

LANDSCAPE SPECIFICATION

NOTE: All soft landscape works to be carried out in accordance with BS4428:1989.

SUBSOIL

Subsoil should be broken up to relieve compaction and aid drainage prior to topsoiling to the following depths:

- For light and non cohesive subsoils: 300mm
- For stiff clay and cohesive subsoils: 450mm

Immediately before spreading topsoil, remove stones larger than 50mm.

TOPSOIL

To be supplied and spread by the main contractor to the approval of the Landscape contractor, in accordance with BS 3882 :2007. To be a natural sandy loam, of medium texture, with a pH between 5.5 and 7.8, not more than slightly stony and free of pernicious weeds. Subsoil to be well broken up prior to top-soiling to relieve compaction. Topsoil depths should be:

Areas for Ornamental Shrub Planting: minimum 450mm

CULTIVATION

Weeds to be prevented from seeding or becoming established by applying a suitable herbicide and allowing the correct time to elapse, as directed by the manufacturer. Compacted soil to be broken up to a depth of 100mm, with any stones, grass tufts or rubbish larger than 50mm in any direction to be removed, leaving a regular and even surface. Suitable slow release fertiliser to be supplied and spread @ 50g/m² to all planted areas.

CLIMATIC CONDITIONS

Topsoiling should be carried out in the driest conditions possible – cultivation to be carried out when the soil is moist, friable and not waterlogged or frozen. Topsoil should not be handled during or after heavy rainfall or when it is wetter than the plastic limit as defined by BS 3882. Planting should not take place in waterlogged conditions or when the ground is frozen.

SOIL AMELIORANT

Peat free compost to be spread over ornamental shrub beds @ minimum 50mm depth prior to cultivation.

TREES

All trees within shrub beds to be planted in separate pits in accordance with tree planting details.

Tree pit to be 1000mm depth including minimum 150mm thick drainage layer of well washed gravel with a geotextile layer separating growing medium from drainage layer. Pit bottom to be broken up to minimum depth of 250mm and sides to be scarified.

Trees to be backfilled with topsoil : tree planting compost 1:6 by volume. All plant material to comply with BS 3936 Part 1 :1992, be obtained from a nursery certified by the HTA and transported to site in accordance with the HTA Plant Handling Guide: 1996. All trees to be planted to the original root collar and the following methods should be implemented to secure them: Trees in soft - double staked using 75mm dia.

pressure treated timber stakes and cross bar, secured with tree tie and spacer at a height not exceeding 1/3 of the tree height. Trees in hard - Platypus underground guying system or equal approved.

SHRUB PLANTING

All shrubs to be positioned as shown on the drawing and to the density and specification listed in the plant schedule. Planting holes to be 150mm wider than the root spread, have the base ground thoroughly broken up before planting and backfilled with compost.

MIXES: To be arranged in groups of 3,5&7 with no two groups of the same species touching.

SUBSTITUTIONS

Upon submission of evidence that certain materials, including plant materials, are not available at the time of the landscape contract, the Landscape Contractor may be permitted to substitute other materials and plants in exceptional circumstances during the contract with an agreed adjustment of prices.

All substitutions shall be of nearest equivalent species and variety to the original specified but shall be subject to approval by the Landscape Architect before any change is made.

MULCH

75mm depth of 8-35mm ornamental bark mulch to be supplied and spread to all planting areas. Finished mulch level to be installed and maintained at 25mm below any adjacent kerbs or paving surfaces.

MAINTENANCE

All planting areas to be maintained to a high standard for 12 months after practical completion, to ensure the landscape scheme is successful, and discourage decline of the area. The site is to be visited at minimum once per month. Any defects or plant losses occurring in the first 12 months to be replaced at the contractors expense. All planting beds to be re-firmed and kept weed free through hand weeding and application of approved herbicide where appropriate. The specified thickness of mulch is to be maintained. The condition of all trees is to be regularly checked, with ties and stakes adjusted or replaced as necessary. Shrubs to be pruned at appropriate times of year to promote healthy growth and desirable ornamental features. All arisings to be removed. Watering should take place as necessary to ensure establishment and continued success of all planting.

8.8 Site Security and Crime Prevention

Our proposal has been designed with safety and crime prevention in mind. We will adopt principles of secure design wherever possible to provide a secure building and site, designing out wherever possible any problems created by the existing building layout.

