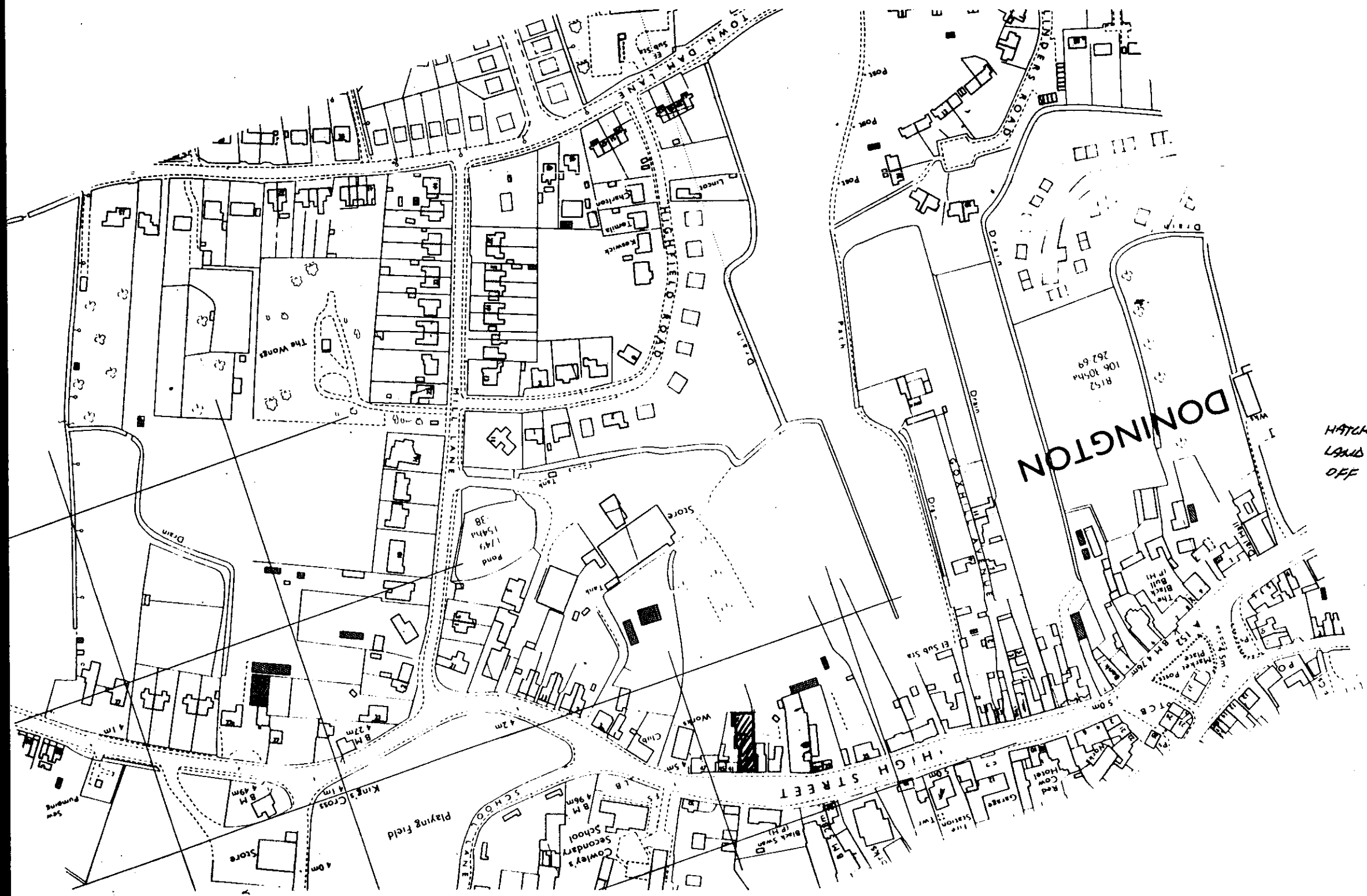
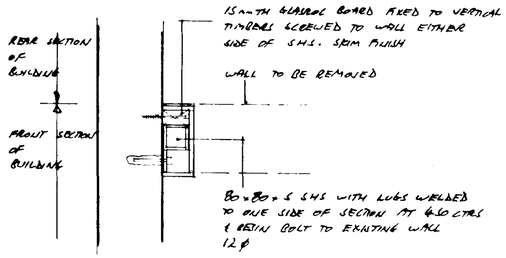

TOWN FARM LANE
HIGHFIELD ROAD
LINDEN'S ROAD
DONINGTON
HIGH STREET
SCHOOL LANE
The Woods
Playing field
Crowley's Secondary School
Pond
Store
Club
Post Office
Red Cow Hotel
Black Bull (P.H.)
Black Swan (P.H.)
Sewage Pumping Station
Telephone Kiosk
Market Place
Drain
Path
Wall
Fence
Hedge
Tank
Tank
Tank

