PITCHED ROOF SPACE VENTILATION: (Breathable Felt)
Provide breathable, untearable roofing felt for roof space ventilation, strictly fitted in accordance with manufacturers specification and British Board of Agrement certificate. All penetrations into the roof space must be properly sealed.

ROOF INSULATION:
Provide and install 300 mm thick Rockwool Rollbatts or similar approved lightweight insulation (0.037 W/mK) comprising 100 mm thick insulation laid between the ceiling chords of trusses and 200 mm laid over.

RAINWATER GOODS:
Main guttering to be Brett Martin or similar cast effect 112mm half round guttering supported on rise and fall brackets running into 68mm diameter downpipes. Installation to comply with B.S. 6367: 1983 including stop ends internal and external angles and sealed joints.

Rainwater goods collecting surface water from flat roof to be increased in size to 100mm diameter down spouts from rainwater collection hopper.

INTERNAL WALL CONSTRUCTION:
Timber studwork partition walls are to be formed using 75 x 50mm ungraded softwood comprising head and sole plates, vertical studs at maximum 450mm centres, and horizontal noggins at maximum 600mm centres and face both sides of the frame with single layer of 12.5mm 'Gyproc' Wall board or similar approved. Construction meets half hour fire protection requirements.

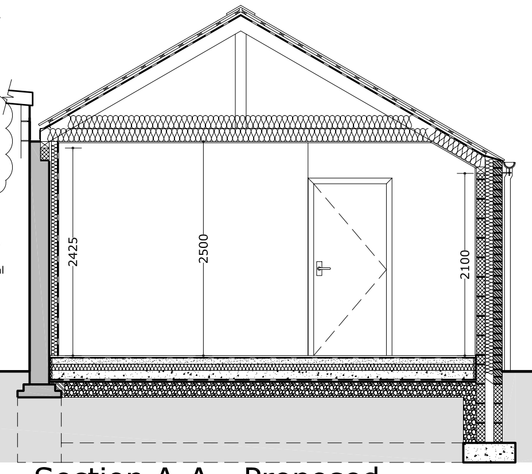
DRY LINING TO EXISTING SOLID EXTERNAL WALLS:
Existing external wall construction comprising 20mm render layer and 220mm solid brickwork wall to be upgraded by installing dry lining to be formed using 1 No. layer of 70mm Extratherm Thin-R XT/TL insulated dry lining board laid over TYVEK or similar approved breathable membrane mechanically fixed to 25mm x 50mm battens @ 600cm/cs fixed to internal face of external walls.

Window reveals to be upgraded using 30mm Gyproc ThermaLine BASIC plasterboard and skim fixed to exposed brickwork.

If walls show signs of damp then it is recommended that the above be incorporated within a new timber stud framework wall.

ROOF INSULATION - AREAS OF WASHTUB CEILING:
Insulation to be 150mm Xtratherm Eco-Versal Pitched Roof Board or same thickness of similar approved having a minimum K-Value of 0.023 W/mK fitted entirely between rafters to be installed in strict accordance with the manufacturers written instructions.

CEILINGS - HALF HR FIRE RESISTANCE:
Ceilings lined with 12.5mm thick Gyproc Wallboard or similar approved with taped joints and skim or 'Artex' finish.



Section A-A - Proposed

PITCHED ROOF CONSTRUCTION - CUT ROOF:
Approved roof tiles fixed strictly in accordance with the manufacturers instructions on 50 x 25mm tanalised soft wood tile battens on 50 x 25mm tanalised soft wood tile counter battens on breathable felt to manufacturers specification, on traditional cut roof to Structural Engineers roof construction details. Rafters at specified pitch as stated on drawings, at max. 600mm centres or as specified by engineer and install 25 x 100mm longitudinal, diagonal and chevron wind bracing to comply with BS 5268, Part 3, 1998. 100 x 65mm preservative treated wallplates bedded in mortar and secured with 30 x 5 x 100 x 1000mm galvanised steel anchor straps fixed at maximum 2.0m centres. Secure trusses to wallplate using proprietary galvanised steel truss clips. Restrain gable walls by strapping to three no. adjacent roof trusses with 30 x 5 x 100 x 1400mm galvanised steel restraint straps fixed at maximum 2.0m centres along the lines of rafters and ceiling chords. Install solid softwood noggins min. 38 x 75mm between rafters located below restraint straps.