The following principles have been considered when designing the building:

External Layout

- The general layout of the development is relatively simple and easy for customers to understand, and it is clear where they should and shouldn't be. Management of the site is also made easier. There are relatively few areas where criminal activity could occur unobserved.
- Most of the car parking area is well overlooked from the frontage of the building and is readily visible from the surrounding streets, allowing a good level of natural surveillance.
- Glazed areas to the front of the building are protected with ram raid bollards.
- The site has several pedestrian routes to cross the car park safely.
- Cycle storage for staff will be within the warehouse. Cycle parking for customers will be at the front of the store visible from within the store.
- The proposal will introduce new lighting columns across the site which will have flood lights fitted to give a uniform level to the car park and service area. Lights will be operated by a time clock and photocell override. Lights will be protected with covers against vandalism.
- Bin stores will be fully enclosed.
- Shopping trolleys are controlled on a coin operated system and will be secured at night to prevent theft/mis-use.
- The site boundaries will be secure to prevent access into neighbouring properties.
- Planting and vegetation in vulnerable areas will be kept to a maximum height of 1m.

Building design

- Windows will be installed to BS7950 and perimeter doors to LPS 1175 grade 3. The windows will be fixed glazing. Windows will have laminated double glazed units.
- Doors and windows are manufactured from steel with no visible external ironmongery.
- An intruder alarm will be installed to the building (Monitored).
- The entrances to the stores for customers are in an obvious position at the front facing the car park adjacent to both access Roads.
- Extensive glazing to the entrance offers an active frontage with vision to the car park.
- There are no recesses to the ground floor of the building exterior.
- There are no areas to the roof that are accessible.
- An anti graffiti coating will be applied to the rendered walls for ease of cleaning and removal of graffiti.

9.0 Environmental & sustainability statement

Aldi are committed to achieving sustainable development as part of its operations. As a group, Aldi operates an Environmental Management Policy, which has been endorsed by senior management. The objectives for achieving sustainable development as part of their operations ranges both between the day-to-day running of their retail stores, to designing sustainability initiatives within their new buildings. This statement addresses Aldi's sustainability proposals that will be built into their new developments.

Accordingly they believe that we have a responsibility to work with our design and development team in minimising the environmental effect of our work wherever and whenever the case may arise.

9.1 Sustainability themes

- **Minimise Energy Use:** the objective is to minimise energy needs in development by following a hierarchical approach to minimising energy use.
- **Sustainable Building Materials:** this theme covers a range of sustainability impacts including, minimising the energy required for producing and transporting building materials, using recycled material from local sources as far as possible and by choosing materials with a low embodied energy.
- **Sustainable Construction:** This theme covers the methods used during the construction phase to reduce disturbance and the impacts on the surrounding environment.
- **Sustainable Transport and Accessibility:** the objective is to minimise car usage and to encourage walking, cycling and the use of public transport.
- **Waste Management:** the amount of waste generated in the construction process is to be minimised following the national waste strategy: reduce, reuse, and recycle.
- **Site Management:** the objective is to ensure that the site is managed effectively to ensure that sustainability measures are implemented effectively.

The sustainability measures that are proposed as part of Aldi's development proposals have been developed in accordance with these themes. A list of the items covered is further outlined in item 8.7

Therefore the project will:-

1. Comply with all Statutory Environmental Regulations
2. Ensure that all environmental matters are taken account of in any business decision
3. Ensure that any disturbance to the environment is kept to a minimum and that the quality of life of any local inhabitants is also respected
4. Endeavour to attain a reputation for effective environmental management
5. Attempt to maintain resources which are scarce or non-renewable
6. Attempt to stop the release of emissions or pollutants that may cause damage to the environment
7. Ensure that only suppliers and sub-contractors who have a high environmental regard are used
8. Ensure that due regard is taken so that the Health and Safety risks to both employees and communities are minimised
9. Undertake an ongoing procedure review of its operations in order to minimise the environmental effect of its operations
10. We are ever mindful of our responsibility to the environment

9.2 Recycling and Waste Reduction

Aldi Stores Ltd is wholeheartedly committed to minimising all waste and if it should occur every effort will be made to recycle such materials.

9.3 Operational Waste

Aldi Stores Ltd reduces the amount of waste created by careful and efficient management and, also, provides the recycling of such waste where practicable.

Waste reduction is maximised wherever appropriate and the use of environmentally friendly cleaning agents which do not contain phosphates of CFC's.