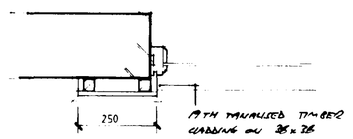
Steven Kidd & Associates 23 Holland Road, Spalding Lincs. PE11 1UL Tel/Fax 01775 769563	Client PODDINGTONS Structure FOUNDATION PAD TO 152UC	REF. No. 220 SHEET No. F / 20/1 BY S.K DATE 06/09/00 CHECKED
CALCULATION SHEET		

SPECIFICATION FOR FOUNDATION MATERIALS

1. Top of foundations is to be 300 mm below F.P.L. unless noted otherwise
2. Concrete backfill is to be provided over the whole base area, unless noted otherwise, to a minimum thickness of 100 mm.
3. The column shaft is to be solidly encased in concrete of minimum grade C20, ensuring a cover all round of at least 100 mm, as recommended in BS 5950 : Part 2 [Cl. 6.3.3].
4. The minimum grade of concrete to be used for the base (in accordance with BS 8110 [Cl. 6.2.4.1]), is grade RC35 (ie a characteristic cube strength of not less than 35 N/mm² at 28 days),with a minimum cement content of 300 kg per cubic metre, or equivalent prescribed mix.
   This assumes non aggressive soil conditions, ie compliance with Class 1 of Table 6.1 [BS 8110], with respect to sulphates in the soil. If this is not the case then the concrete grade used should be increased accordingly.
5. The minimum cover to the reinforcement in the base is to be taken as 75 mm, in line with the recommendations of BS 8110 [Cl. 3.3.1.4] and BS 8004 [Cl. 2.4.5].
6. The reinforcement is to be mild steel in accordance with the recommendations of BS 4449.
7. The base is to be adequately vibrated to ensure the correct compaction of the concrete.
8. The safe bearing pressure of the soil has been taken as 80 kN/m² Any variation to this should be referred back to design office at the above address.