EXTERNAL WALL CONSTRUCTION:
310 mm cavity wall construction comprising 110 mm nominal approved facing brickwork outer leaf laid in English Bond, 100 mm wide cavity to be fully filled with 100mm Isowool CWS cavity wall insulation batts or similar approved having a maximum K Value of 0.036W/mK, installed in accordance with manufacturers written instructions. Inner leaf to be 100mm thick 'Tarmac Toplite Standard' block with a minimum compressive strength of 3.5N/mm² or similar approved having a maximum K Value of 0.15W/mK, installed in accordance with manufacturers written instructions. Internal skin to be faced with 12.5 mm thick Gyproc Wallboard on dabs with plaster skim. Ensure wall insulation finishes at least 150 mm below line of floor insulation level to prevent any cold bridging occurring.

Incorporate approved stainless steel wall ties at max. 750 mm horizontal centres, 450 mm staggered vertical centres and 225 mm centres at jambs of openings. Close cavities at jambs and sills of openings with either insulated thermabate cavity closer, or concrete block returns to outer leaf, incorporating Damcor or equal approved insulated d.p.c. installed in strict accordance with the manufacturers written instructions.

Incorporate pitch polymer d.p.c's in both leaves of the cavity wall construction and to internal walls taken down to foundations at minimum 150 mm above finished ground level.

MORTAR:
Unless the Planning Department have insisted on a lime based mortar then mortar should be to the proportions given in BS5628. Part 1: 1992 for mortar designation (iii) or 1:6 Portland cement and fine aggregate measured by volume of dry materials or of equivalent where appropriate, of greater strength, which is compatible with the masonry units and position of use. Note: All construction to be in accordance with BS5628 Part 1: 1992 and Part 3 2001 and sections A1 and A2 of Approved Document A of the Building Regulations 2004 edition.

MASONRY WALLING BELOW GROUND LEVEL:
Masonry walling below ground level to be either Class 3 common brickwork or Class A blockwork laid in cement mortar (1:3). Commence facing brickwork outer leaf 3no. courses below the D.P.C level. Infill the cavity of the external wall construction up to 225mm below D.P.C. level with lean-mix concrete, angled to the external leaf & trowelled smooth. Provide horizontal weep holes at 900mm centres.

GROUND FLOOR CONSTRUCTION:
Floor construction to be to finished to clients specification (Ribbon Slate) installed in accordance with manufacturers written instructions on separating layer of building paper to BS 1521: 1972 (1994) (Specification for waterproof building papers), Grade B1F or polythene sheet (not less than 125 micron / 500 gauge), laid over 70mm sand and cement screed reinforced with loose laid mesh at 250mm centres on 70mm Xtratherm Eco-Versal flooring insulation board or similar approved high density insulation boards having a maximum K Value of 0.022 W/mK on minimum 100mm thick designated mix GEN3 concrete oversite floated off smoothly, on 'Visqueen' or equivalent 1200g polythene D.P.M. lapped onto inner leaf of external wall at D.P.C. level. To be laid over 150mm thick clean approved compacted hardcore base with 25mm thick sand blinding cover. Also install 25mm thick insulation boards vertically around the perimeter of the slab against the inner face of the external cavity wall construction.

Where floor slab abuts existing footings then provide non compressible material in the form of a 20mm joint of mastic soft filler over the footing.

FOUNDATIONS:
Site MUST be clear of topsoil, trees, roots and vegetation to a minimum depth of 150 mm prior to excavation to the satisfaction of Local Authority Building Control.

Cavity walls generally to be built off 225 x 600 mm wide strip foundations, minimum depth 900mm; 1000mm deep if in clay. Depth of foundations to suit ground conditions and to be agreed on site by the Local Authority Building Control after inspection of the excavated base .

In certain locations, localised trees or shrubs may require wider and deeper trench fill foundations, to be agreed by Local Authority Building Control.

Single skin internal load bearing walls generally taken down to foundations are to have 225 x 450mm wide - depth as above, trench fill foundations.

Foundations to be designated mix concrete GEN 1.

Where unexpected or problematic ground conditions are encountered then a structural engineer should be consulted immediately.

FOUL & SURFACE WATER DRAINAGE:

Below Ground Drainage - General
Pipe work below paved/grassed areas to have at least 600mm cover to be laid on a 150mm thick bed of pea gravel and the trench backfilled with selected excavated material to a minimum depth of 150mm above the crown of the pipe. Pipe work below paved/grassed areas having less than 600mm cover to be protected from damage by a reinforced concrete cover slab with a flexible filler and at least 75mm of granular material between the top of the pipe and the underside of the flexible filler below the slabs. Pipe work below driveways to be surrounded with 100mm thick concrete to prevent damage from heavy vehicles.