Electrical energy and heating energy is conserved by the widespread use of time switches.

9.4 Site Waste

Strict site procedures help to keep site waste to an absolute minimum which not only helps environmentally, but also reduces costs applicable to our own operatives.

As with operational waste, every effort is made to recycle the waste. The use of nickel cadmium rechargeable batteries for tools is also encouraged. Where recycling is not possible, materials will be disposed of safely and efficiently.

All waste materials are stored in a safe and secure manner and kept in appropriate containers.

Aldi Stores Ltd utilise registered waste carriers and where substances, which we are not registered to be disposed of are involved, we ensure that only companies with the relevant waste disposal management licence are contracted.

When waste changes hands we ensure that transfer notes are completed and signed by both parties and a written description of the waste handed over.

9.5 Sustainability Issues

Where we can influence the design for the project, we will base decisions on a sustainable basis where the health and safety of the occupants can be combined with the conserving of resources for future generations. It will be about using resources efficiently with the minimum of energy consumption, to deliver a project that is flexible, durable, has longevity and, where practical, fixtures and fittings that can be re-used.

Products will be specified from suppliers/manufacturers who uphold the correct environmental codes and who source their materials from sustainable sources or approved producers.

Where possible and practical, water based paints will be used and, where not, low toxic paint will be used.

Light fittings will be of low energy type and switched on by presence detectors.

All timber, including that for formwork and studwork etc will be FSC certified and obtained from renewable sources backed by certification to current government standards.

Where possible materials and labour will be sourced locally to create energy savings.

Materials will either be of long life usage or, where there is potential for frequent changes and the item cannot be re-used, the material will be of recyclable type.

The aim is to make the building work as non-toxic as possible to the environment.

9.6 Conclusion

The environmental issues facing us all are extremely important and it is evident by the aims set out in our policy document that Aldi Stores UK is fully committed to these issues.

9.7 Summary of Measures for sustainability

Main themes	Sub Theme	Proposed Measures to be incorporated into the development
Minimise Energy Use		
	Improving Building Envelope	- Improve building fabric performance by using materials with low U values. - Reduce Air Permeability for the development.
	Reducing Energy Demand	- Use high frequency ballasts on all Fluorescent and Compact Fluorescent Lamps (CFL's). - Detailed Specification of energy saving fitting for refrigeration system
	Allocation of Renewable Energy	- Re-use of waste heat from refrigeration system to heat the retail area
	Further Measures	

Main themes	Sub Theme	Proposed Measures to be incorporated into the development
Sustainable Building Materials	Material Specification	- Use of recycled and secondary aggregates where possible. - Use of timber from sustainable sources, including the reuse of timber where possible, whilst procuring new timber from sustainable sources such as FSC and PEFC sources. - Use of materials that where possible have a low embodied energy, including making firm commitments to procure materials from local sources where possible. - Procuring materials will be done with consideration to manufacturers and suppliers with accredited EMS and ISO Standards.
Sustainable Construction		- The contractors will be signed up to the relevant CCS come and comply with best practices in construction and site management. - Working hours would be restricted to ensure disturbance is minimised outside of these times.
Sustainable Transport and Accessibility		- Cycle parking for the site would be specified at appropriate frequencies if required
Water Conservation and Management	Water Use within the Retail	- A pulsed water meter would be proposed for the development to monitor water use. - 2/4 litres wc's in retail store.

Main themes	Sub Theme	Proposed Measures to be incorporated into the development
	Minimising Flood Risk	-Proposals would be put forward that would not add to the flood risk in the area. A detailed FRA would be provided for the site and proposal.
Waste Management	Construction Waste	- Recycling would occur during the construction phase where waste would be segregated and split into recyclable components. - General waste would be disposed of responsibly and sent to licensed waste handling facilities.
Reduction of detrimental Environmental Effects		- Hydrocarbon traps will be placed around the perimeter of the car park area where necessary. - The development does not include materials that are toxic to humans. - All insulation materials and refrigerants have an ODP value of 0 and a GWP of 5 or less. - Where necessary, land contamination would be remediated. - External lighting will be compliant to best practice guidelines from the institute of Lighting Engineers (ILE) Guidance note: GN01.
Site Management	Commissioning and Handover	- A building user guide and building education would be provided as part of the development's handover.

