipboard flooring deck.

The structural steelwork members shall support the floors. The floor structure shall be constructed of timber joists. Airborne Sound transmission shall be in accordance with the Building Regulations. Impact Sound Resistance shall be minimised by the incorporation of an impact resistant mat of membrane laid over the floor, in accordance with the Building Regulations requirements.

The floor will be finished to receive applied floor finishes and the whole of the floor construction is designed to support a minimum superimposed load of 1.5Kn/m<sup>2</sup> to accommodation plus 1.0Kn/m<sup>2</sup> for partitions.

In addition to structural requirements, floors are to be designed to achieve appropriate fire resistance and sound insulation.

#### **4.0 Roof**

Roof to be finished with natural slate on 38x25mm treated softwood tiling battens at a gauge to suit tile size on a tyvek soft breather membrane placed directly on top of insulation to achieve a 'U' value of 0.25 w/m<sup>2</sup>k.

Tyvek vcl sd2 vapour control layer to underside of rafters/ceiling joists.

Underside of rafters/ceiling joists to be finished with 12.7mm thick foil backed plasterboard with a 3mm plaster skim finish.

Supply new rainwater goods (hoppers and down pipes) in material to be approved by the local planning authority

#### **5.0 Rainwater Goods and Drainage**

The Contractor shall include all necessary builders work including filling holes in floor and roof to ensure Fire Compartment separation in line with Building Regulation requirements.

Internal soil and vent pipes shall be designed and installed using pipes of appropriate size giving cognisance in jointing and support of the need for leaks to be avoided.

The Contractor shall ensure that any gap between the structure and the pipe is filled including suitable fire protection. All pipes shall be boxed in and boxings packed with insulation to reduce noise.

#### **Svp's & other vents**

Make provision for the vents in the roof to include upstand, flashings etc.

Allow for lead flashing and soakers to any penetration of svp's and vents through the roof.

#### **6.0 External Walls**

The main material used in the treatment of the external elevations is coursed natural stone.

The walls to be built up from 100mm thick natural stone, 125mm thick cavity with 75mm thick Kingspan Kooltherm K8 insulation (50mm clear cavity) and 100mm or 140mm thick 7N blockwork to achieve a minimum u value of 0.35w/m<sup>2</sup>k.

Stonework courses tied to blockwork with wall ties @ 750mm c/c horizontally, 450mm c/c vertically

The Contractor will only be permitted to alter any feature/specification/design relating to the

external elevation with the express approval of the Employer's Agent and Local Planning Authority.

Any natural stone shall be walled in natural mortar with pointing to match the walling.

## 7.0 Insulation

Insulations (Thermal & acoustic) are required to new walls and floors to comply with current Building Regulations.

## 8.0 Staircases

Contemporary internal staircases supplied and fitted by the contractor in timber with stainless steel handrail/balustrade to meet current Building Regulations. The staircase to be approved by the client prior to ordering by the contractor.

## 9.0 Internal Walls

The inner leaf acoustic value shall be considered and density and thickness should be such that no flanking noise transmission occurs which will diminish acoustic performance.

Any stone, brickwork, and blockwork are to be tied to the structure with a contractor designed stainless steel fixing system.

The Contractor shall ensure that adequate horizontal and vertical cavity barriers are properly installed to prevent noise transfer and fire separation through the external envelope zone from one dwelling to the other.

The Contractor shall ensure that adequate fire barriers are installed both vertically and horizontally.

### Party walls

Dense concrete blockwork comprising two skins of 100mm wide with 100mm or 75mm wide cavity to give an overall thickness of 275mm or 300mm.

Both sides of wall to be finished with gyproc dryliner basic system (or similar approved) comprising of 9.5mm gyproc wallboard on gyproc adhesive dabs all in accordance with the manufacturers instructions/details, with a 3mm plaster skim finish.

All board joints to be taped and filled and all abutments to be fire stopped with cement mortar.

