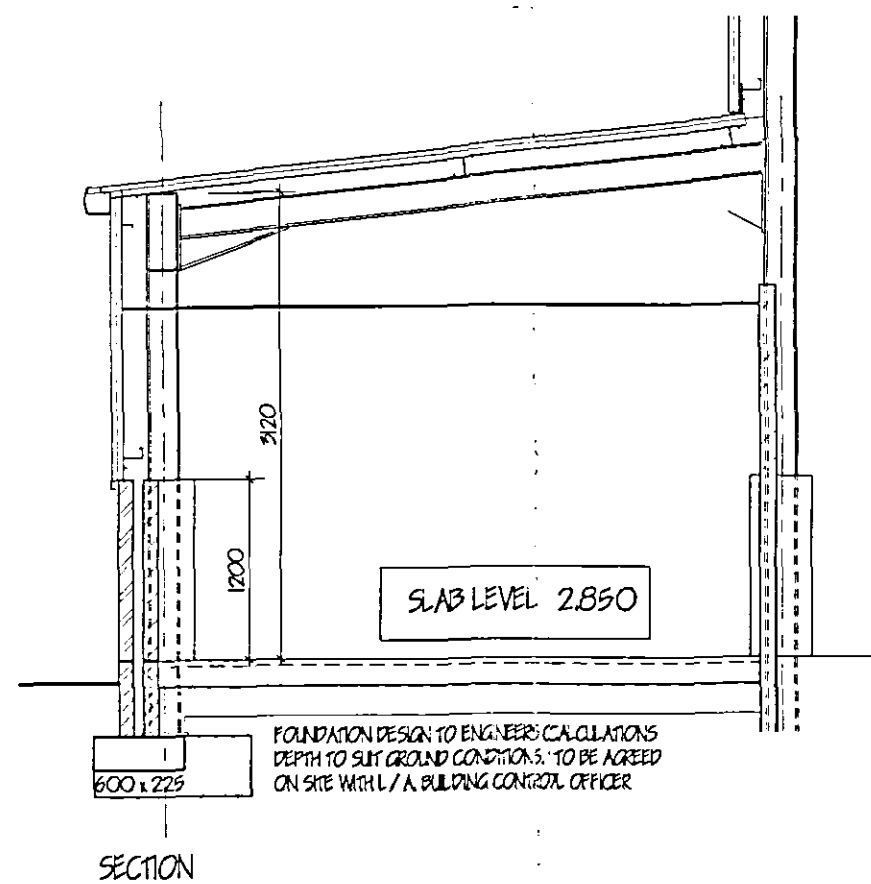




HOT WATER AND SPACE HEATING.
Provide wall mounted Gas fired combination boiler with fan assisted balanced flue. Fit drabable wire and to externally to boiler flue. Provide timer switch and outside zone thermostat to building. Fit thermostatic control valves to all radiators. All hot pipework to be insulated to B.R. 11, pt. 5. To M.O.T. bay and Workshop provide 2 No. gas fired tube linear heaters suspended from Steel work.

GENERAL.
All electrical installations to be in accordance with the latest I.E.E. Regulations.
Provide hot & cold water supply to all wash basins.
All electrical switches, socket outlets, telephone to be positioned at appropriate heights between 450mm & 1200mm from F.F.L.

STEELWORK.
Form all steel work to Structural Engineers recommendations. All Roof, Side and Gable purlins / rals to be "Ward Building Components Ltd" or similar fixed in accordance with manufacturers instructions out side steel work.

FOUNDATIONS.
Under cavity walls as shown provide strip concrete foundations 225 x 600 GEN4 mix to B.S. 5923; pt. 1991. All foundations taken down to bear on lead bearing strata min. depth of 600 to top of foundations should suitable soil conditions be found on site then foundations shall be taken down to a depth of 1 metre below ground level. Where internal walls are taken up off floor then thicken out slab to 300 x 600 or if considered necessary be taken down to 225 x 450 foundation. Isolated pad foundations to Steel columns to Engineers details. All RC25 min to B.S. 5923; pt. 1991.