9.8 BREEAM Assessment.

Ref	Title	Credits available	Credits awarded	Assumptions and rationale used
Man 1	Commission	2	2	As a standard, Aldi will ensure that the first year commissioning of the development will be in line with current building regulations. Using appropriate individual to conduct commissioning and the commissioning of specialist systems.
Man 2	Considerate Constructors	2	1	Each development site is managed under the CCS. The contractor will operate under considerate constructor's scheme; will conform to at least minimum requirements.
Man 3	Construction Site Impacts	4	3	As standard Aldi will adopt best practices for monitoring construction site impacts to deliver 3 credits for this category. This will include adopting the following generic measures: • Implement best practice in respect air pollution from the site • Implement best practice policies in respect of water pollution on site • Main Contractor to have environmental materials policy • Main Contractor to operate an Environmental Management System A third credit is gained as 80% of the site timber is reasonably sourced and 100% legally sourced.

Ref	Title	Credits available	Credits awarded	Assumptions and rationale used
Man 4	Building User Guide	1	1	A non-technical information pack will be supplied to Aldi staff regarding the environmental performance of the development.
Man 8	Security	1	1	The Local Crime Prevention Officer will be consulted through the Design and Planning Process.
Hea 4	High Frequency Lighting	1	1	High Frequency Ballasts will be installed on all fluorescent light fittings
Hea 5	Internal and External Lighting Levels	1	1	All internal and External Lighting Levels are to luminance levels recommended by CIBSE
Hea 9	Volatile Organic Compounds	1	1	Best Practice levels will be applied to limit emission of VOCs from internal finishes
Hea12	Microbial Contamination	1	1	Aldi do not have a standard manufacturer for their HVAC systems. The use of known major retailers is used, and the design assumes that the manufacturers of the HVAC systems used in the design conform to all the relevant health and safety practices, including AcoP, L8 - Legionnaires Disease.

Ref	Title	Credits available	Credits awarded	Assumptions and rationale used
Hea14	Office Space	2	2	Daylight glare control, natural ventilation and provision of natural light will be provided. The development would allow thermal zoning and light controls within the office.
Ene 1	Reductions of CO ₂ emissions	15	8	The CO ₂ reduction will be site specific and depend on a variety of factors listed in detail within the body of this statement. For the generic model, a reduction of 14% from L2A 2006 is assumed. This will be subject to minor variations between sites, and through the allocation of renewable energy technologies.
Ene 2	Sub-Metering	1	1	Sub-metering of energy will be specified for different high energy use areas.
Ene 4	External Lighting	1	1	Energy efficient external lighting will be specified and light fittings are controlled in the presence of daylight.
Ene 7	Cold Storage Equipment	3	3	Refrigeration units for Aldi stores are procured from the same manufacturers and have energy saving features as standard. These include: Night blinds, sliding doors, compressor controls and low heat display lights. The backup chiller cabinet and refrigeration would also reclaim heat for the supermarket area; the aspects achieve 3 credits under assessment.

Ref	Title	Credits available	Credits awarded	Assumptions and rationale used
Tra 1	Provision of Public Transport	5	3	This credit is site specific and as such has been assessed as an average.
Tra 2	Proximity to amenities	1	1	As all Aldi developments are in or close to town or district centres, they will always by default be within 500m of amenities.
Tra 3	Cycle Facilities	2	1	As a standard, Aldi will provide covered, secure cycle storage.
Tra 4	Pedestrian and Cycle Safety	2	2	In general, the design of the access routes to the site would permit direct access for cyclists and pedestrians
Tra 5	Travel Plan	1	1	A travel plan would be produced for the site which would be tailored to the specific needs of the development's users.
Tra 8	Deliveries and Manoeuvring	1	1	All schemes will be designed to allow safe access for delivery vehicles and there are separate storage areas for refuse, etc.
Wat 1	Water Consumption	3	3	The use of 2/4 litres low flush in retail component and clear instructions for use will be provided.