Drainage runs passing beneath the building to be bedded and surrounded with 100mm of pea gravel and the trench backfilled with selected excavated material.

Where the crown of the pipe is within 300mm of the underside of the slab, special protection should be provided by reinforced concrete slab on compressible material, on minimum 75mm pea gravel surround. Where pipe runs are installed within 1000mm of the building, bed and surround the pipe with concrete up to the underside of the foundation slab, where the distance exceeds 1000mm bed and surround pipe with concrete in accordance with Diagram of Part H1 of the Building Regulations 2002.

Below Ground Drainage - Foul Water
100mm-diameter PVCu pipe work to BS EN1401-1: 1998 and BS4660: 2000 laid to fall 1:40 installed strictly in accordance with the manufacturers instructions.

Where it is necessary to backfill the drainage trench with concrete in order to protect the nearby foundations, movement joints formed with compressible boards shall be installed at each socket/sleeve joint. Where a drain passes through a wall, form an opening to give at least 50mm clearance all around the pipe and mask both sides of the opening with suitable rigid sheet material to prevent the ingress of fill or vermin. Ensure adequate lintel support over openings.

Property manholes and inspection chambers to be 'Hepworth' or similar approved Polypropylene Inspection Chambers installed strictly in accordance with the manufacturers written instructions. Inspection chambers up to a depth of 1.2m to have min. internal dimensions of 450 x 450mm with min 430 x 430mm steel cover and frame, heavy duty in access, road and parking areas. Manholes between depths of 1.2m and 3.0m to have minimum internal dimensions of 1200 x 1000mm with 600 x 600mm steel cover and frame, heavy duty in access, road and parking areas. Manholes below 1.0m deep are to be fitted with step irons or fixed ladder. Manholes and inspection chambers should have removable non-ventilating covers of durable material.

Gully assemblies shall be installed as indicated on the proposed plan layout drawing. To receive discharge from waste pipework above ground level gullies shall be square hopped type with integral back inlet and low back P-trap. All gully assemblies shall be bedded and surrounded in concrete, designated mix GEN 1.

Above Ground Drainage - Foul Water
100mm diameter PVCu soil and vent pipe, terminating with an approved cage or perforated cover guard, not less than 900mm above any door or window opening into the building located within 3.0 metres.

PVCu waste pipe work from appliances to be as follows:
WC's 100mm diameter 'Panekta' or similar approved w.c connector.
Wash Hand Basins: 32mm diameter for run lengths up to 1.7 metres maximum.
Sinks: 40mm diameter.
All appliances to be fitted with 75mm deep seal traps.

Below Ground Drainage - Surface Water
All pipework as for foul water except laid to fall of 1 in 60. All gullies to be square hopper type with integral back inlet & 90º-rest bend, all bedded and surrounded in concrete, designated mix GEN 1. All drainage works to be carried out in accordance with BS8301: 1985 & Approved Documents 'H1' & 'H3' of the Building Regulations 2000, 2002 Edition.

These plans have been prepared from a copy of the planning drawings as prepared and provided by others. No on site survey has been undertaken by DesignQube therefore it is essential that all dimensions are checked on site prior to commencement and discrepancies reported.

This drawing has been prepared for the purpose of obtaining Planning and or Building Regulation Approvals only. The contractor is responsible for taking and checking all dimensions and levels on site prior to commencement and reporting back any discrepancies to the client and the architectural consultant.

All materials specified on this drawing are to be used in strict accordance with manufacturers written instructions and current codes of practice. Variations to the specifications within these drawings or associated documents are at the contractor's own risk.

This drawing is the copyright of DesignQube By Steven Brown Ltd and must not be reproduced without written consent.

© DesignQube By Steven Brown 2011

ACCESS STATEMENT:
The proposed development will see the existing outbuildings to the rear of Old Nicks Tavern, North Street, Horncastle converted into a micro brewery. The occupancy of the building will be relatively minimal as it will be restricted by the size of the building with visitors frequenting the premises to taste and purchase the products brewed and bottled on site, it is envisaged on a daily basis.

The design standard followed is generally Approved Document M (2004). The proposals allow access for disabled persons to the premises by the principal entrance which is sufficient in size to accommodate wheel chairs. A sheltered access is not practical given the listed nature of the building although it is envisaged that visitors to the site will be guided by the proprietor who would meet them in the main public house area and therefore visitors would not have to wait outside. The building will be provided with a level access and served by a 1:12 access ramp.