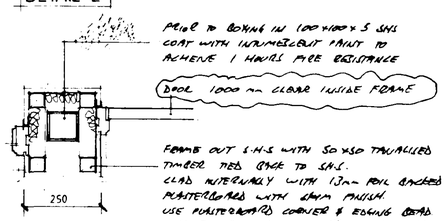
DETAIL 1

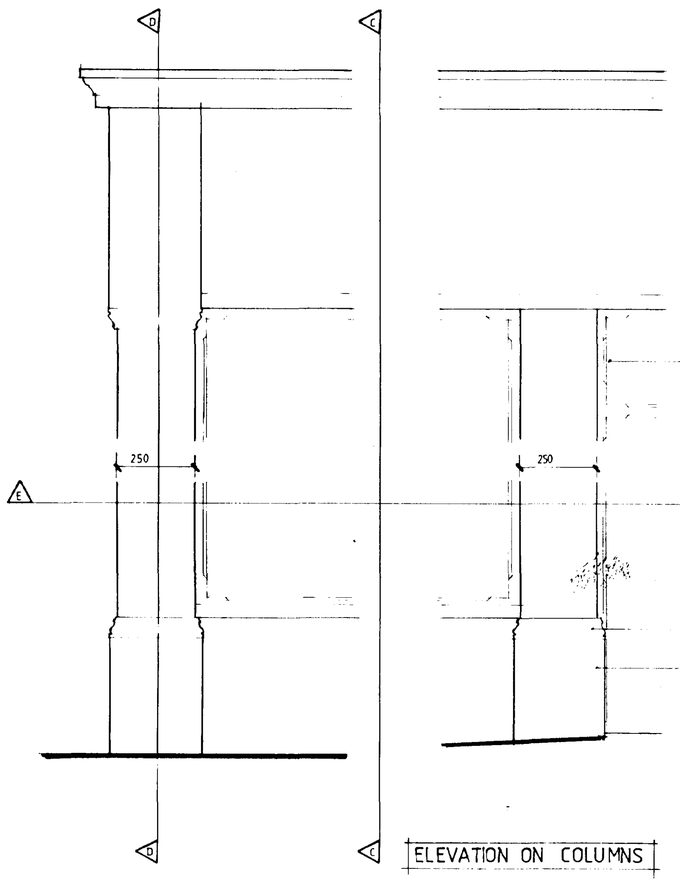


SECTION EE

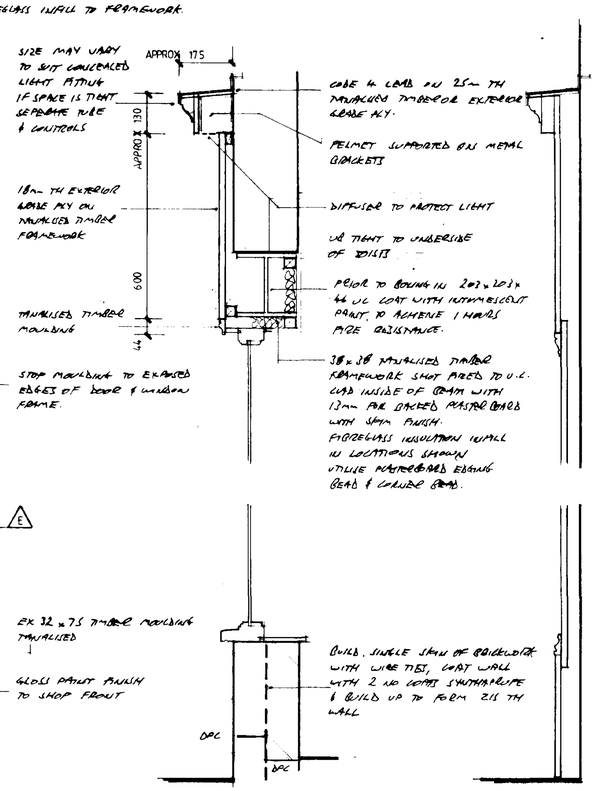


DETAIL 2





ELEVATION ON COLUMNS



SECTION C-C

SECTION D-D

Steven Kidd & Associates
Structural & Civil Engineering Consultant

27

STRUCTURAL STEELWORK SPECIFICATION

Structural steel shall be to BS4 for hot rolled sections and to BS4848 Parts 2 and 4 for hot rolled hollow sections and angles respectively. Hot rolled sections shall normally be Grade Fe 430B to BS EN 10025 except hollow sections which shall be Grade S275J2H or S355J2H to BS EN 10210-1 and shall be free from loose rust, scale and pitting and be truly straight and of uniform section throughout.

Mild steel bolts, nuts and lock nuts shall conform to BS4190 (Black hexagon bolts) and BS 3692 (Precision hexagon bolts) or BS 4933 (Black cup and countersunk head bolts as appropriate. Washer shall be in accordance with BS 4320 and provided to all connections.

The threaded portion of each bolt shall project through the nut for at least one thread.

Connections made with single bolts shall not be allowed except where specifically approved.

End connections to diagonal bracing's using 2 No bolts in which 1 No bolt is placed in a slotted hole formed in the end cleat is not allowed unless verified by an engineer.

Welding shall be by Metal-Arc welding in accordance with BS 5153. All appropriate clauses of that standard shall be taken as incorporated therein.

Electrodes for Manual Metal-Arc welding shall be in accordance with BS EN 440 and the shielding of gas is to comply with BS 4105.

Fabrication shall be in accordance with BS5950.

Hot rolled sections cut to length during fabrication shall be inspection for evidence of weakness by internal laminations. Pieces with laminations shall be discarded and not used on the structure.

The erection of structural steelwork shall be in accordance with BS 5950 Part 2 and BS 5531.

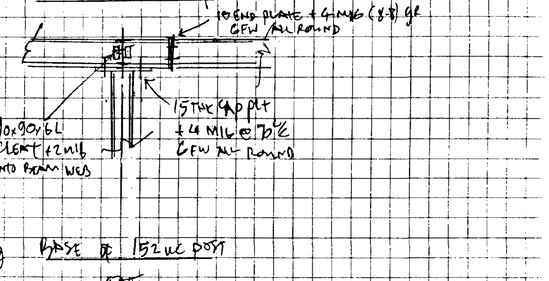
During erection the work shall be securely restrained by temporary bracing's strutting or fixings necessary to resist all erection forces, wind sway and temporary construction loads.

No steel member shall be bent, deformed or under undue stress prior to usage.

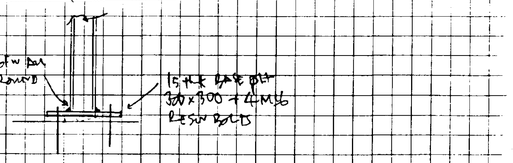
STEVEN KIDD Chartered Structural Engineer TEL/FAX: 01775 769563	39 High St DONNINGTON	Ref No. 220 SHEET No. F26 BY SK DATE Sept 2000 CHECKED
CALCULATION SHEET		