Ref	Title	Credits available	Credits awarded	Assumptions and rationale used
Wat 2	Water Meter	1	1	A water meter with a pulsed output will be fitted.
Wat 4	Sanitary supply shut off	1	1	Proximity shut off systems will be included for the WC's.
Mat 1	Materials Specification	4	3	The external walls, roof, and the first floor storage area will be made from materials that obtain an 'A' rating from the Green Guide to specification. This will achieve a maximum of 3 credits under the scheme. Windows will consist of powder coated aluminium, achieving a 'B' rating, thus not applicable for credits.
Mat 5	Responsible Sourcing of Materials	3	1	This is site specific and dependent on the materials palette. In general, timber products will be from sustainable sources, and fully certified. This will permit 1 credit.
Mat 6	Insulation	2	1	One credit scored for Thermal Insulation being responsibly sourced.
Mat 7	Designing for Robustness	1	1	The surface of the entrance and exit to the car parks will undergo substantial vehicle and pedestrian movement. This area will be designed with robustness and durability in mind.
Wat 1	Construction Site Waste	3	3	Two credits for non-hazardous construction waste is same as good practice levels

Ref	Title	Credits available	Credits awarded	Assumptions and rationale used
	Management			under considerate contractors scheme. One credit for significant recycle of materials (crushed concrete, etc.) not used on site.
Wat 2	Recycled Aggregates	1	1	Significant re-use on site of recycled aggregates
Wat 3	Recyclable Waste Storage	1	1	Dedicated space on site for recyclable waste storage
Wat 4	Compactor / Baler	1	1	A waste Baler is specified as standard
LE1	Re-use of land	1	1	All sites are generally on previously developed land
LE2	Contaminated land	1	1	This is site specific; however the remediation of land to get to a suitable level for food retail use is always a part of the construction process.
LE5	Enhancing Ecology	3	1	A Professional would be appointed, if necessary and enhancement measures would be adopted for the site based on species content.
Pol 1	Refrigerant GWP- Building Services	1	1	No refrigerants would be used for building services cooling.

Ref	Title	Credits available	Credits awarded	Assumptions and rationale used
Pol 3	Refrigerant GWP - Cold Storage	1	1	All refrigerants used will have a GWP of less than 5. The use of ammonia rather than R404A refrigerant provides a more environmentally friendly solution.
Pol 4	NOx Emissions from Heating Source	3	2	This is site specific. Where gas fired heating systems are specified, the design incorporates hot water and space heating systems of NOx class 5. These efficient boilers should, at a minimum not exceed 70 mg/kWh of NOx.
Pol 5	Flood Risk	3	3	Developments are generally on sites with a low risk of flooding. Extra credit obtained as will always use attenuation or sustainable drainage where necessary
Pol 6	Minimise Watercourse Pollution	1	1	The use of oil separators/Hydrocarbon traps around the perimeter of the car park will reduce the impact of contaminants migrating from the site.
Pol 7	Night Time Light	1	1	Credit will be achieved as external lighting will be designed in accordance with Institute of Lighting Engineers (ILE) guidelines on the reduction of obtrusive light. Lighting would also be turned off when not in use.
Pol 8	Noise Attenuation	1	1	Pre completion testing will be carried out for the residential units above. These areas, situated immediately above are likely to be the most sensitive receptors. The noise will not exceed a change of 3 dB. It is assumed that if these receptors are not

Ref	Title	Credits available	Credits awarded	Assumptions and rationale used
				adversely affected, nor will other local receptors within the area.
Man 2	Considerate Constructors	1	1	All sites will be under a considerate constructor's scheme. sefff

Issue	% Achieved	Issue (Cont.)	% Achieved
Management	9.6%	Materials	5.77%
Health & Wellbeing	10.0%	Waste	6.43%
Energy	9.88%	Land Use & Ecology	3.0%
Transport	5.54%	Pollution	7.69%
Water	3.33%	Innovation	1.0%
Overall Pre Assessment Score		BREEAM Rating	
62.24%		VERY GOOD	

9.9 Renewable Energy and Carbon Reduction Measures.

Below is the data from a Building Regulation output document for iSBEM showing for an Aldi store at design stage the data is based on a standard Aldi design and layout (990 store to latest building regulations, latest Aldi lighting scheme, latest heating scheme – air source heat-pumps)

The comparison is based on the current employed method of heating at newly constructed Aldi stores which comprises air source heat-pumps and a BASE model utilising standard high efficiency gas fired heating plant (no renewables).

The BRUKL output documents showing the calculated values are enclosed.

The calculations provide the following data:

Energy Usage	
BASE model Building (No renewables) kWh/m ² .annum	Aldi "Standard" (With renewables) kWh/m ² .annum
85.3392	64.7011

The low/zero carbon technologies incorporated in the Aldi "Standard" yields a reduction in energy usage of 24.2%

Carbon Dioxide Emissions	
BASE model Building BER (No renewables) Kg CO ₂ /m ² .annum	Aldi "Standard" BER (With renewables) Kg CO ₂ /m ² .annum
31.9	27.8

The low/zero carbon technologies incorporated in the Aldi "Standard" yields a reduction in Carbon Dioxide emissions of 12.9%

BRUKL Output Document

Compliance with England and Wales Building Regulations Part L 2010



Project name

Aldi General BASE

As designed

Date: Mon Nov 26 10:51:34 2012

Administrative information

Building Details

Address: ..