Provision for a disabled wc is not included as size constraints dictate that such an installation would be impractical. Difficulties in navigating the difference in levels between the public house floor level and the w.c area which is raised would make it impractical for all but ambulant disabled persons to access the existing toilet area. A provision could be made by way of providing grab rails etc in order to make at least one cubicle in each of the toilets suitable for ambulant disabled people.

Provisions will be made by the building owner for disabled persons within the working environment on a need to be basis.

The approach, entrance(s), horizontal circulation, access to services, emergency egress etc, to be as stated above. Emergency egress covered generally by the access to the building. Appropriate signs and staff training to be implemented.

ALL doors to be of contrasting colour to surrounding frames. Where doors are fitted with a latch, the door opening furniture should be able to be operated with one hand using a closed fist, e.g. a lever handle, all door opening furniture should contrast visually with the surface of the door and should not be cold to the touch.

Due to the level nature of the access there will be no further requirements in terms of access ramps.

Due to the restricted stepped access from the public house and what are relatively minor alterations to the existing toilet area which is seeing a reduction in the area utilised for the said purpose and what is effectively a refurbishment of the existing, it is not proposed to include a disabled W.C.

The scheme has been developed using Approved Document M (2004).

Other than previously discussed, the sites location does not particularly impede nor constrain compliance with the relevant design guidance. There are no constraints to be 'reasonably' overcome.

Copies of the drawings, including this access statement, will be issued to ALL parties involved with the project including the end user. The design philosophy has been developed with the end user. The principals of the Access Statement will be reported to the end user.

Proposed Side Elevation

Proposed Rear Elevation

CAVITY TRAYS:
To be installed over all lintels (windows & doors) & air bricks with weepholes & stop ends fitted. Weepholes must not be more than 450mm apart and there must be a min. of 2 weepholes per opening

BONDING TO EXISTING BRICKWORK:
New brickwork & blockwork to be bonded to existing masonry using 'Catnic' Stronghold or similar approved stainless steel angle cramps at max. 225mm vert. ctrs.

INTERNAL LIGHTING: (Energy Efficient)
Provide and install energy efficient lighting units to micro brewery. Units to comprise fixed lighting (either basic lighting outlets or complete luminaries) that only take lamps having a luminous efficacy greater than 45 lumens per circuit-watt (i.e. fluorescent tubes and compact fluorescent lamps). Not GLS tungsten lamps with bayonet cap or Edison screw bases.

LEAD FLASHING:
Lead flashings are to be tucked into mortar joints by at least 25mm. All wedges to have lead plugs and be pointed. Upstands and projections onto roof tiles on lead flashings to be a minimum of 150mm. Lead flashings are to be minimum Code 4 or Code 5 when used for guttering purposes.

ACCESSIBLE SWITCHES & SOCKET OUTLETS:
All switches & socket outlets for lighting & other equipment in all rooms shall be located at appropriate heights between 450 mm & 1 200mm above finished floor level.

SURFACE FINISHES OF WALLS, CEILINGS ETC:
In all circumstances the surface finishes of walls and ceilings should generally be of a standard not lower than Class 1 - Building < 30m²

LINTELS:
Below Ground - Lintels to openings in masonry walling below ground level are to be approved pre-cast reinforced concrete lintels, ensure minimum end bearings of 100mm.

Cavity Walls - Lintels to openings in cavity wall construction above ground level are to be IG standard insulated galvanised steel lintels types L1/S75 or L1/S100 for standard duty loading conditions and type L1/HD75 or L1/HD100 for heavy duty loading conditions. All lintels to have min. 100mm end bearings for spans up to 1200mm and 150mm end bearing for span greater 1200mm. Cavity trays to be fitted above all lintels and provided with stop ends and weepholes at 450mm apart with min. 2no. weepholes per tray.

Solid Walls - Lintels to openings in solid wall construction above ground level are to be IG Thin Joint Solid Wall Lintel type L1/TW-215 for standard duty loading conditions and type L1/HDTW-215 or L1/ITW-215 for heavy duty loading conditions. All lintels to have min. 100mm end bearings for spans up to 1200mm and 150mm end bearing for span greater 1200mm.

Internal Walls - Lintels to openings in internal single leaf blockwork walls above ground level to be approved steel or concrete lintels with minimum 100mm end bearings. All lintels are to be selected and installed in strict accordance with the manufacturers written instructions.