WALLING.
285 cavity walling to consist of face brickwork to B.S. 5923/1974 for clay bricks and B.S. 187/1978 for calcium silicate bricks. 65 cavity build into cavity Redwood cavity wall batts insulation boarding in accord. with makers instructions and agreement cert. No. 89/1087. 100mm Tamvac Fair Faced solid insulation blocks or similar. Cavity walls tied together using galvanneal iron twist ties set 750 horizontally and 450 vertically to B.S. 1245/1978 wall ties positioned at 300 vertical centres at all unbonded courses of cavity. Close cavities with "Thermobate" preformed doors and provide bitumen felt DPC to C.P. 121. External walls to have min. "U" value of 0.45 W/m2 deg. C. Internal walls of 100/150mm Tamvac Fair Faced solid insulation blocks.

SUB STRUCTURE WALLING.
100mm dense concrete blocks to B.S. 6073 pt. 1991; DPC to external wall positioned in accordance with CP 102 min. 150 above finished ground level. Weak mix concrete fill to base of cavity no denser than 225 to DPC. All brickwork below DPC to be F.L. quality.

LEVEL ENTRY THRESHOLD.
Provide "Ester" or similar level entry threshold to 950mm wide principal entrance to building.

Ceilings. (Sales area)
Provide 150mm total thickness class fire insulation laid over "Armstrong" Prima Teksar suspended ceiling with class 0 surface spread of flame.

FULL DRAINAGE.
Inspection chamber construction to be "Oval" and installed in accordance with makers' instructions with the internal diameter related to the depth in accordance with B.S. 850/1985. Fall drainage pipes to be 110mm dia. UPVC, to B.S. 4660/1985 flexibly jointed and laid to makers' instructions to a fall of 1:170 bed and surround with 100mm pea gravel. Where pipes pass under floors encase in 150mm pea gravel. Where pipes pass under handoverhangs surround in 150mm concrete with flex joints to correspond with joints in pipework. Provide 65 x 100 prestressed concrete lintel bridging where pipes pass through walls, allow 50mm gap around pipe, opening finished both sides of wall with rigid sheet material. Soil and vent pipes to be 110mm dia. PVC to B.S. 4514/1985 and to extend 900mm above window head terminating with PVC balloon. Waste pipes to be generally 40mm dia. If over 3.0m long run increase to 50mm dia. All PVC to B.S. 5943; 1979 complete with rodding eyes at every change of direction. Down and sink to have 75 deep seal traps.

SURFACE WATER DRAINAGE.
"Ward Building Components" Triline rainwater gutters to 100mm square, rainwater pipes 110mm dia. underground pipes flexibly jointed to a fall of 1:170 pipes bedded and surrounded in pea gravel.

WINDOWS & GLAZING.
All windows and principal entrance frame to be powder coat aluminium (Red). Double glaze throughout. Minimum 12mm air gap to all units. All glazing between F.F.L. and 800mm high and between F.F.L. and 1500mm high in doors and side lights to be safety glass to B.S. 6206. All windows / doors to be draught sealed.

VENTILATION.
All windows to provide background ventilation to rooms min. 4000mm sq permanent free air ventilation per room. All following rooms to have in addition to above Vial mounted mechanical extractor fan. Kitchen to extract min. 60 litres per second. W.C.'s to extract min. 6 litres per second with 15 minute overrun. Internal W.C. to have light switch operated extracts fan.

CONSTRUCTION HAZARDS.
The following operations are identified as involving hazards in construction.
a) Working close to underground or over head power cables.
b) Demolition and modification to adjacent existing buildings containing asbestos materials.
c) Excavation adjacent to existing foundations and effluent tanks below ground.
d) Steel erection close to boundary or existing building.
e) Working with scaffolding.
f) Working at height.
g) Roofing operations.
h) Grillage operations.
i) Working on insulation or large laminated insulated panels in areas with restricted access.
j) Disposal of soil / wastes.
k) Welding to existing steelwork.