Certification tool

Calculation engine: SBEM
Calculation engine version: v4.1.d.0
Interface to calculation engine: Design Database
Interface to calculation engine version: v25.05
BRUKL compliance check version: v4.1.d.0

Owner Details

Name: Information not provided by the user
Telephone number: Information not provided by the user
Address: Information not provided by the user, Information not provided by the user

Certifier details

Name: Information not provided by the user
Telephone number: 01642 608421
Address: Unit 15, Halegrove Court, Cynghor Drive, Bowfield, Stobdon-on-Tees, TS18 3DB

Criterion 1: The calculated CO₂ emission rate for the building should not exceed the target

The building does not comply with England and Wales Building Regulations Part L 2010

1.1	CO ₂ emission rate from the notional building, kgCO ₂ /m ² .annum	29
1.2	Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	29
1.3	Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	31.9
1.4	Are emissions from the building less than or equal to the target?	BER > TER
1.5	Are as built details the same as used in the BER calculations?	Separate submission

Criterion 2: The performance of the building fabric and the building services should achieve reasonable overall standards of energy efficiency

2.a Building fabric

Element	U _{unit}	U _{calc}	U _{calc}	Surface where the maximum value occurs*
Wall**	0.35	0.35	0.35	001 Wall 1
Floor	0.25	0.25	0.25	001 Exposed Floor 1
Roof	0.25	0.25	0.25	001 Exposed Roof 1
Windows***, roof windows, and rooflights	2.2	2.2	2.2	001 Window 1
Personnel doors	2.2	2.1	2.1	003 Door 1 (Personnel Door)
Vehicle access & similar large doors	1.5	-	-	"No heat loss vehicle access doors"
High usage entrance doors	3.5	2.73	2.73	001 Door 1 (High Usage Entrance Door)

U_{unit} = Limiting area-weighted average U-values [W/(m²K)]

U_{calc} = Calculated area-weighted average U-values [W/(m²K)]

U_{calc} = Calculated maximum individual element U-values [W/(m²K)]

* There might be more than one surface where the maximum U-value occurs.

** Automate U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows.

*** Display windows and similar glazing are excluded from the U-value check.

N.B.: Neither roof ventilators (i.e. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.

Air Permeability	Worst acceptable standard	This building
m ³ /(h.m ²) at 50 Pa	10	10

2.b Building services

The building services parameters listed below are expected to be checked by the BCO against guidance. No automatic checking is performed by the tool.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	NO
Whole building electric power factor achieved by power factor correction	<0.9

1- HVAC 1

Heating seasonal efficiency	Cooling nominal efficiency	SFP [W/(l/s)]	HR seasonal efficiency
0.92	-	-	-
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system			
NO	NO	NO	NO

2- HVAC 2

Heating seasonal efficiency	Cooling nominal efficiency	SFP [W/(l/s)]	HR seasonal efficiency
1	-	-	-
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system			
NO	NO	NO	NO

1- Default DHW

Heating seasonal efficiency	Hot water storage loss factor [kWh/litre per day]
1	0.015

Local mechanical ventilation and exhaust

Zone	Supply/exhaust SFP [W/(l/s)]	HR seasonal efficiency	Exhaust SFP [W/(l/s)]
001	1.87	-	-
002	1.87	-	-
003	1.87	-	-
005	-	-	1.35
006	-	-	1.35
007	-	-	1.35

General lighting and display lighting

Zone	General lighting [W]	Display lamps efficacy [lm/W]
001	280	61
002	240	61
003	14480	61
004	290	-
005	60	-
006	60	-
007	270	-
008	360	-
009	180	-
010	60	-
011	1470	-
012	60	-
013	60	-

Criterion 3: The spaces in the building should have appropriate passive control measures to limit solar gains

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
001	YES (+187.5%)	NO
002	YES (+136.7%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
003	YES (+21.7%)	NO
007	NO (-84.6%)	NO
008	N/A	N/A

Criterion 4: The performance of the building, as built, should be consistent with the BER
Separate submission

