

OUTLINE SPECIFICATION

For

INDUSTRIAL DEVELOPMENT - UNIT 2000

At

LINK 62, NORMANTON, WAKEFIELD

For

PPG LAND (NORMANTON) LIMITED

Michael Eyres Partnership LLP  
Chartered Quantity Surveyors and  
Project Managers  
208/210 Keighley Road  
Bradford  
West Yorkshire  
BD9 4JZ

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1.00 **GENERAL REQUIREMENTS**

1.01 **Introduction**

This Outline Specification is to be read in conjunction with the drawings prepared by the Architect.

The gross internal floor area of the buildings will be as follows:

Ground Floor Warehouse	100,000 ft <sub>2</sub>
Ground Floor Offices	2,500 ft <sub>2</sub>
First Floor Offices	2,500 ft <sub>2</sub>
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Total Gross Internal Floor Area	105,000 ft <sub>2</sub>
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The Contract works include site investigation, obtaining all statutory approvals, ground stabilisation, boundary treatments, retaining walls, all external works, landscaping, services, drainage, etc sufficient to achieve a fully serviced development, with the exception of those elements as identified in this Specification.

The Contractor will assume full design responsibility for the entire project and ensure the achievement of the standards indicated. The Contractor shall be responsible for the establishment and incorporation of all current requirements relating to the utility services, statutory instruments legislation, Local Authority requirements, Highway Authority, Building Control, etc.

1.02 **Planning Permission**

Planning Approval has been granted for the project.

1.03 **Building Regulations Approval**

The Contractor shall be responsible for the preparation and submission of a Building Regulations Application for the base building only, providing all necessary documentation, calculations, drawings, test data, etc and to obtain approval from the Local Authority or other recognised Building Regulations Body.

1.04 **Fire Provision, Means of Escape in Case of Fire and Fire Officer's Requirements**

The Contractor shall be responsible for liaison with the Local Authority Building Control and, if necessary, directly with the Fire Officer during the preparation of the design of the base building and incorporate all necessary requirements to comply with statutory obligations.

Note: the following items are specifically excluded from the project:

- Hand held fire fighting equipment.
- Fire hydrants.
- Sprinkler system, tanks, pumphouses, supply pipework and associated builder's work.
- Smoke ventilation system.
- Smoke detection system to the factory/warehouse area.
- Additional escape doors due to the final layout of the factory/warehouse area.
- Hose reel system.
- Internal warehouse division/fire walls.

1.05 **Standards**

The Contractor shall design, supervise and construct to the highest of standards and shall adopt good building practice, in all aspects of the development. Any item of work or materials noted by the Employer's Agent which are not to standard shall be removed and replaced by the Developer's Contractor at the Developer's cost.

1.06 **Warranties**

The Contractor shall obtain necessary Deeds of Warranty from the Design and Construction Team.

1.07 **Professional Design Team**

The Contractor shall employ suitably qualified persons or firms to execute the design work for the whole of the works.

1.08 **Duty of Care**

All professional persons or firms appointed shall enter into a Duty of Care Agreement.

1.09 **Health and Safety, including the Construction Design and Management Regulations, etc**

Pre-Contract Planning Supervisor will be Michael Eyres Partnership LLP and Post-Contract will be the Principal Contractor.

2.00 **CONSTRUCTION REQUIREMENTS**

2.01 **General**

Warehouses	100,000 ft <sub>2</sub>
Offices	5,000 ft <sub>2</sub>
	_____
Total Gross Internal Floor Area	105,000 ft <sub>2</sub>
	_____

The development will include for all car parking, external service yard areas, drainage and services as outlined.

2.02 **General Standards and Provisions**

The design, materials and workmanship of the works will comply with the latest editions of British Standards and relevant Codes of Practice and shall be in accordance with good building practice of a standard appropriate for the works. The general standards are indicated below:

- a) British Standards and Codes of Practice, latest editions and/or amendments.
- b) Building Regulations and Local Authority Building Control requirements.
- c) Fire Officer's requirements.
- d) Conditions of the Planning Approval issued by the Local Authority.
- e) The Construction (Design and Management) Regulations COSHH and any other Public Health and Health and Safety Executive requirements.