HAZARDOUS MATERIALS.
The following materials could be deemed a hazard.
a) Cement and cement based products.
b) Solvent based paints.
c) Oil and factory waste sewerage located in existing drainage system.
d) Dust generated during construction (including asbestos).
e) Sealants and adhesives.
f) Insulation material.
g) Heavy structural steelworks and timbers.
h) Reinforcing bars.

The above lists is not a definite list as the Principal contractor or any subcontractor may specify materials which could be deemed a hazard over and above those listed.

TESTING & CERTIFICATION.
If the proposed building is less than 1000 square metres in area, then design details and construction technique method statement can be submitted to the Local Authority prior to commencement on site. The Main Contractor is to provide a certificate or declaration relating to the design details and fluecap showing compliance with B.R. L2. In buildings larger than 1000 square metres provide an infra Red thermographic survey in accordance with BS report 176. Air tightness tests are to be carried out in accordance with CEI TM 25:2000. Thermal performance of the building is to comply with BS EN ISO 15789/1990 limiting thermal bridging and air leakage and in accordance with ISO 2001. Design of metal cladding to comply with document L2. NCMATECH Note 14. Main Contractor is to provide all certification for tests carried out.

FIRE DOORS.
All doors to be min. 850mm wide and have 30 minute fire resistance and fitted with self closers. All frames / doors to have intumescent strip fitted. All office doors to be fitted with vision panel of 400mm x 100mm to Class C of B.S. 6206.

EMERGENCY EXIT DOORS.
All doors to be min. 850mm wide and fitted with panic latch. Doors to be operable to 180 degrees. Provide "Push Bar to Open" sign on door. Emergency Exit sign over to B.S. 5499 pt. 100mm LETTERING. 1.0m x 1.0m concrete landing level with internal F.F.L.

LIGHTING.
Provide "Stemless" or similar approved twin 1.8m high Tri-phosphor T10 with fluorescent ballasts fixed at ceiling level to provide the following lighting levels.
Provide "Fluorite" or similar approved High Bay Mercury Banded Fluorescent (HBF) lamps.
Workshops 500lux at work surface level.
Offices 300lux at work surface level.
Storage areas 150lux at vertical plane.
Kitchen 200lux at table level.
Toilets 150lux at floor level.
Corridors 120lux at floor level.
All lighting levels are minimum and subject to specific client requirements.
Provide emergency light fittings with full tube conversion in positions shown on plan all to B.S. 5266 pt. 1.

FLOORS.
Floor slab to comprise of 200mm min. clean and well consolidated Portland cement concrete exceeding 40mm min. size, with 90mm binding, 150mm reinforced concrete RC40 mix with 2 layers A42 reinforcing fabric min. cover 25mm from top & bottom. Provide 1200mm polythene D.I.M. lapped min. 500mm in all directions and taken up edge of floor slab. Construction joints of 900mm max 16mm dia. tie bars at 600mm c/c. Floor Finish Finish.

PITCHED ROOF.
For pitched roof covering of "Canus Trisomes" or similar Composite Panel with 80mm core thickness, to provide "U" value of 0.25 W/m2K, Class 0 Surface spread of Flame to B.S. 476 Pt. 7. Cladding system fixed to "Ward Building Components Ltd." or similar galvanneal steel purlins spaced to Structural Engineers recommendations. All fixed in accordance with manufacturers instructions.

VERTICAL CLADDING.
For pitched cladding of "Canus Trisomes" or similar Composite Panel with 50mm core thickness, to provide "U" value of 0.25 W/m2K, Class 0 Surface spread of Flame to B.S. 476 Pt. 7. Cladding system fixed to "Ward Building Components Ltd." or similar galvanneal steel purlins spaced to Structural Engineers recommendations. All fixed in accordance with manufacturers instructions.