### Internal load bearing masonry walls

Dense concrete blockwork comprising one skin of 100mm wide.

Both sides of wall to be finished with gyproc dryliner basic system (or similar approved) comprising of 9.5mm gyproc wallboard on gyproc adhesive dabs all in accordance with the manufacturers instructions/details, with a 3mm plaster skim finish.

All board joints to be taped and filled and all abutments to be fire stopped with cement mortar.

All abutments shall be fire stopped with cement mortar packed into joints and all abutments shall be filled with a gyproc acoustic/intumescent sealant.

All details and workmanship shall be in full accordance with manufacturer's written instruction.

### Internal non-load bearing walls

Timber stud walls and/or gypquite jumbo stud walls finished with gyproc dryliner basic system (or similar approved) all in accordance with the manufacturers instructions/details, with a 3mm plaster skim finish.

All board joints to be taped and filled and all abutments to be fire stopped with cement mortar.

Bathroom walls to have moisture resistant grade board on bathroom side.

All abutments to be filled with a gyproc acoustic/intumescent sealant.

All details etc to be in full accordance with manufacturers written instruction.

As an alternative to the above, British gypsum (or similar approved) gypwall rapid wall system comprising of 1 layer of gyproc gypwall board each side of gwr1 (70s65) studs at 900mm centres. Gwr2 (70n60) mid height noggins.

Partition to have 25mm isowool in cavity to bathroom walls.

Bathroom walls to have moisture resistant grade board on bathroom side.

All details etc to be in full accordance with manufacturer's written instruction.

## 10.0 Acoustics Performance

The acoustic performance of the development is to comply with Part E of the Approved Documents of the Building Regulations.

## 11.0 Windows

New timber double glazed windows with a minimum 'u' value of 1.9 w/m<sup>2</sup>k.

Fit new painted area with formaldehyde free mdf window boards internally.

Windows to have trickle ventilators to provide 8000mm<sup>2</sup> of background ventilation and have opening lights to provide rapid ventilation equal to 1/20th of the floor area.

Opening lights to be of a suitable size, i.e. at least 750 x 450mm, with a maximum height to the opening of 1100mm for alternative means of escape.

All windows to be pointed externally at the perimeter with silicone sealant, to an approved standard colour

Any internal glazing shall conform to Part N of the Building Regulations.

The Contractor is required to develop a window cleaning strategy for the development and is responsible for suitable installation. The window cleaning strategy is subject to the Employer's approval.

## 12.0 Internal doors

### Doors

Frames shall be fitted with all necessary intumescent strips and smoke seals to achieve the required level of fire performance.

All gaps between door frames and wall/partitions to be filled with a gyproc acoustic/intumescent sealant.

Door schedules and details for specific door sizes and ironmongery to be provided by the contractor.

Double doors to be rebated at meeting stiles.

Hardwood lippings adhesive fixed to all door edges and stiles to be of concealed type and to be site decorated/lacquered, to match after fitting, easing & planing.

Main entrance door shall be fire resistant FD30 or FD60 solid core door size 826 x 2040 x 44mm thickness in accordance with Building Regulation Part B and Part M requirements.

Internal fire resisting FD30 flush panel doors to be solid core, standard design size 826 x 2040 x 44 mm.

Non-fire rated internal doors including cupboard doors to be 40mm hollow core, standard design of appropriate size.

## 13.0 Ironmongery

Generally all ironmongery to be in brushed stainless steel. All ironmongery to be scheduled by the contractor.

Entrance doors to have Numeral adjacent to door size 225 x 125mm to be brushed stainless steel, to match ironmongery spaced from wall by 25mm stainless steel cylindrical spacers.

Fire doors to have Perkomatic type or equivalent approved door closers (fire rated) fitted to hinge stile and frame.

Allow for contemporary brushed stainless steel lever handles and latches to an approved design to all doors plus bathroom sets with indicator to bathrooms and ensuites.

Allow in price for 1.5 pairs heavy-duty brushed stainless steel butts, Perko closer to fire doors within dwellings.

