SITE PREPARATION BULK EXCAVATION AND DISPOSAL Excavate oversite to obtain the required formation levels for construction. Any unsuitable material found at or below formation level will be removed, the resultant void being filled and compacted with approved material.

FILLING AND COMPACTION Making up levels from existing ground levels, after removal of surface soil, to required formation levels using selected excavated material on site, or imported material both to the approval of the Consultant Structural Engineer. All material will be compacted in layers, to obtain the maximum density, giving due consideration to the material.

FOUNDATION BASES AND BEAMS Plain or reinforced concrete to the detailed design of our Consultant Structural Engineer, sufficient to distribute the superimposed structural and live loads safely to the load bearing strata; together with cavity wall construction upto ground floor level. Where exposed above ground level, the external leaf will be constructed of facing brickwork.

STRUCTURAL STEELWORK AND SHEETING RAILS Steel portal frame with pinned bases, grid in bays of approx 6.500cc Portal rafter to be at 22 degree pitch complete with base plates, cleats, gussets, haunches, to include all necessary wind bracing, galvanised sheeting rails and roof purlins and all necessary trimming of steelwork at door and window openings. Where required by Building Regulations the base plates and bolts will be modified to partial fixity in accordance with Constrado Fire Collapse recommendations. In addition to standard external loadings, the structure will be designed to sustain a services load of 0.2kN/m. Hot rolled steelwork will be shotblasted to remove mill scale and rust before painting with a zinc phosphate primer before delivery to site.

ROOF CONSTRUCTION
Kingspan KS1000 RWZero ODP/LPCB Trapezoidal roof panel system.
External weather sheet to be 0.5MM thick steel S220GD to hot dip zinc / aluminium coated steel to BS EN10214: 1992, external coating to be 200 microns thick plastisol. Colour - to be Merlin grey externally, reverse to have light grey polyester coating.
Insulation Core :- to consist of 100mm thick, closed cell, with zero ozone depletion (zero ODP) and LPCB certified firesafe polyisocyanurate (PIR) insulation.
Internal Liner Sheet :- Substrate to be 0.4mm thick hot dip zinc coated steel to BS En10147: 1992 Internal coating to be living Enamel, 15 microns thick, colour - white. Reverse to have light grey polyester coating.
me u - value of 0.22W/m2k
All to comply with new Part L of the current Building Regulations.

RAINWATER GOODS.
Kingspan Highline Gutter System or similar approved, to consist of 0.7mm thick ZA255 Galvalloy hot dip alloy coated steel to BS EN 10214: 1995 plastisol coated 200 microns both sides of gutter

WALL CLADDING
Kingspan Optimo Prisma Coated composite cladding wall panels, colour to be metallic silver, mx U value 0.30W/m2k
EXTERNAL CAVITY WALLS
Outer Leaf :- to consist of 100mm Forticrete Architectural Masonry, Medici Polished in coloured gauged mortar, with 2mm deep recessed type pointing.
Inner Leaf:- 100mm thick, concrete blockwork in plain mortar, for plastering.
120mm wide Cavity with stainless steel safety wall ties incorporating insulating board material of sufficient thickness Kingspan TW50 or similar Walls to incorporate vertical and horizontal damp proof courses, cavity closures, lintels, thresholds, expansion and contraction joints in accordance with sound construction practice.

DRAINAGE All below ground drainage to be vitrified clayware with flexible connections, all drains passing under building to be surrounded in type A granular material minimum 150mm All manholes to be constructed in class B engineering brickwork 225mm thick with step irons at 300mm vert centres or precast conc rings.
Manhole covers to be bs grade 1 to service yards & carparking areas, & bs grade C to landscaped
All gullies to service yard & car park to be 375 x 900 dp.

Waste sizes generally to be as follows
w.h.b. 32Ø with 75mm deep seal trap
sinks 40Ø with 75mm deep seal trap
shower 40Ø with 75mm deep seal trap
urinal 50Ø with 75mm deep seal trap
w.c.'s 100Ø with 50mm trap

All internal manholes to have double seal screw down covers
All wash hand basins to have anti syphonic traps.
All w.c.'s to have AD WC adaptors where connected to G.E.P.
All s.v.p. to have AD400 adaptors where connected to G.E.P.
All sinks to have AD150 adaptors where connected to G.E.P.
All urinals to have AD150 adaptors where connected to G.E.P.
All W.H.B.s to have AD125 adaptors where connected to G.E.P.