STRUCTURAL CONNECTIONS

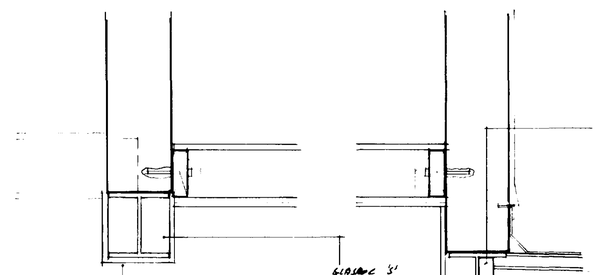
① HEAD OF 152UC POST



② BASE OF 152UC POST



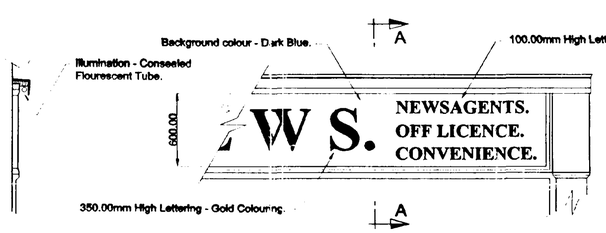
③ HEAD OF 100x100x5 SHS ! USE SIMILAR PRINCIPLES TO ABOVE BUT 10 TH CAP PLATE & BASE PLATE 250 x 250 x 10 THK + 4 M16 RESINS



DETAIL 3

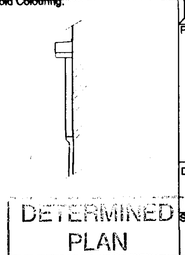
SIMILAR DETAIL TO 203 x 203 x 46 UC BEAM
178 x 102 x 19 UB BEAM
178 x 102 x 19 UB T.F.

DETAIL 4



Section A - A

ELEVATION ON SIGN AS TAKEN FROM PLANNING DRAWING



DETERMINED PLAN

RECEIVED
25 OCT 2000
Ref: 1268/00

Contractor To Check All Dimensions On Site Before Work Commences.

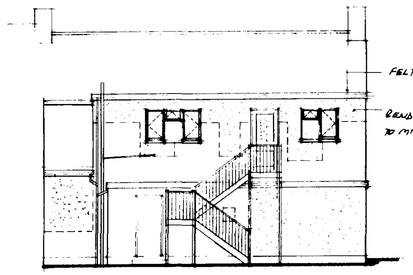
Rev.	Date.	Init.	Revision Details.

PODDINGTONS
Architectural Design Consultants
Rabbit Hollow, Church Lane, North Rauceby, Sleaford, Lincs. NG34 8QU
Tel. (01529) 488033 Fax. (01529) 488044

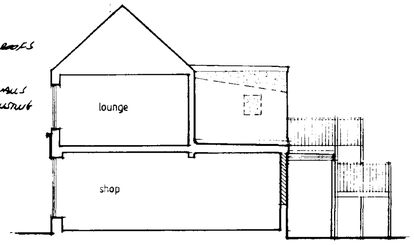
Project.
PROPOSED ALTERATIONS & EXTENSION AT 39, HIGH STREET DONINGTON. FOR MESSRS DONINGTON NEWS.

Drawing.
DETAILS

Scale.	Drawing. No.
	2966- 3
Drawn.	
Date. SEPT 2000	Rev.



SOUTH proposed



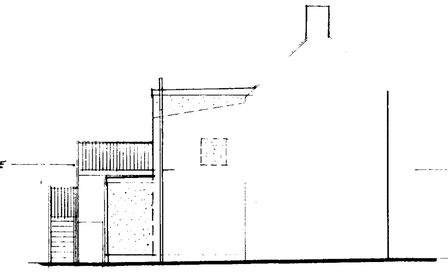
WEST proposed



NORTH proposed

ALTERATIONS TO SHOP FRONT COVERED BY PLANNING PERMISSION H04-1008-99

PAINTED TIMBER STARCASE



EAST proposed

FOUL DRAINS
250 ø PVC-U WITH 100 m RGA GRAVEL BED & SURROUND. PEDESTRIAL DUTY COVER. 100 ø PVC DRAINS FLEXIBLE JOINTED WITH 100 m DEP RGA GRAVEL BED & SURROUND. LAY DRAINS TO A FALL OF BETWEEN 1 in 40 & 1 in 80