Allow for brushed stainless steel overhead closer to dwellings entrance doors, door numerals, spyglass, cylinder lock and thumb turn to BS 3721 with escutcheon covers and security chain to each dwelling entrance.

Allow for new external doors in solid core six panel paint grade door complete with 1.5 pairs heavy duty stainless butts, euro profile lever set key to outside, thumb turn to inside, 200mm pull handle, deadlock to BS 3621, electric latch for door entry, chrome door closer, two 70mm numerals, mounting plate for door entry, all in Chrome plated or equivalent approved.

Include for brushed stainless steel doorstops to all doors fixed directly to the new covering

#### **14.0 Door Linings**

Medium density fibreboard door linings with MDF door stops to all internal doors, primed to all faces prior to fixing. Fire rated door-frames where required.

#### **15.0 Architraves**

MDF 75mm x 19 mm square profile with square groove and pencil rounded edges, primed to all faces prior to fixing to remaining internal doors

#### **16.0 Skirtings**

MDF 150mm x 19mm square profile, with square groove and pencil rounded top edge, primed to all faces prior to fixing to remaining internal doors.

#### **17.0 Window Boards**

25mm thick MDF with bull-nose rounded front edges to all windows, primed to all faces, prior to fixing, on timber blocks set into perpend joints of sub-sill blockwork internal skin.

#### **18.0 Door Thresholds**

9mm thick Hardwood door threshold with clear lacquered finish to match door finish to all dwellings entrance doors.

#### **19.0 Rising Ducts**

Provide ducts of appropriate fire rating, with access panels or doors at each level. Ducts to have floors infilled around services or to have handrail protection incorporated.

#### **20.0 Joinery**

Include for forming cylinder cupboard in a position to be agreed to house the cylinder and consumer unit formed from metal or timber stud partitions and clad both sides with 12.5mm plasterboard and skim finish with a door, lining and ironmongery as detailed in this specification with 2No slatted shelves.

#### **21.0 Plasterwork**

##### **Internal partitions**

Plaster skim coat dry lining finish on plasterboard fixed to stud wall walling system to suit acoustic requirements.

##### **Beams encasements**

1 Layers of 12.5mm gyproc fireline board to achieve a minimum fire resistance of 30 minutes.

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Void to be filled with gyproc isowool insulation.

All board joints to be staggered, taped and filled. Boards to receive a 3mm plaster skim finish.

Encasements shall be installed in accordance with the manufacturer's instructions and details.

## 22.0 Tiling (Walls & Floors)

Allow for tiling all bathroom, ensuites and shower room floors and walls full height. Allowing a pc sum for the supply only of floor and full height wall tiles to all the bathrooms, ensuites, toilets etc in the sum of £20 per m<sup>2</sup>.

The contractor is to allow for all labour, adhesive (inc flexible adhesive for timber floors) and trims as necessary and 9mm plywood covering to timber floors. The contractor will also allow for tiling behind all the sanitary ware before final fixing avoiding unsightly cuts etc

Allow for tiling to the kitchen areas up to the underside of the wall units. Allowing a pc sum for the supply only of wall tiles in the sum of £20 per m<sup>2</sup>. The contractor is to allow for all labour, adhesive, grouting, etc

Allow for silicone sealing all joints to sanitary ware, kitchen worktops and unnatural joints to timber, which are liable to crack abutting the tiles.

Allow for a plastic tile trim and preformed corners to all exposed edges

The Contractor is to allow for all mastic jointing and all necessary external corner and edge trims.

## 23.0 Floor Finishes

Carpet to bedrooms on underlay to an approved colour and design on Iso-rubber top acoustic membrane 3.0mm thick.

Common areas, corridors, hallways and lounge/dining area floor finish to be laminated timber floor finish, in Oak veneer laminated board floor, pre-finished system, on Iso-rubber top acoustic membrane.