All lintels should be to the manufacturers load span tables.

ROOM VENTILATION:
All rooms to have purge ventilation provided by one or more openable windows with total free ventilation area not less than 1/20th room floor area with some part of the vent opening at high level (typically 1.7m above finished floor level). The main access door will meet this requirement. All rooms to have background ventilation provided by adjustable trickle ventilators in the top rails of windows to provide a minimum 8,000mm² free ventilation. Ventilators to be reasonably secure and located typically 1.70m above finished floor level.

Micro Brewery - Air Spectrum Jetstream 100 In-duct spray system as required by the Planning Department and approval Condition No. 4

Kitchen - Existing extraction system to be retained.

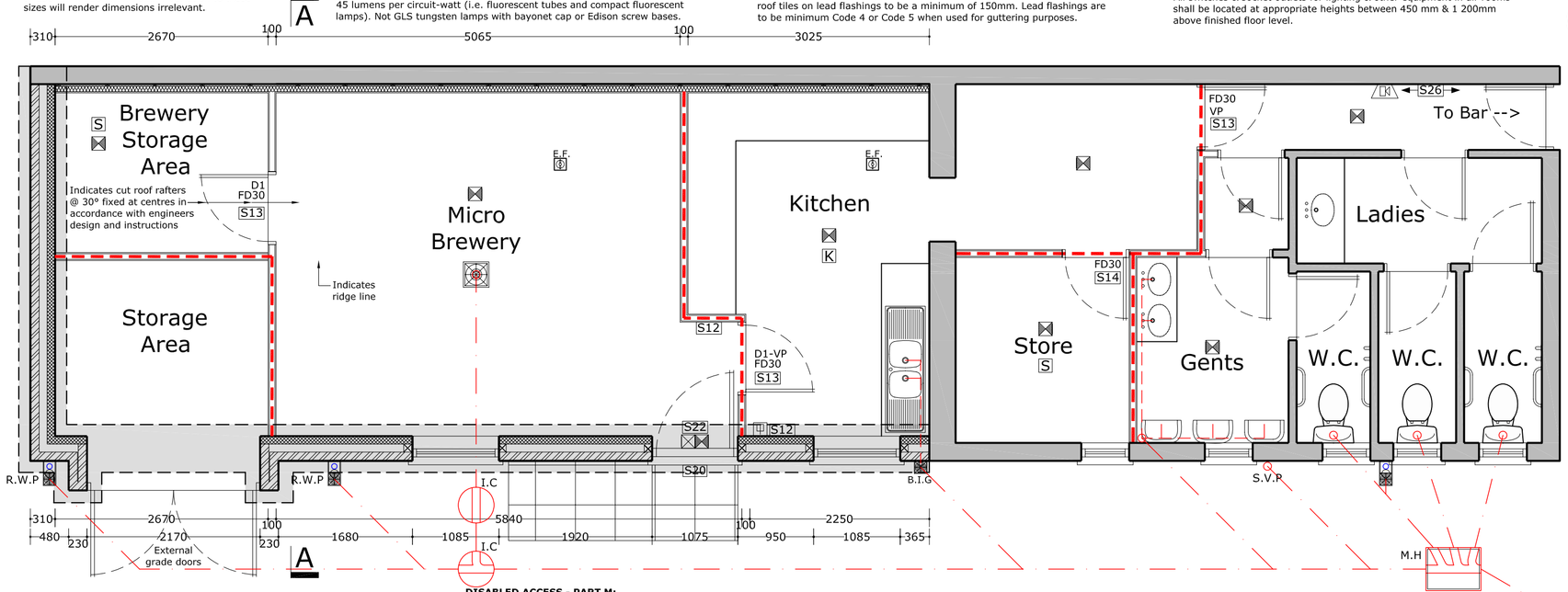
Sanitary Accommodation - If non present it is advisable to provide mechanical extract ventilation capable of extracting at a rate not less than 6 litres/sec minimum, and capable of being operated intermittently.

INTERNAL WASTE PIPES:
PVCu waste pipe work from appliances to be as follows:
W.C.'s: 100mm diameter 'Panekta' or similar approved w.c connector.
Wash Hand Basins: 32mm diameter for run lengths up to 1.7 metres, 40mm for runs up to 3m or 50mm for runs up to 4m.
Sinks: 40mm diameter.

All appliances to be fitted with 75mm deep seal traps.

Where where there are multiple appliance connections on a pipe run a 50mm diameter waste pipe should be used.