#### 2.03 **Materials**

The Contractor shall use all reasonable skill and care not to specify for use, and not to approve the use in the development of any materials which by their nature or application contravene any British Standard or EU equivalent current at the time of specification, or which contravene the recommendations of Ove Arup & Partners' publication Good Practice in the Selection of Construction Materials (1997).

#### 2.04 **Substructure**

The Developer shall carry out a Site Investigation, including a Desktop Study adequate to establish the history of the site, in sufficient detail to determine the extent of any necessary environmental, geotechnical or contamination investigation. The Site Investigation shall be based upon the requirements of BS 5390 and the environmental investigations should comply with BS 10175.

#### 2.05 **Site Preparation**

All necessary site preparation will be undertaken in accordance with the Structural Engineer's requirements with regard to the foundations and loadings required, noting the category of the floor finish and tolerances, both internal and external finishes.

#### 2.05 (Cont'd)

Copies of any Statutory Approvals and other documentation associated with site clearance will be provided.

Adequate foundations are to be provided in accordance with the Structural Engineer's requirements, designed appropriate to the requirements of the building and to accord with the ground environmental conditions and loadings identified.

No abnormal groundworks or foundations have been included.

#### 2.06 **Ground Floor Slab**

The ground floor slab is to be constructed in reinforced concrete. The design thickness and reinforcement to be designed in accordance with the Engineer's requirements, strictly conforming to the relevant Codes of Practice, British Standards and taking due cognisance of the ground conditions prevalent. The slab is to be designed to support a uniform distributed load of 50.00 kN/m<sup>2</sup>. The floor slab will be designed and constructed in accordance with the recommendations of Technical Report No. 34 "Concrete Industrial Ground Floors" (prepared by the Concrete Society in association with the British Industrial Truck Association and the Storage Equipment Manufacturer's Association). The floor to be laid to an FM 1 Special tolerance.

The slab is to include joints in accordance with the Structural Engineer's requirements. The top surface shall be finished smooth and level with a power float finish. The floor will be treated with a hardener/dust inhibitor upon completion.

## 2.08 **Office Ground Floor Slab**

The ground floor slab to the office area to be designed to carry a maximum superimposed load of 7.5 kN/m<sub>2</sub> with a top surface finished smoothed and levelled with a power float with a tolerance of +/- 3 mm in 3 m length, not exceeding 12 mm across the whole floor slab from datum level. The first floor to the office area to be designed to carry a maximum superimposed load of 4 kN/m<sub>2</sub> plus an additional allowance of 1 kN/m<sub>2</sub> to cater for the weight of partitions.

## 2.08 **Structural Frame**

The main structural frame of the warehouse building is to be constructed in a portal frame with an overall clear height to underside of haunch of 9500 mm.

The steel frame is to be designed, manufactured and erected in accordance with current British Standards and Codes of Practice. Steelwork design to be as BS 5950, Part 1 : 2000 and Part 2 : 2001, BS 6399, Part 1 : 1996, Part 2 : 1997 and Part 3 : 1998. The portal frame shall be complete with all purlins, sheeting rails, bracing, sag-rods and all necessary support angles, channels, ties, etc to walls. The office shall be constructed with structural steelwork frame to support the first and second floor, roof and walls as necessary, allowing for all associated secondary steelwork.

Steelwork is to be designed in accordance with the appropriate ground conditions. An allowance of 0.25 kN/m<sub>2</sub> is to be made for service loading. All hot rolled steelwork is to be shot blasted and primed with zinc phosphate paint post fabrication.

Concealed surfaces of steelwork and steelwork encased by blockwork shall be fully painted with two coats of heavy duty bituminous paint.

## 2.08 (Cont'd)

Steelwork below ground will be encased in concrete.