Provide chrome or polished aluminium finish cover/dividing strips between lounge laminated timber floor finish, and kitchen tiling and in all door openings.

Floors to kitchens to be ceramic tiled on thin bed adhesive, on Iso-Rubber (by Thermal Economics Ltd) or similar approved top acoustic membrane 3.0mm thick.

Bathrooms and en-suite facilities to be ceramic tiled, over whole floor area, (including under all sanitary fittings, baths, showers & w.c. pedestals) on thin bed adhesive on Iso-rubber top acoustic membrane 3.0mm thick.

## 24.0 Ceiling Finishes

12.5mm British Gypsum plaster board with 100mm thick Isowool insulation nailed or screwed to the timber joists as per the British Gypsum details and in accordance with Robust details to meet Part E of the Building Regulations. All plasterboard joints to be taped and filled. Board to receive a 3mm plaster skim finish (Moisture resistant board to be used in bathrooms).

## 25.0 Painting and Decorating

All woodwork to be painted with Dulux or equivalent approved water based acrylic gloss finish paint:

Walls (except Bathrooms, En suites & separate toilets) shall be finished with 1No. mist coat and 2No coats matt emulsion paint.

Ceilings shall be finished with 1No. mist coat and 2No coats matt emulsion paint.

Staircase walls, and the soffits to landings, shall be finished with 1No. mist coat and 2No coats matt emulsion paint, as Employers colour scheme.

All visible internal and external metalwork and woodwork unless specified for alternative finish to be primed with etching primer, undercoated with 2No. coats and 2No. coat acrylic gloss paint finish.

All visible internal hardwood surfaces to have three coats polyurethane lacquer finish.

All visible pipework to cylinder cupboard shall be enamel gloss finish painted to match Employers colour scheme.

## 26.0 Kitchen Fittings

Allow a provisional sum of £2500 for the supply of contemporary kitchens inclusive of worktop and with EXTRA full height storage units including fixed appliances (design and layout to be approved by the client). The contractor to include within his rates for the installation costs.

Appliances to be supplied and fitted (integrated fittings) are as follows

Stainless steel Fan oven

Stainless steel hob with hood and extractor fan (all integrated)

Stainless steel extractor

Washer dryer

Dishwasher

Integrated Fridge/Freezer

The Provisional Sums also include a stainless steel sink with drainer, monoblock mixer tap and waste outlet grille and trap, and final services connections.

The splash-back area between the worktop and the wall units to be fully tiled

## 27.0 Postal Letterplates

Standard A.4 size letterplates in brushed stainless steel are to be provided to each dwelling.

## 28.0 Sanitary Fittings

Allow for 25mm dia Alkathene pipe from the new meters in the footpath into each property in one continuous length terminating with a stop tap in each of the kitchen areas.

Allow for pipe runs to be concealed within the thickness of the walls unless exceptionally it is agreed otherwise.

Allow Ideal standard "studio" range bathroom suite with resin bonded bath tubs/shower trays incorporating and up stand and built in feet. Quantity as detailed on the drawing. Shower cubicles in brushed steel finish from the Trevi range to match the profile on the drawings and either bi-folding or sliding doors to permit access from the space available

Electric Showers to be a 9.5kw finished in white with chrome riser rail and shower hose and outlet

Allow for all the hot and cold water supplies to sanitaryware and kitchen sink and appliances in compliance with the water byelaws.

Include for all waste and S & V pipes installed in a concealed manner.

PVC sanitaryware and wastes shall connect to the new drain connections within each unit.

Waste traps to be included in Plumbing Installation.

White silicone sealant to sanitary fittings/ wall and Floor finish.

### Boxings and Supports

All hot and cold supplies, wastes, soil and vent pipes etc are to have boxing of smallest practical size on plan and suitable access provided. No visible pipework is acceptable. Soil pipes are to

be wrapped with mineral wool insulation.

## 29.0 Mechanical Installations

For mechanical installations including soil/waste system, incoming mains supplies to meters, mains cold water, hot water, water storage, fire fighting, etc all to be designed and installed by the contractor.