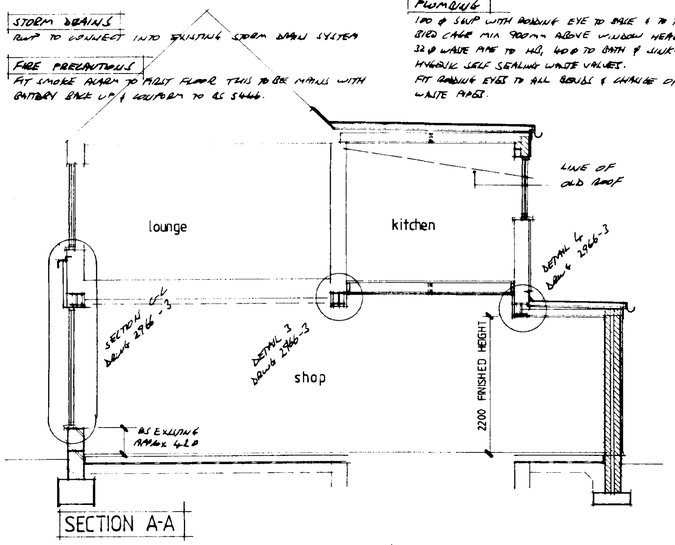
STORM DRAINS
PUMP TO CONNECT INTO EXISTING STORM DRAIN SYSTEM

FIRE PRECAUTIONS
FIT SMOKE ALARM TO FIRST FLOOR THIS TO BE MAINS WITH BATTERY BACK UP & COMPLY TO BS 5446.

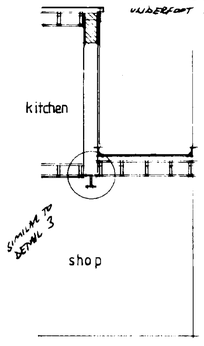
FIRE PRECAUTIONS
INSTAL EMERGENCY LIGHTING IN SHOP DESIGN TO BS 5Y ELECTRICAL CONTRACTORY & COMPLY TO BS 5266 PT1
PROVIDE 9 LITRE WATER FIRE EXTINGUISHER IN SHOP.

PLUMBING
100 ø SVP WITH RODDING EYE TO BASE & TO TERMINATE WITH BIRD CAGE MIN 900 m ABOVE WINDOW HEAD
32 ø WASTE PIPE TO H&B, 40 ø TO BATH & SINK. HEPWORTH HYGIENIC SELF SEALING WASTE VALVES.
FIT RODDING EYES TO ALL BENDS & CHANGE OF DIRECTION OF WASTE PIPES.

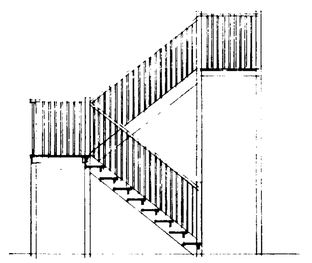
STAIRS
REMOVE EXISTING INTERNAL STAIRCASE & FORM EXTERNAL STAIRCASE IN TANALISED TIMBER.
MINIMUM TREAD 220 m CLEAR WIDTH.
APPROX OVERALL RISE 3014 (CHECK ON SITE) 17 RISERS OF APPROX 177.3 mm. TREADS TO HAVE MINIMUM GOING OF 220 m
EX 100 x 100 TIMBER POSTS ON 400 x 400 x 200 TH CONCRETE PADS (OR CUT OFF & FIX TO CONCRETE SLAB)
ALL HANDRAILS TO BE 900 m HIGH (MEASURED VERTICALLY ABOVE PITCH LINE OF FLIGHT) VERTICAL BALUSTRADING. NO OPENING IN BALUSTRADING OR OPEN RISERS TO PERMIT PASSAGE OF 100 SPHERE.
FIT PROPRIETARY NON SLIP FINISH TO TREADS EG STEPSURE WATERFORD SYSTEM BY ABATTOIR FLOORING & DAC'S LTD.



SECTION A-A



SECTION B-B



STAIRS SECTION

FLAT ROOF FIRST FLOOR
STRIP OFF EXISTING A/C PITCHED ROOF BUILD UP WALLS & FORM FLAT ROOF COMPRISING POLYBASE 18S FLEXI RESIN SEAMLESS ROOFING SYSTEM ON 12 TH EXTERIOR GRADE PLY ON 47 TH CELOTEX TR4 ON 12 TH EXTERIOR GRADE PLY WITH NOGGINGS TO SUPPORT ALL BOARD EDGES ON PARAPETS WITH 1 in 40 FALL ON 100 x 50 SC3 JOISTS AT 400 CTRS TO SECTION A-A & 150 x 50 SC3 GRADE JOISTS AT 400 CTRS TO SECTION B-B. CROSS STRUTTING TO JOISTS TO BE 25mm GALVANISED STEEL STRAPS AT MAXIMUM 2m CTRS. SECURE JOISTS TO WALLS WITH 30 x 5 M/S GALV STRAPS AT MAX 2m CTRS. TO SECTION B-B 1 LAYER OF 12.7 PLASTERBOARD & SKIM. TO SECTION A-A 2 LAYERS OF 12.7 WBRE RESILIENT BOARDS WITH ALL JOINTS STAGGERED & NOGGING TO SUPPORT LOWER BOARD EDGES. SKIM FINISH. FLASH POLYBASE 150 UP WALL & MOULD OVER & LEAD COVER FLASHING

EAVES
100 METAL GUTTER WITH 65 ø DOWNPIPES. EX 25 TH TIMBER FASCIA. CONTINUE UP WALL INSULATION TO LINE UP WITH UNDERSIDE OF PLYWOOD DECKING.