NB: Brickwork dimensions based on imperial bricks of 230mm x 110mm x 73mm. Variation to these sizes will render dimensions irrelevant.



Proposed Floor Plan

WINDOWS AND EXTERNAL DOORS:
Provide and install timber single glazed window units by specialist manufacturer, as indicated on the planning drawings.

All new external doors should achieve a maximum 'U' Value of 1.8 W/m²K and new windows should achieve a maximum 'U' Value of 1.6 W/m²K although given the constraints of work on a listed building the latter cannot be complied with.

To limit infiltration, all doors & windows are to be sealed with draught seals or similar.

DISABLED ACCESS - PART M:
Where possible a 'Level Approach' with a gradient of not more than 1 in 20 shall be formed to the main entrance door, it's surface shall be firm and even and be a min. 1200mm wide. If the ramp is no longer than 2m and does not rise more than 166mm then a 1:12 gradient may be used. All approaches to be agreed and approved by Building Control.

Doorways shall have a level threshold (max. 15mm upstand) suitable for wheelchair access & provide a **minimum** clear opening width of not less than 850mm for existing buildings.

Where doors are fitted with a latch, the door opening furniture should be able to be operated with one hand using a closed fist, e.g. a lever handle. All door opening furniture should contrast visually with the surface of the door and should not be cold to the touch. The opening force at the leading edge should be no greater than 20N.

AMBULANT DISABLED TOILET FACILITIES:
Each sex toilets should provide for ambulant disabled persons as detailed in Part M diagram 21 and cubicles should be fitted with grabrails as detailed. Where practical ensure a 750mm clear space in front of the W.C. and clear of any door swings. Ideally the door should be outward opening where practical / possible.

VISION PANELS & GLAZING - DOORS LABELLED VP:
Vision panels to be installed to doors in corridors to leading edge between 500 & 1500mm if necessary with gap between 880 & 1150mm (diagram 9 page 30 AD M)

Drainage requires further investigation. If practical then existing W.C. drainage could be connected to new manhole / I.C.

Drainage to connect to main drainage run through coaching arch and on to main AW Sewer within North Street

SCHEDULE OF DOOR SIZES
D1 - 838 mm x 1981 mm
FD30 - 1/2 Hr Fire Door
Dimensions given are door opening sizes

KEY:

S12	Fire Action Sign
S13	Fire Door Keep Shut Sign
S14	Fire Door Keep Locked Sign
S20	Fire Escape Keep Clear Sign
S22	Fire Exit Sign
S26	Direction Arrows To Nearest 'Fire Exit' Sign

EMERGENCY LIGHTING:
All emergency lighting should be installed in strict accordance with Mechanical Engineering Consultants drawings and must comply with BS5266:Part1:1999. A test certificate should be issued on completion.

Indicates area to be covered by emergency lighting by specialist to BS5266:Part 1:1999).

Indicates 100mm high internally illuminated 'Fire Exit' sign positioned above door with emergency lighting to BS5266:Part 1:1999.

FIRE FIGHTING EQUIPMENT:
All fire extinguishers and fire fighting devices should be sited and maintained in strict accordance with BS:5306:Part 3:1985. Requirements, number of devices and positions to be determined

S — Indicates area to be covered by automatic smoke detector linked to main fire alarm system to BS5839:Part 1:1989

K — Indicates area to be covered by automatic heat detector linked to main fire alarm system to BS5839:Part 1:1989

Manual Fire Alarm Point to BS 5839:Part2:1989

Warning Device Sounder BS 5839:Part1:1989

30 Minutes Fire Resistant Construction

FD30 — All doors marked FD30 on the floor layout plans to be 30 minute fire rated FD30 doors & frames fitted with intumescent strips and positive self closing devices.

DESIGNQube
By Steven Brown
Architecture and Urban Design
Gardeners Cottage, Thorpe Hall, Lincoln Road, South Elkington, Louth, Lincs, LN11 0QR
Tel: 01507 610375 - E-Mail: designqube@btconnect.com

Mr Ross Ellis	Client
Old Nicks Tavern, North Street, Horncastle	Site Address
Proposed Conversion and Alterations of Existing Out Buildings to Create a Micro Brewery	Project Title
Proposed Plans, Elevations and Section Through	Drawing
SAB	Drawn By
1 : 50	Scale
December 2011	Date
DQ-194-BR02 - Rev A	Drawing Number
A1	Original Paper Size
Rev A: Amended to detail Building Control enquiries	Revisions

Preliminary Drawing
Subject to Building Control Approval