Criterion 5: The necessary provisions for enabling energy-efficient operation of the building should be in place
Separate submission

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

Area [m ²]	Actual	Notional
External area [m ²]	3766.7	3766.7
Weather	NEW	NEW
Infiltration [m ³ /m ² @ 50Pa]	10	5
Average conductance [W/K]	1405.53	1022.31
Average U-value [W/m ² K]	0.37	0.27
Alpha value* [%]	11.25	10.94

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area	Building Type
100	ATLAS Retail/Financial and Professional services
	A3/A4/A5 Restaurants and Cafes/Drinking Est./Takeaways
	B1 Offices and Workshop businesses
	B2 to B7 General Industrial and Special Industrial Groups
	B8 Storage or Distribution
	C1 Hotels
	C2 Residential inst.: Hospitals and Care Homes
	C2 Residential inst.: Residential schools
	C2 Residential inst.: Universities and colleges
	C2A Secure Residential inst.
	Residential spaces
	D1 Non-residential inst.: Community/Day Centre
	D1 Non-residential inst.: Libraries, Museums, and Galleries
	D1 Non-residential inst.: Education
	D1 Non-residential inst.: Primary Health Care Building
	D1 Non-residential inst.: Crown and County Courts
	D2 General Assembly and Leisure, Night Clubs and Theatres
	Others: Passenger terminals
	Others: Emergency services
	Others: Telephone exchanges
	Others: Miscellaneous 24hr activities
	Others: Car Parks 24 hrs
	Others - Stand alone utility local

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	20.43	8.6
Cooling	0	0
Auxiliary	6.96	3.24
Lighting	35.79	47.09
Hot water	1.52	1.61
Equipment*	19.44	18.95
TOTAL	64.7	60.54

* Energy used by equipment does not count towards the total for carbon emissions.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	0	0
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0

Energy & CO₂ Emissions Summary

	Actual	Indicative Target
Heating + cooling demand [MJ/m ²]	248.06	174.77
Total consumption [kWh/m ²]	64.7	60.54
Total emissions [kg/m ²]	27.8	28.4

HVAC Systems Performance

System Type	Heat dem [MJ/m ²]	Cool dem [MJ/m ²]	Heat con [kWh/m ²]	Cool con [kWh/m ²]	Aux con [kWh/m ²]	Heat SSEE	Cool SSEE	Heat gen SEFF	Cool gen SEER
[ST] Flued forced-convection air heaters, [HS] Air heater, [HFT] Natural Gas, [CFT] Electricity									
Actual	147.8	175.8	22.8	0	8.8	1.8	0	2.08	0
Notional	34.2	185.3	7.5	0	4.1	0.79 / 0.81	0	---	---
[ST] Other local room heater - flanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity									
Actual	243.6	62.3	84.5	0	14.3	0.8	0	1	0
Notional	190	147.3	66.6	0	6.2	0.79 / 0.81	0	---	---
[ST] No Heating or Cooling									
Actual	0	9.8	0	0	0	0	0	0	0
Notional	0	7.3	0	0	0	0	0	---	---

Key to terms

Heat dem [MJ/m²] = Heating energy demand
Cool dem [MJ/m²] = Cooling energy demand
Heat con [kWh/m²] = Heating energy consumption
Cool con [kWh/m²] = Cooling energy consumption
Aux con [kWh/m²] = Auxiliary energy consumption
Heat SSEE = Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEE = Cooling system seasonal efficiency ratio
Heat gen SEFF = Heating generator seasonal efficiency
Cool gen SEER = Cooling generator seasonal efficiency ratio
ST = System type
HS = Heat source
HFT = Heating fuel type
CFT = Cooling fuel type

Key Features

The BCO can give particular attention to items with specifications that are better than typically expected.

Building fabric

Element	U _{typ}	U _{min}	Surface where the minimum value occurs*
Wall	0.23	0.35	001 Wall 1
Floor	0.2	0.25	001 Exposed Floor 1
Roof	0.15	0.25	001 Exposed Roof 1
Windows, roof windows, and rollights	1.5	2.2	001 Window 1
Personnel doors	1.5	2.1	003 Door 1 (Personnel Door)
Vehicle access & similar large doors	1.5	-	*No heat loss vehicle access doors*
High usage entrance doors	1.5	2.73	001 Door 1 (High Usage Entrance Door)
U _{min} = Typical individual element U-values [W/m ² K]	1.5	2.73	Use = Minimum individual element U-values [W/m ² K]
* There might be more than one surface where the minimum U-value occurs.			