CAVITY WALL
265 TH CAVITY WALL COMPRISING
100 TH TARMAC METRELITE BLOCK WITH RENDERED FINISH TO MATCH EXISTING . OBELL MOUTH BRID TO DPC
65 TH CAVITY FILLED WITH 65TH ROCKWOOL CAVITY WALL BATTS
100 TH TARMAC METRELITE BLOCK WITH RENDER & SKIM FINISH.
TIE NEW WALLS TO EXISTING WITH FURAX WALL EXTENSION SYSTEM OR SIMILAR.

STUD WALL
FORM WITH 100 x 50 TIMBER FRAMEWORK WITH VERTICALS AT 400 CTRS INFILL BETWEEN JOISTS WITH 100 TH FIBREGLASS. 12 TH PLASTERBOARD WITH SKIM FINISH (USE PAIL BACKED PLASTERBOARD TO BATHROOM)

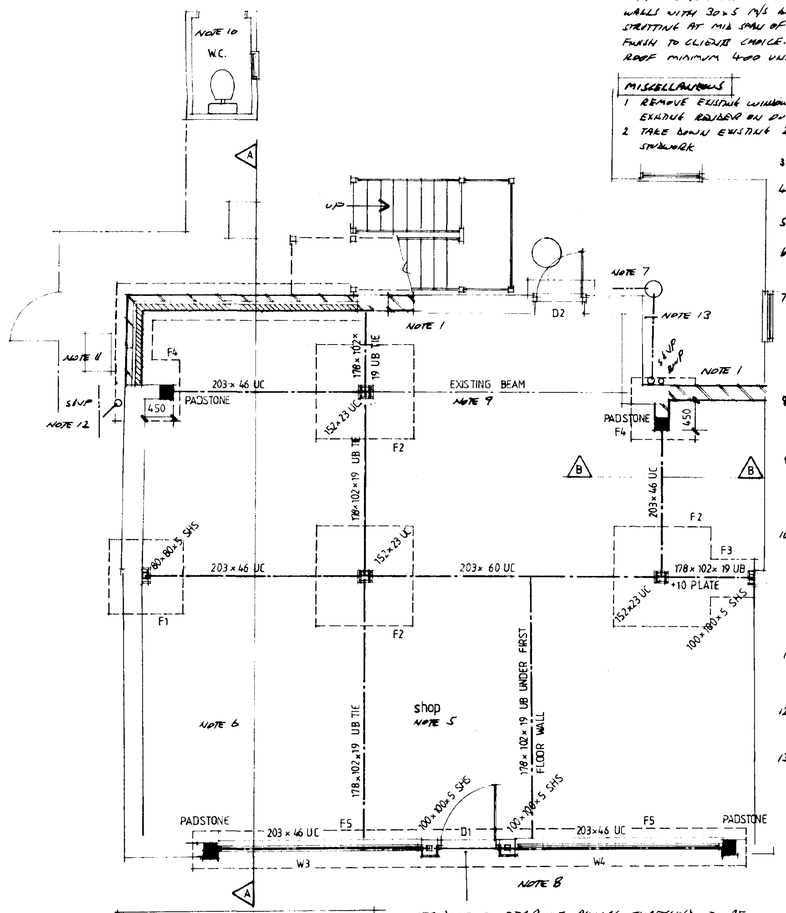
JOINERY
TO FIRST FLOOR STANDARD RUBY JOINERY WITH CENTRED DOUBLE GLAZED UNITS WITH 1.4 TYPE LOUVRE OVER.
TO GROUND FLOOR PURPOSE MADE TIMBER JOINERY WITH SINGLE GLAZING.

D1	MINIMUM CLEAR OPENING WIDTH OF FRAME	STEEL BEAM OVER	PURPOSE MADE DOOR & FRAME WITH LAMINATED GLASS TOP PANEL TIMBER BOTTOM PANEL.
D2	EXISTING OPENING	EXISTING LINTEL	FIT & MAKE GOOD ARCHITRAVE DOOR, DOOR CLOSER, SMOKE SEAL, WEATHERBOARD SEAL.
D3	900 x 2100 STRUCTURAL OPENING	1.6 BOX 200 x 1200 LONG	FRAME FILL DOOR 45MT BOTE 2x40
W1	1200 W x 1050 H STRUCTURAL OPENING	1.6 BOX 200 x 1500 LONG	210 CV DPP 8000 m² T/U DOUBLE GLAZE 24/4
W2	1770 W x 1050 H STRUCTURAL OPENING	1.6 BOX 200 x 2100 LONG	310 CV 8000 m² T/U
W3	APPROX 3780 WIDE x H/GH	STEEL BEAM OVER	PURPOSE MADE TIMBER DOUBLE GLAZE LAMINATED
W4	"	"	"