LINELS.
All linels to be manufactured by Messrs. I.G. and to be installed in accordance with makers' instructions, and to have min. and bearing of 150mm. Internal linels to be 12/100/150 Ply tape. Linels to be underlaid with 12/12 Fibre board or receive 12mm render and skim.

LIMITATIONS.
This drawing is limited in the amount of information contained and does not purport to contain a full specification of the works. It is solely for the purpose of obtaining Planning / Building Regulation approval. The drawing must not be used as a contract document alone.
All dimensions shall be taken from site from actual work. Under no circumstances shall measurements be scaled from this drawing for construction or ordering purposes. All given dimensions shall be checked by the Builder / Contractor and will be the responsibility from commencement of site works.
The works will not be supervised or inspected on site by G.R. Merchant, or any representative thereof. It is the client or their appointed agents responsibility to control workmanship, substitution of materials, adherence to specification, variations to contract etc.

COPYRIGHT RESERVED.
Copies of this drawing must be made only with the written permission of G.R. Merchant.

STANDARDS.
All materials to be new unless otherwise stated and all components and materials etc. to be used fitted and installed etc. in strict accordance with manufacturers instruction and relevant Code of Practice. Materials shall conform to appropriate British Standard Specification or BPA Certificate or European Code equivalent.

HEALTH & SAFETY.
The Employer / Client shall ensure that the selected contractor is conversant with and adopts all measures necessary to achieve compliance with Health & Safety legislation for Building Sites and Work Places. The Employer / Client is advised that should the works need to comply with the Construction Design and Management Regulations an independent Planning Supervisor will be required.

SCOPE OF THE WORKS.
The works shall comprise of all that is shown on the drawing and details. Work that may not be specifically shown but may be reasonably inferred as necessary to carry out the works shall be deemed to be included.

- ⊗ EMERGENCY LIGHTING TO B.S. 5266 Pt. 1.
- ⚠ DRY POWDER FILLED EXTINGUISHER CAPACITY 4.5kg.
- ⚠ WATER FILLED EXTINGUISHER CAPACITY 9 litres
- ⊞ EMERGENCY EXIT DOOR WITH SIGN OVER TO B.S. 5499 pt. 100mm LETTERING
- ⊞ PUSH BAR TO OPEN SIGN

07 OCT 2004		Rev: 1348	
DETERMINED PLAN		CLIENT AMENDMENTS CLIENT AMENDMENTS CLIENT AMENDMENTS ref. revision date	

G. R. MERCHANT
IENG AMICE FIWO
ARCHITECTURAL, STRUCTURAL AND LAND DRAINAGE CONSULTANTS
Unit 4, Wrights Mews
12A Park Road, Holbeach,
Spalding, Lincs. PE12 7EE
Tel: 01408 430000
Fax: 01408 426744
E-Mail: G. R. Merchant @ Merchant. FD. Co. UK

Project
GARAGE WORKSHOP
PLOT 5, EDISON COURT
SOUTH HOLLAND ENTERPRISE PARK
SPALDING Lincs.

Client
HORSESHOE GARAGE.

Drawing
FLOOR PLAN / SECTION

Job Ref.	Drawing No.
665-03	01-C

Date	Drawn
APRIL '03	J.C.

Scales
1:50

DO NOT SCALE FROM THIS DRAWING
This drawing is copyright and may not be altered, traced, photocopied or used for any other purpose other than that for which it is issued.
The General Contractor is to check all dimensions on site and report any discrepancies to the Architect.
All details shown on this drawing including foundations are based upon typical site conditions unless to the contrary. No responsibility can be accepted for abnormal conditions which may be discovered during construction unless reported to the Architect as that design amendments may be considered. Site will not be used for construction until the Architect has established specific site conditions before foundation work is undertaken.