Recessed manhole covers to tiled toilet areas.

HEATING AND DOMESTIC HOT WATER:
Heating to be provided by a condensing gas fired boiler system serving steel panel radiators via copper distribution pipework running in the raised floor and riser ducts.
The design criteria will be :
External design temperature -3%
Office internal design temperature 21°
Ancillary and toilet area 18°

The boilers will be wall mounted and provided with a fan assisted flue. The system will have a mains cold water fed pressurisation system with circulation pump and weather compensator control system and time clock control.

Radiators will be installed generally under windows and will be fitted with thermostatic radiator valves for individual control.

VENTILATION

Offices to be ventilated by means of natural ventilation with two stage opening windows providing background and rapid ventilation.
Rapid equal to 1/20th of floor area
Background equal to 400mm2 / m2 of floor area

MECHANICAL VENTILATION: Mechanical ventilation to toilet areas to be by means of electric fans with light switch operation and overrun with ducting to external walls system to be designed to provide 3 no air changes per hour offices to have natural ventilation from opening lights

ELECTRICAL SERVICES

INTERNAL LIGHTING
Office areas will be provided with 600x600mm recessed fluorescent fittings with gull wing design to achieve 'direct/indirect' illumination using colour 84 4000k or equivalent lamps with high frequency control gear.

The direct element of the light output will be controlled via a louvre suitable for VDU screens.

The internal lighting will be in accordance with CIBSE Lighting Guide 3 (2001).

Lighting will be based on an open plan basis. No allowance has been made for additional work to suit internal partitioning.

Toilet areas will have recessed downlighters with low energy fittings.

Reception area to have decorative low energy downlighters and low voltage dichroic downlighters.

Design lux levels
Office areas - 450 lux average
Toilet areas - 250 lux average
Ancillary areas - 350 lux average

External lighting
Will comprise of building mounted security fittings supplemented with column mounted luminaires to achieve 20 lux average as defined by CIBSE Lighting Guide. Note lighting to be provided to light the external escape staircases.

EMERGENCY LIGHTING
Emergency lighting will be provided to illuminate escape routes and emergency exit doors inside and out by inverter packs in general lighting and self contained fittings as appropriate. All to BS5266

Any penetration throught the stair core enclosure to be fitted with fire collar / dampers and any voids filled with fire stop material (30mins fire rated)

FIRE ALARM SYSTEM
Fire alarm system to be provided to comply with BS5839 to suit L3 specification comprising of manual call points to escape routes and automatic detection to any voids greater than 800mm

Note - Any fitting out of premises should not increase the travel distances.

Fire exit signage to comply with BS5499
APPROPRIATE EXIT SIGNAGE TO BE PROVIDED OVER EACH FINAL EXIT DOOR OFFICE ACCOMMODATION INCORPORATING GRAPHIC RUNNING MAN SYMBOL AND DIRECTIONAL ARROW.
THE SIZE OF EXIT BOXES SHOULD BE APPROPRIATE FOR THE MAXIMUM VIEWING DISTANCE INVOLVED. THE FIRE PRECAUTIONS (WORKPLACE) REGULATIONS 1997 REQUIRE RELEVANT EMPLOYERS TO MAKE A SUITABLE AND SUFFICIENT ASSESSMENT OF THE RISKS FROM FIRE IN THE WORKPLACE, AND HOW THEY AFFECT THE SAFETY OF THEIR EMPLOYEES AND ANY OTHER EMPLOYEES WHO MAY BE AFFECTED BY THEIR UNDERTAKING. THE OCCUPIER SHOULD CONTACT LOCAL FIRE AUTHORITY WITH REGARD TO THE PROVISION OF SUITABLE FIRE FIGHTING EQUIPMENT.