FIRST FLOOR
STRIP OUT EXISTING FIRST FLOOR TO REAR OF HOUSE & RE FORM FLOOR LEVEL WITH THAT AT FRONT OF HOUSE WITH 22 TH T&G CHIPBOARD FLOORING ON 150 x 50 SC3 GRADE JOISTS AT 400 CTRS (DOUBLE UP IN AREAS SHOWN ON FLOOR JOIST PLAN). HERRINGBONE STRUTTING MID SPAN. IN WALL BETWEEN JOISTS WITH 100 TH GLASS WOOL. FIX GYPROC RESILIANT BARS TO UNDERSIDE OF JOISTS & CLAD WITH 2 LAYERS OF PLASTERBOARD, TOP LAYER TO BE 19 mm PLANK BOTTOM LAYER 12.7 MARGES EDGE GYPROC SCRIMBOLD WITH ALL JOINTS STAGGERED. TAPE & FILL JOINTS. SKIM FINISH

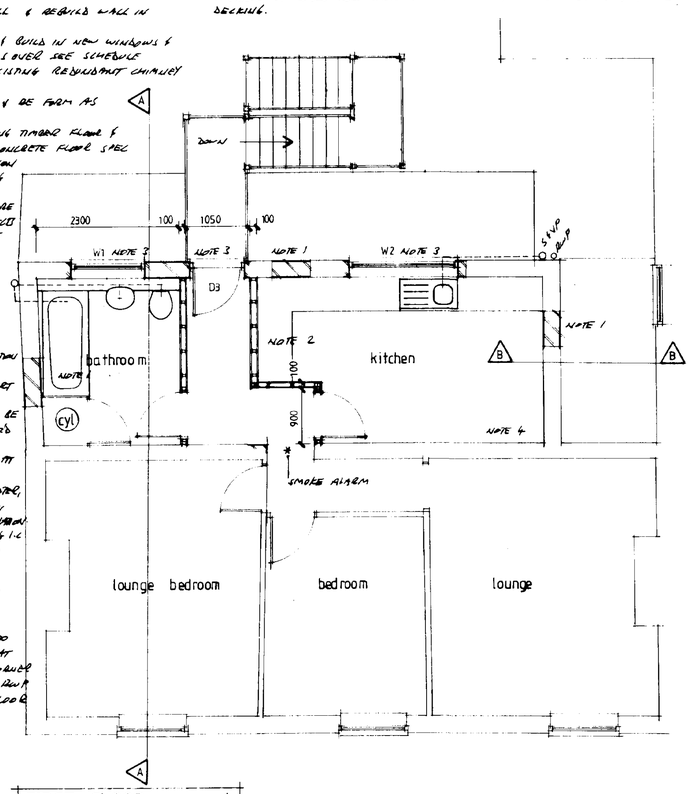
DPC
PVC DPC IN EXTERNAL SKIN TO BE MINIMUM 150 ABOVE GROUND LEVEL
PVC DPC TO INNER SKIN TO BE CONTINUOUS WITH DPM IN FLOOR

GROUND FLOOR
REMOVE EXISTING WINDOW & BRICK UP OPENING CUT, TOOTH & BOND TO EXISTING RENDER ON OUTSIDE
TAKE DOWN EXISTING 215 TH BRICK WALL & REBUILD WALL IN STONEWORK
FORM OPENINGS & BUILD IN NEW WINDOWS & DOORS 1.6 LINTELS OVER SEE SCHEDULE
TAKE DOWN EXISTING REDUNDANT CHIMNEY & MAKE GOOD
STRIP OUT SHOP & RE FORM AS SHOWN
TAKE UP EXISTING TIMBER FLOOR & REPLACE WITH CONCRETE FLOOR SPEC AS PER EXTENSION
REMOVE EXISTING WALL & EXTEND FOUL DRAIN - ENLARGE FOUL DRAIN CONNECTED INTO 1.C REMOVE CARRYING OUT WORK
EXISTING SHOP FRONT TO BE REMODELLED AS SHOWN
EXPOSE EXISTING BEAM FOR INSPECTION BY STRUCTURAL ENGINEER IT PART OF PROJECT
EXTERNAL W.C TO BE UPGRADED AS NEED TO COMPLY WITH HEALTH & SAFETY AT WORK ACT.
W.C, H.B, HOT WATER, HEATING, LIGHTING, INSULATION, VENTILATION
RE BUILD EXISTING 1.C IF NEED BE TO PROXIMITY OF EXTENSION
CONNECT SVP INTO EXISTING DRAIN RUN
REMOVE WATER TO GROUND FLOOR FLAT REAR GROUND CORNER & CONNECT INTO NEW SERVING FIRST FLOOR



GROUND FLOOR proposed

SET DOOR TO REAR OF PILLARS. THRESHOLDS TO BE SUITABLE FOR WHEELCHAIR USE. RAMP UP FROM PATH UP TO FLOOR LEVEL. GRADIENT OF RAMP NOT TO EXCEED 1 in 20.