All mechanical work to include LTHW heating, new boiler, hot & cold water supply, ventilation, water meters and the like to conform to CIBSE latest regulations as detailed below.

### LTHW Heating

Contractor designed and installed gas central heating (wet) system. Include for providing heat loss calculations and confirmation of the size of each radiator.

LTHW heating shall be distributed to each dwelling by new pipework connecting to the boiler located in the kitchen. The heating system will be controlled by a new control panel.

The minimum design temperatures based on an internal temperature of 21° c when the external temperature is -3° C

Living, dining room 21° C

Bedroom, hall, landing, kitchen 18° C

Toilet, bathroom and ensuites 22° C

### Hot and Cold Water Services

Contractor designed and installed system to include for providing heat loss calculations.

Hot and cold water services will be distributed to each dwelling by new pipework connecting to a new main. The new hot and cold water pipework will run adjacent to the heating mains and shall be fully insulated where concealed within the building.

The hot and cold water services will distribute to serve the kitchen, bathrooms, en-suites, sink and washing machine etc at each dwelling.

The hot water storage provision must be capable of delivering hot water to cope with the demand of the bathroom, ensuite and kitchen appliances and water draw off points.

### Ventilation

Bathroom to have mechanical ventilation linked to light switch with humidity sensor capable of extracting at a rate of 15 litres/second, with over-run facility of 10 minutes.

Kitchen to have cooker hood capable of extracting at a rate of 60 litres per second.

Details of the extractor fans to be submitted to the local authority for approval prior to installations.

### Bathroom ventilation

Mechanical ventilation shall be provided to the bathroom area entry via 100mm dia surface or ceiling mounted fans to cater for the required air-changes to comply with the Building Regulations.

PVC ductwork shall connect to the fans and shall distribute to outside and terminate with an airbrick grille (buff in colour) if vented through the walls or a propriety roof vent to match the roofing tiles.

## 30.0 Electrical Installations

For electrical installations including incoming mains supply to meters, space heating, extract ventilation, distribution, lighting, power, mechanical services wiring, fire alarm system, lightning protection, television system, etc. to be designed and installed by the contractor to an approved scheme.

Power and lighting installation to be in accordance with the latest edition of the IEE regulations.

Each dwelling to be fitted with mains fire alarm system as defined in BS 5839: Part 1: 1988.

Include for all wiring connection and fused spurs for the heating system.

Install television aerial system. Allow in tender for connecting all TV sockets to amplifier position, allow provisional sum of £1,500 for the supply and fix of amplifier, terrestrial aerial and satellite aerial.

Install ductwork and secondary cabling for telephone installation as required.

Allow for 2 No dusk till dawn carriage lights 11w (position to be agreed) over main entrance doors and a low voltage 11w bulkhead to the rear.

Allow for new consumer units to each dwelling. Allow for 2 spare breakers to each consumer units for future expansion

### **Fittings**

All plates to be from same manufacturer and in satin stainless finish. All other fittings are manufactured by MK. Allow for installing electrical sockets as follows:-

#### Living room

4 No twin socket outlets (in white)

Television aerial point and SKY

Telephone point

Lighting by recessed mains voltage down lighters 6 per living room as minimum, 2 way switched.

#### Kitchens

4 twin socket outlets above worktop (brushed stainless steel with "black" switches)

twin immersion heater to hot water cylinder

Spur at low level for washer/drier

Spur at low level for fridge / freezer

Spur for oven & hob

Spur at high level for cooker hood

Spur at low level for dishwasher

Allow for a gang switch above the worktop to isolate all the appliances. The switch should be engraved with the name of each appliance

Allow for an electricity supply to oven and to electric hob.