Cold rolled steel rails and purlins are to be manufactured in galvanised steel to BS 5950, Part 5 : 1998.

## 2.09 **Internal Envelope**

### General

The external walls are to be of a thermal performance equal to or better than that required by the current edition of the Building Regulations.

### Walls

External elevations are to be as indicated on the Architect's drawings, to incorporate 150 mm high precast concrete edge beam at floor level.

In the office areas at ground floor level, inner leaf blockwork shall be extended full height to the underside of the office steel haunch. Inner leaf blockwork shall be concrete block to BS 6073, Part : 1987, unless specified otherwise by the Engineer.

The inner leaf (precast concrete panel) in the warehouse area shall be paint grade and extend to 2100 mm above finished slab level, the top of the wall to be suitably capped.

### Quality

Use of good building practice to mitigate damage to mortar staining to brick and blockwork is to be maintained at all times. Prior to handover, all brick and blockwork is to be cleaned down.

All walling shall be true and flush, well aligned to a good finish.

Cavities shall be kept clear of all mortar droppings, rubbish, etc.

## 2.10 **Cladding**

### Roof

The roof slopes are to be clad in Kingspan RW composite roofing panels or similar and approved, to meet current Building Regulation requirements. The roof pitch will be a minimum of 6°.

### Walls

Cladding to elevations to be 0.50 mm thick HPS 200 coated steel sheets, in alternate profiles as shown on the elevation drawings with a 0.40 mm thick bright white steel liner tray including all bearers, fixings, etc, strictly in accordance with the manufacturer's recommendations and to comply with CP3 Chapter V, Part 2 : 1972.

Office elevations will have a composite flat panel cladding system, Kingspan Microrib or other equal and approved, and Gasell Horizontal cladding system as shown on the elevation drawings.

## 2.10 (Cont'd)

### Rooflights

15% of the warehouse roof area to be double skin rooflight to match the roofing system. The specification should satisfy the Health and Safety Executive requirement for non-fragile roof test and be in accordance with the current Building Regulations.

### Flashings

Include for all flashings, trims, etc to all openings, corners, etc to be in HPS 200 to match elsewhere.

### Rainwater Goods

Provide rainwater installation, designed to BS EN 12056, Part 1 : 2000 and Part 3 : 2000.

Rainwater disposal to be by means of a syphonic system. Steel gutters are to be of the "wrap-over" type pressed to form an integral unit with the purlins, to eliminate the need for gutter straps. All necessary stop ends, weir overflows, junction pieces and outlets shall be allowed as appropriate.

All gutters are to be underdrawn. The lining and insulation to be the same materials as the insulated roof construction. The insulation is to be allowed to the full area of the sole and sides.

Allow for applying two coats of heavy grade bituminous weathering to the weather surface of all gutters prior to end of Contract.

Rainwater fall pipes to be conventional PVC pipes, connected to ground level access points. Wherever possible, these pipes should be set within the web of the structural steel columns.

## Boundary Wall Conditions

For any applicable boundary wall conditions, include for all necessary materials and fixings to provide a fire wall system, including for all fire protection to steelwork, nylon ferrules, slotted connections, etc all filled strictly in accordance with the manufacturer's recommendations to provide the required fire resistance.

### 2.11 **Fire Protection**

Fire protection, where required by Building Regulations, shall be provided to the structural steelwork, with the use of a board or sprayed finish.

### 2.12 **External Windows and Glazing**

External windows and glazing shall be provided as shown on the Architect's drawing. The Contractor shall allow for the design, supply and installation of all windows and shall include for all necessary mastic sealants, cill and head flashings, etc which are to be powder coated to match the frame sections. The window and glazing system to be by Technal Viking or similar manufacturer, to be a double glazed, thermally broken system. Windows are to accord with BS 4873 and comply with the latest Edition of the Centre for Window and Cladding Technology Standard for Curtain Walling (CWCT Standard) and to be tested and conform to BS 6375.