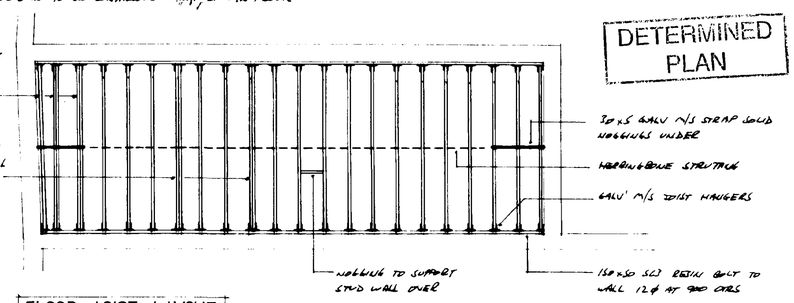


FIRST FLOOR proposed

GROUND FLOOR
TAKE UP SECTION OF TIMBER FLOOR & REPLACE WITH CONCRETE FLOOR + FORM FLOOR IN EXTENSION WITH
50 TH SAND & CEMENT SCREED ON 100 TH STG CONCRETE ON 1200 g POLYTHENE DPM ON MINIMUM 150 BLINDED & CONSOLIDATED HARDCORE.

FOUNDATIONS
600 x 225 STG STRIP FOUNDATIONS TO CAVITY WALL
PAD F1 1400 x 1200 x 300 TH RC25 REINFORCED WITH 5 NO 16 ø LONGITUDINAL BARS AT 250 SPACING 5 NO 16 ø TRANSVERSE " " " "
PAD F2 1800 x 1600 x 400 TH RC25 REINFORCED WITH 5 NO 20 ø LONGITUDINAL BARS AT 350 SPACING 6 NO 20 ø TRANSVERSE " " " "
PAD F3 EXTEND PAD F2 600 WIDE TO FORM PAD/STRIP FOUNDATION TO S.W.S POST.
PAD F4 1000 x 1000 x 400 TH RC25 NO REINFORCEMENT
PAD F5 600 W x 400 TH x 9000 LONG RC25 GROUND BEAM 4 N 720 LONGITUDINAL BARS AT 100 CTRS IN TOP " " " " " " " BOTTOM 7 8 LINKS AT 300 CTRS.
SEE ALSO FOUNDATION SPECIFICATION ON DRAWING 2966-3
ALL FOUNDATIONS TO BE TAKEN DOWN TO SUITABLE LOAD BEARING STRATA AT AGREED ON SITE WITH L.A BUILDING INSPECTOR
CONCRETE BLOCKS BELOW FL/GL.
LEAN MIX CONCRETE CAVITY FILL TO WITHIN 150 m OF LOWEST DPC

STRUCTURAL STEELWORK
TO BE AS DETAILED ON DRAWING 2966-2 & 2966-3
FIRE PROTECT STRUCTURAL STEELWORK WITH GYPROC GLASWOOL BOARDS & NON-COMBUSTIBLE PANEL ALL TO ACHIEVE 1 HOURS FIRE RESISTANCE
WHERE BEAMS CLEAR OF MASONRY PROVIDE 215 x 215 x 2 COURSE CURB & ENGINEERING BRICK PADSTONE (NO PADSTONE NEEDED FOR THE GIRDERS)



FLOOR JOIST LAYOUT

DETERMINED PLAN

CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE BEFORE WORK COMMENCES.

revision	date	init.	revision details
A	13.9.00	JT	DETAILS ADDED
B	22.9.00	JT	LOFT LAYOUT ADDED

PODDINGTONS
Architectural Design Consultants
44 Double Street, Spalding, Lincs PE11 2AB
Tel: 01775 761856 & 768296 Fax 01775 710218

project:
PROPOSED ALTERATIONS & EXTENSION AT 39, HIGH STREET, DONINGTON, FOR MESSRS DONINGTON NEWS.

drawing

scale 1:50 1:100	drawing no 2966-2
	A B
date JULY 2000	drawn
	checked

OCT 2000
1268/00