Low level spurs to be switched above worktop

Under cabinet lighting

Area lighting by 6 no mains voltage down lighters

#### Bedrooms

3 no twin socket outlets (in white)

Telephone socket (in Master Bedrooms only)

Television aerial and SKY (in Master Bedrooms only)

Wall lights (one per wall)

#### Bathrooms, ensuites, shower rooms and toilets

Allow for spur to extract fan and for the supply and installation of extract fans and associated ducting.

Fused spur to be positioned outside the room and the fan linked to the lighting circuit

Allow for Heated Towel Rail in chrome

4 no low voltage Zone 3 downlights

Shaver point and light above all basins

### **Fixing Height**

Guide to mounting heights to underside of boxes shall be as follows

Lighting switch 1200mm

Kitchen accessories above worktop 1050mm

Consumer unit (depending on location) 2000mm  
Kitchen accessories below worktop 450mm  
Telecom and TV outlets 450mm

### **31.0 Builders Work in Connection with Services**

Allow for all builders work in connection with mechanical, electrical and all necessary fire stopping works. Allow for attendance on statutory undertakers in relation to new supplies for:-

Electricity – one new supply per dwelling.  
Water – one new supply per dwelling.  
Telephones – one new supply per dwelling.

### **32.0 External Works & Car-parking**

The Contractor shall ensure that the minimum parking spaces shall be provided as the numbers indicated on the drawings. Minimum car parking bay size 2.40 x 4.80 metres.

Construct and make good the external parking area to be finished in tarmac with kerb and edging to suit layout including drop kerb for disabled access.

Allow for drain alterations and lowering the existing kerb, manhole cover, frame etc and forming all new manholes required to complete the drainage and access to the parking area. The contractor must include for cutting and trimming the existing tree within the boundary of the site.

Remove all redundant cables, fittings, clips, boards and the like from external walls and make good.

Resurface parking areas with 63mm blacktop. Include installation of precast concrete edges to parking areas.

Allow for the construction of a timber fence to the rear and between each of the properties.

### **33.0 Incoming Services**

Include for all statutory services supply costs including infrastructure charges.

### **34.0 Drainage**

The Contractor shall include for surveying and checking the existing drainage system (surface and foul water).

Foul water drainage to be complete to final connection into existing main sewer.

Surface water drainage to be complete to final connection into existing main sewer.

New below ground foul water drainage to connect to existing combined system. All below ground drainage to be in accordance with the Hepworth drainage recommendations and the current Approved Document H of the building regulations. Internal manholes to be fitted with a double seal screw down lid.

Washbasin to have a minimum waste of 38mm diameter with a 75mm deep seal anti-vac trap.

Shower to have a minimum waste of 42mm diameter with a 50mm deep seal anti-vac trap.

Bath to have a minimum waste of 42mm diameter with a 50mm deep seal anti-vac trap.

Wc's to have a minimum waste of 100mm diameter with a 50mm deep seal trap.

Sink to have a minimum waste of 42mm diameter with a 75mm deep seal trap.

New below ground foul water drainage to connect to Yorkshire water system.

All ventilation to be in accordance with Table 1 of the Building Regulations Approved Document F.

### **35.0 Fire Strategy**

Each dwelling to be fitted with individual L2 fire alarm system as defined in BS 5839: Part 1: 1988.

Mains operated smoke alarm system to each dwelling independent of building alarm.

Burglar alarm system to the ground, first and second floors of each dwelling comprising PIR detectors, windows contacts (to ground floor), door switch on main door entrance as well any other external doors and panic button and external siren to each dwelling.

Each party wall is a 60 minutes fire compartment wall. Elements of structure to have 60 minutes fire resistance.

Internal wall and ceiling linings to rooms to have a surface spread of flame classification of 1.

Services/drainage pipes greater than 40mm diameter passing through compartment or separating walls to be fitted with intumescent collars. All penetrations to be fire stopped.

### **36.0 Demolition & Reduced Level Excavation**

Demolition of the existing building and its foundation inclusive of all notices to be served, fencing, Health & Safety etc and site clearance in preparation for the new build.

Allow for reduced level excavation to new land profile.