### 2.12 (Cont'd)

All glazing system members and infill panels must be designed to accord with BS 6399, Part 2 : 1997 with regard to the location, exposure and shape of the proposed building. The aluminium is to accord with BS 1474 and the finish is to be polyester powder coated by Syntha Pulvin or similar (standard RAL colour) to BS 6496. All glazing to conform to Part N of the Building Regulations. All windows to provide background ventilation, all to comply with Part F of the Building Regulations.

The type and location of fixings and cleats to be strictly in accordance with the manufacturer's recommendations and relevant British Standards. The glass is to be manufactured to BS 952 and to accord with the requirements of safety glass externally and clear toughened glass internally. The windows and curtain walling include opening lights, as indicated. The openings lights are to be fitted with friction stay hinges, with automatic restrictors and a locking device.

The entrance doors and side panels are to be from a similar range, including double glazed units and solid panels, as indicated. The doors are to be fitted with maximum security deadlocks and concealed bolts, pad handles, letter plate and floor springs. The frame is to incorporate the necessary draft and weathering seals. All to be finished in polyester powder coated finish.

The infill panels, as indicated, are to be double glazed units with external leaf of tinted glass and an internal enamel backed panel to achieve a look-a-like glazed infill.

A powder coated and glazed feature entrance canopy is to be located over the main entrance doors.

Internal electrically operated security shutters to all ground floor windows and doors to offices.

### 2.13 **External Personnel Fire Doors to Warehouse Area**

The external personnel fire exit doors to the warehouse area shall comprise vandal resistant heavy duty steel door sets and frames from proprietary manufacturers, with a pre-galvanised basic factory finish suitable for further decoration. Heavy duty vandal-resistant hinges shall be provided per door as a minimum. No fixings for the steel door construction or steel frame shall be visible on the exterior. A fully welded door construction would be preferred. The door ironmongery and frame assembly shall be suitable for use by disabled persons in case

of emergency. A weatherproof and watertight threshold shall be provided. It must not inhibit or hinder escape by persons in wheelchairs. The doors and frames shall be treated and finished in high gloss paint.

#### 2.14 **Goods Doors**

The service doors to be lockable, and electrically operated, to be of an insulated sectional overhead door type, with Plastisol coated external finish from the standard range. Each door is to have a higher lift track arrangement. Allow for all sealant strips to base size, etc. The horizontal and vertical tracks to be manufactured from galvanised steel. Roller brackets to be of heavy duty and rollers to be of self-adjusting type with ball bearings on the steel shaft. All guide rails, roller brackets, hinges, etc to be bolted or screw-fixed. The doors to be manufactured and installed in accordance with all British Standards, Codes of Practice and relevant European Standards with regard to operations, installations, etc. The doors are to incorporate observation panels.

1 Nr flat entry electrically operated shutter doors have been included.

#### 2.14 (Cont'd)

The dock levellers shall be manufactured by Easilift Loading Systems, minimum working capacity of 6000 kg. The warehouse floor level will be set at 1200 mm above the adjacent external yard level. The dock levellers will have a working range of +/- 350 mm in relation to the warehouse slab level.

The Contractor to include for precast concrete dock surrounds and pits to the approval of the Engineer.

8 Nr dock levellers have been included, comprising a dock pit, leveler, electronically operated insulated door and dock shelter in each location of proprietary manufacture.

Bollards should be provided outside the loading doors, to be positioned clear of the building and faced in such a way that vehicle damage to brickwork is prevented. The bollards should be constructed in 10 mm thick, 150 mm diameter steel with steel cappings, all galvanised after fabrication. All bollards shall project 1300 mm above ground level and at least 600 mm below ground level, suitable, secured and founded in concrete to prevent uprooting by vehicle knocks at manoeuvring speed. Bollards should be prepared, galvanised treated and finished with gloss paint.

#### 2.15 **Office Areas and Ancillary Areas**

##### Internal Doors

All internal doors shall comprise heavy duty, solid-core construction with flush hardwood face. Door frames shall be softwood with good quality satin anodised aluminium ironmongery and suitable fire rating.