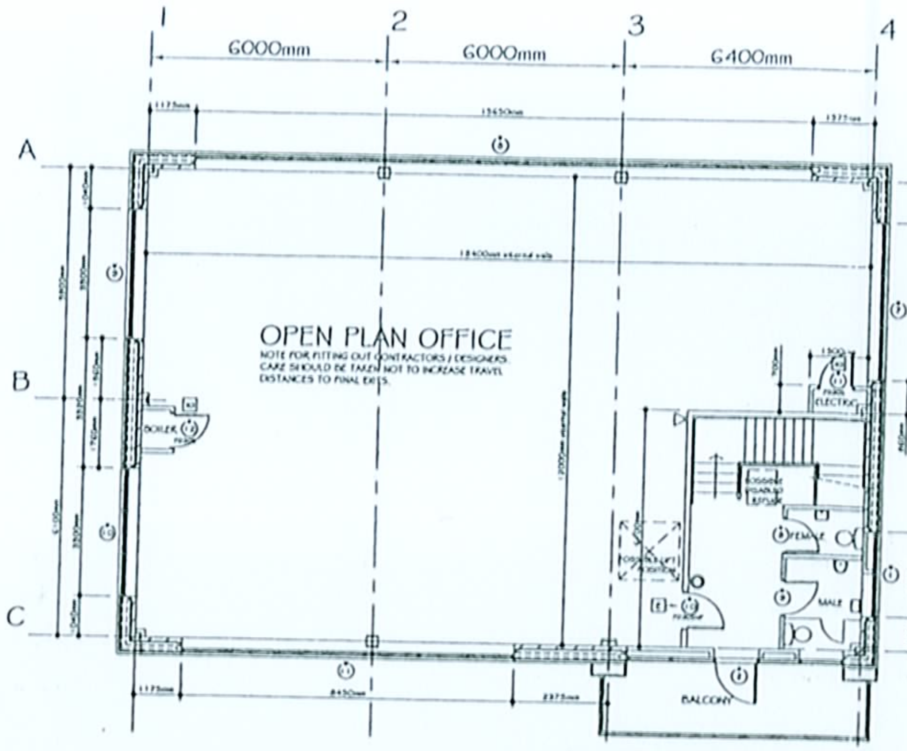
PERSONNEL DOORS (to offices) Fully glazed comprising factory sealed double glazed units set within a synthaprufen powder coated, aluminium framework, the whole being complete with draught and weather seals, security lock, letter and back plate and matching furniture. The whole will be secured to the surrounding structure.

WINDOWS (offices) To be syntha pulvin or similar powder coated aluminium frames with tilt & turn opening lights, internally glazed with double glazing with tinted anti sun glazing. See later details. Office entrance/exit doors in curtain wall panel to be syntha pulvin or similar powder coated aluminium to match above, see later details. glass to be toughened in the critical locations in accordance with part N1 of approved document.

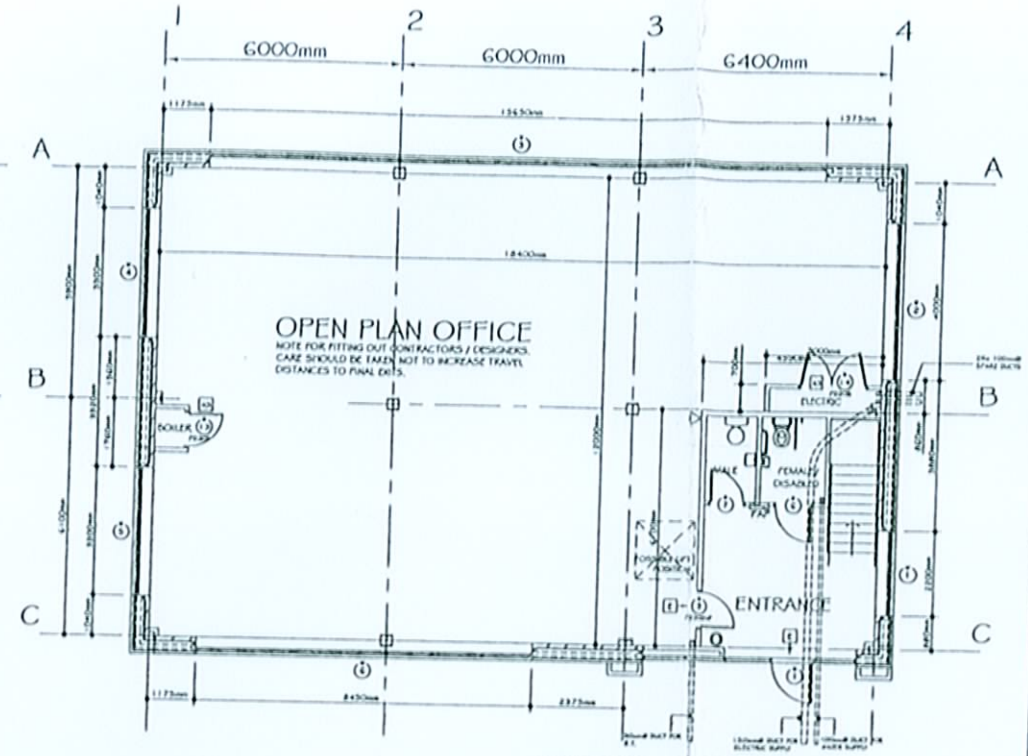
DISABLED RAMPS:
To main office entrances - approach not to exceed 1 in 20 slope and have tactile paving where route crosses carriageway and have dropped kerbs at crossing point

ENTRANCE FINISHES
All entrance core and landings to have fire sterile wall & ceiling finishes with class O surface spread of flame.

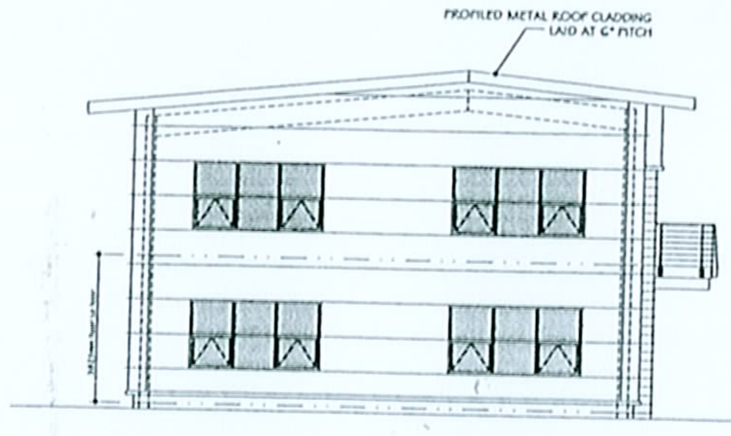
MAIN STAIRCASE
Precast concrete staircase.
1200mm wide, 250mm goings, 3825mm floor to floor, 23 risers at 166mm per rise, handrails fixed to both sides 900mm above flights and 1000mm above landings.