##### Toilet Accommodation

The main walls forming all toilet accommodation shall be blockwork. This coving shall be terminated beneath proprietary metal cover strip, capable of taking wall tiles to the upper side. All the toilets should comprise full height ceramic wall tiling.

Ceilings shall be Armstrong Ceramaguard or similar and softwood shadow battens shall be incorporated throughout. Toilet cubicles shall be Bushboard or similar, including for all hinges, handles, coat hooks, toilet holders, etc.

The disabled toilet shall be complete with all extras and fittings, to comply with Part M of the current Building Regulations requirements. All toilets shall include minimum 1000 x 600 mm mirror.

### Sanitary and Plumbing

The toilets shall incorporate appliances of high quality vitreous enamel, complying with British Standards, coloured white to be Armitage Shanks or equivalent quality.

### Office Walls

Office core walls will be constructed in solid dense blockwork. Any internal partition walls shall be concrete blockwork or metal stud, Metal stud walling may be constructed from first floor level as the office/warehouse division wall.

## 2.15 (Cont'd)

### Joinery

Window cill boards throughout shall be in MDF with a gloss paint finish. Door frames, architraves, skirtings and the like throughout office area will be in softwood.

### Wall Finishes

All office areas throughout will be complete with 13 mm, two coat plaster finish.

All walls throughout the office areas will be finished two full coats of emulsion paint.

### Floor Finishes

Throughout the offices to have heavy duty contract quality carpet. Allowance of £15/m\_ supply only and the carpet to be agreed. Allowance made for forming a matwell to the reception area with New Way or similar approved matwell carpeting system.

Toilet areas to receive vinyl floor finish with coved skirtings.

Medium duty raised flooring system to be installed in all office areas, overall depth 180 mm.

### Ceiling Finishes

The ceiling finishes throughout the office areas shall be a proprietary 600 x 600 mm tegular ceiling system with white Microlock "T" grid with Armstrong Dune tile or similar, ceiling height to be 2700 mm.

### Stairs

The main staircase to the office shall be constructed in concrete. The balustrade shall comprise stainless steel balusters with perforated aluminium infill panels and stainless steel handrails. Finish to the treads and risers shall be in carpet to match the offices with aluminium nosings.

## 2.16 **Electrical Installation**

Provision shall be made for an incoming supply of 402 kVA. The supply into the building shall be low voltage from a new substation.

### Warehouse Lighting

Not included.

### Warehouse Fire Alarm

Include.

### Lightning Protection

A lightning system shall be incorporated to provide lightning protection to the building in accordance with the current Regulations.

## 2.16 (Cont'd)

### External Lighting

An average illumination throughout the car parking and service areas of 15 lux is to be provided. This external lighting is to be photo-cell operated with clock and manual override.

### Office Lighting

The office areas are to be complete with 600 x 600 mm recessed low brightness modular fittings, to provide a lux level of 500 at 800 mm above floor level. Lighting to the main office areas shall be provided to category LG7.

### Circulation and Toilet Areas

The circulation and toilet areas are to have 300 lux level.

### Emergency Lighting

Emergency lighting to office areas only are to be provided, to conform with the current Building Regulations and Fire Officer recommendations.

### Office Power

Power is to be provided by floor mounted outlets in recessed floor boxes, each box to provide a minimum of 2 power outlets; 2 data outlets; and 2 telephone outlets. Floor boxes to be provided at the rate of 1 Nr/10m<sup>2</sup>. Wall mounted sockets to be provided on perimeter walls, WC and core areas for cleaning purposes.

Spur points for hand driers to be provided in toilet areas.

### Warehouse Power

Power supplies to be provided doors and dock levellers.

### Intruder Alarm

To be included.

### Fire Alarm

To be included.

## 2.17 ***Mechanical Installation***

The proposed heating and cooling system shall be VRF Heat Recovery System.

Ceiling mounted cassette fan coil units will be installed in all office areas, meeting rooms and reception area with zoned control and external condenser units for each floor, this will provide heating and cooling as required.

Electric panel thermostatically controlled heaters to be provided to staircase and toilet areas.

## 2.17 (Cont'd)

The Contractor shall design, supply, and install and commission the complete system to the following criteria:

Offices:	Internally 22C	Externally	-3C
Toilets:	Internally 18C	Externally	-3C

### Plumbing Installation

Domestic hot and cold water shall be provided to all toilets and tea rooms throughout. All internal drainage pipework cylinders, etc necessary for the complete installation of the system shall be provided. An incoming gas main shall be brought into the building, sufficient to provide heating to the office and warehouse areas.

### Ventilation

Extract ventilation to toilets is to be provided by fan units with ducting wired back to light switching with variable override.

### Warehouse Heating

Not included.

## 2.18 **External Works**

### General

External access roads and concrete yard areas shall be designed for heavy duty traffic, sufficient to accommodate heavy loaded vehicles. The access road and concrete yards shall be designed in accordance with Structural Engineer's requirements with regard to the ground conditions. The service yard and road shall include a full drainage system and the yard shall be laid to falls and finished with a brushed surface. All areas shall be formed on consolidated hardcore. Pre-cast concrete road kerbs shall be used throughout.

Precast concrete paving to all fire exit paths.

Block paving to all office paved areas.

Car parking areas for car parking that is separated from any heavy goods traffic shall be concrete, brushed finish and thermoplastic line marking. All externals will be laid to falls and adequately drained.

The office car park will be constructed in tarmacadam areas should include delineation of car parking areas and provision and display of disabled bays with the correct symbols.

### Roads and Footpaths

The Developer shall construct suitable access roadways and footways to the building, the car park and the service yard, in accordance with the Planning Consent and other Statutory Approvals.

### Fencing and Gates

Fencing will be provided to the extent shown on the Architects drawings with gates to the access road.

## 2.18 (Cont'd)

Paladin fencing 2100 mm high to all service yard areas and timber knee rail fencing to the

car parking areas.

#### 2.19 **Drainage**

All drainage shall be installed in accordance with the requirements of the local drainage Inspector and Building Regulations. A complete foul and surface water drainage system shall be incorporated to cater for the whole of the building and shall be sized also to accommodate additional capacity and layout for future expansion. All drainage to be a separate system and suitably discharged to mains adoptable sewer. All drainage work throughout shall be in vitrified clay or concrete. No plastic pipework will be acceptable.

Provide a foul drainage outlet in the warehouse area for future use.

The Contractor shall take due consideration of the design intent with regard to the main foul and surface water systems and shall provide a drainage system in its entirety, including all Approvals, the payment of related connection charges, provision of petrol interceptors, etc as required.

A petrol interceptor should be sized to deal with the total surface area and also for future expanded areas.

#### 2.20 **Landscaping**

A full and complete landscaping scheme will be provided to comply with Local Authority Approvals, including for all topsoiling and for twelve months maintenance.

To be completed in the next appropriate planting season.

#### 2.21 **Cycle and Smoking Stands/Shelters**

Prefabricated proprietary cycle and smoking stands/shelters are to be housed adjacent the car parking areas.

#### 2.22 **Water Main**

A new water main shall be provided sufficient for the development.

#### 2.23 **Telephone**

2 Nr service ducts are to be brought in and terminated within each building, position to be agreed.

#### 2.24 **Incoming Services**

The following incoming services will be provided:

Electricity	-	402 kVA
Water	-	32 mm supply
Gas	-	Supply only

#### 2.24 (Cont'd)

Exclusions

- General power in the warehouse.
- Heating/lighting in the warehouse.
- IT cabling or distribution in the office or warehouse.

- Internal office partitioning.
- Fuel storage area.
- Vehicle wash down area.
- Sprinkler installation.
- Smoke venting or separation curtains in the warehouse.