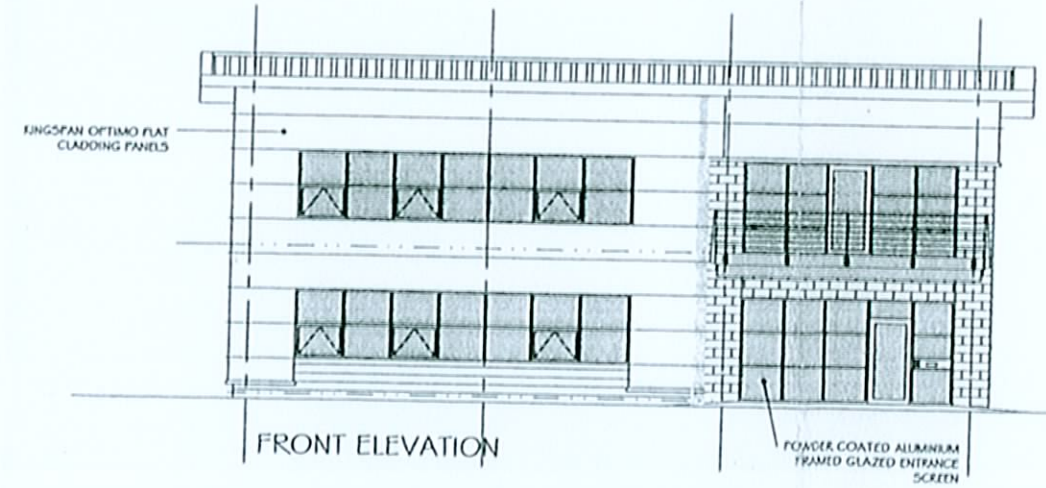
FIRST FLOOR PLAN



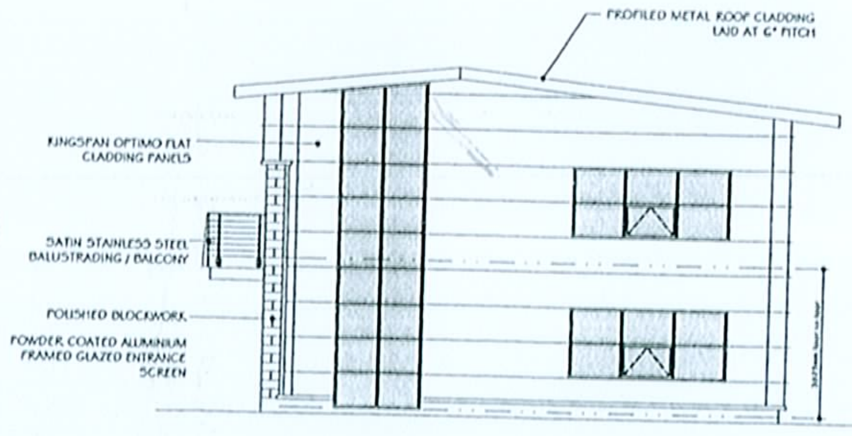
GROUND FLOOR PLAN



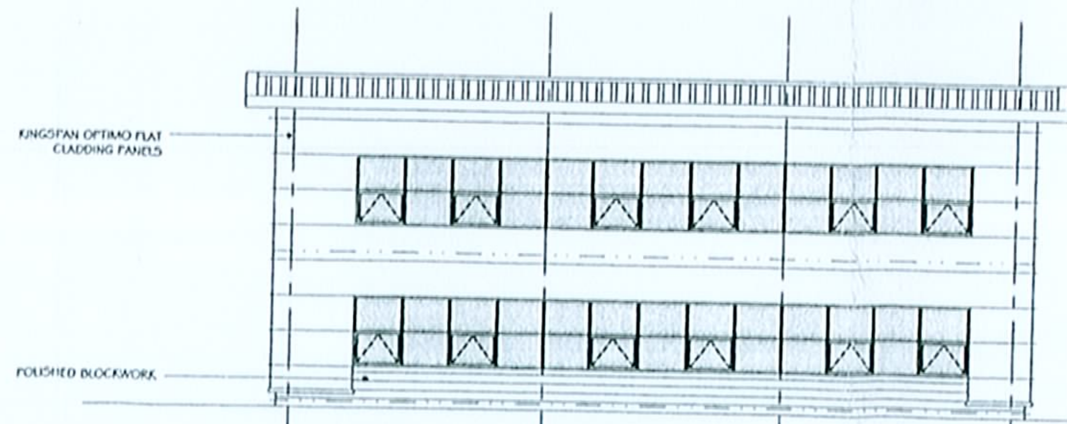
GABLE ELEVATION



FRONT ELEVATION



GABLE ELEVATION



REAR ELEVATION

Notes

FIRE PREVENTION LEGEND

- FIRE ALARM PANEL
- EMERGENCY LIGHTING POINT 3HR NON MAINTAINED
- AUDIBLE WARNING DEVICE
- P.B. DOORS FITTED WITH PANIC BAR WITH SIGNAGE
- FIRE ALARM CALL POINT
- AFFF EXTINGUISHER
- CARBON DIOXIDE EXTINGUISHER
- 2KG POWDER EXTINGUISHER
- 9 LITRE WATER EXTINGUISHER
- ILLUMINATED FIRE EXIT BOX SIGN
- HOSE REELS
- HEAT DETECTOR
- SMOKE DETECTOR
- FIRE BLANKET
- FIRE DOOR KEEP SHUT NOTICE
- FIRE DOORS KEEP CLEAR NOTICE
- 'FIRE DOOR KEPT LOCKED SHUT' NOTICE
- GENERAL FIRE NOTICE ON DOOR
- GENERAL FIRE NOTICE ABOVE DOOR
- FIRE EXIT SIGN
- FIRE EXIT DIRECTIONAL SIGN

ALL FIRE FIGHTING EQUIPMENT TO PROVIDED BY CLIENT / TENANT

Revisions

Rev	Date	Description

BUILDING MANAGEMENT SERVICES LTD

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Elland, West Yorkshire
HX5 9BW
TELEPHONE : ELLAND (01422) 371616
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Building Management Services

Client

C.D.P. LIMITED

Project

TIGER COURT
KINGS BUSINESS PARK
KNOWSLEY

Sheet

UNIT 10 ELEVATIONS & FLOOR PLANS
4,000sq ft. UNIT RIGHT-HAND CORE

Drawn N.D. JORDAN Date NOV.06

Scale 1:100 @ A1

Drawing No.