Air Permeability	Typical value	This building
m ³ /(h.m ²) at 50 Pa	5	10

Thermal bridges

There is at least one junction in the project whose linear thermal transmittance has been defined as having been calculated following a quality-assured accredited construction details approach in accordance with a scheme approved by the Secretary of State.

9.10 Aldi Corporate Responsibility

Our Message

You'll already know there's an Aldi way of doing things. Every decision we make is designed to keep things simple and efficient. It's why we have our unique fill system and only offer the best products at the best price. This approach not only saves us money, but also saves our customers money. It could even help our planet's resources.

That's why the Aldi way is important – and why we would like you to share with customers the five areas it covers. They're called our Corporate Responsibilities (CR for short). Now, that may sound a bit official, but together they show us how we can do the right thing and take responsibility for the impact we have on people and the planet.

And when you know that you can actually make a difference – to those we deal with, and to the environment we live in – then we think you'll realise just how important these messages are. In fact, we think they're so important we now have a dedicated CR department to promote our five CR areas; •Customers, •Suppliers, •Products, •Operations, •Our People

Our Customers

Naturally, we are all committed to making sure everything our customers buy meets the highest standards and quality. But we also live to give our customers the information they need to make healthy choices.

Healthy Guides

To help our customers eat healthily, our packaging carries Guideline Daily Amount (GDA) labels. These simple to understand guides show how many calories and how much sugar, fat, saturated fat and salt each product contains to help maintain a healthy, balanced diet.

Healthy Products

We promote fresh fruit and vegetables through our Super 6 selection. We also devised some great family recipes following our link up with the Change 4 Life.

Alcohol Information

We like to promote responsible drinking by ensuring our customers have the facts about the alcohol they consume. That's why all our alcohol product labels show the units each drink contains, and carry NHS guidelines and a warning about drinking when pregnant. It's also why we ask you to use the challenge 25 policy in store.

Our Suppliers

We rely on our suppliers for great products. They rely on us for their livelihood. That's why it's so important to build long-term, honest and open relationships, and ensure everyone is treated fairly and ethically.



We're Backing Britain

We always aim to support local businesses. Our core range of fresh beef, chicken and pork is all 100% British and meets strict Red Tractor standards for quality. That's why you'll see this logo on many of our food products.



We're Ethical

We want to be certain to everyone in our supply chain is treated fairly. By stocking Fairtrade products we help producers in developing countries receive a larger share of what we pay for their produce.

Our Products

By ensuring our products are made with respect for animals and the natural environment, we are making a positive difference. We are determined that what we sell is raised, grown, caught or made in the most responsible way. Here are just a few ways in which we source responsibly.



Animal Welfare

We've introduced free range eggs that carry the Freedom Food logo, to ensure that the hens live in conditions that meet RSCPA welfare standards.



Sustainable Fishing

Wherever we can, we aim to source from sustainable fisheries. We offer a number of products that meet the Marine Stewardship Council Standards. You'll see the MSC logo on products that help protect fish stocks for the future.



Sustainable Paper Products

All of our own label tissues, toilet paper and kitchen towels are made from recycled material or fibres from well managed forests certified by the Forestry Stewardship Council.

So if our customers ask what any of these logos mean, you can now explain how Aldi insists on sourcing responsibly

Our Operations

With over 450 stores, we can have a huge impact on the environment, so it's up to us to make that impact as small as possible. We can all play our part – turning off lights, reducing waste, recycling – but there are bigger things we're doing behind the scenes.

On The Road

We're driving down our carbon footprint by introducing a new system to our truck fleet that monitors fuel-efficient driving, and testing various aerodynamic aids to our trailers.

In Our Buildings

Because our stores are our biggest energy users, they are a key focus of our energy efficiency efforts. Working with our architects, planners and developers, we're making sure our properties meet global green building standards. In fact, all our new stores in 2011 earned A or B rated Energy Performance Certificates. We've also introduced energy efficient lighting systems in our UK distribution centres, and will soon be seeing if solar panels can be used to cut electricity consumption.

Utilising Our Waste

73% of our general waste is diverted from landfill. Our goal is to send zero waste to landfill by 2015. The Atherstone region is trialling an 'energy from waste' solution. Food waste from stores is taken away and converted into energy through a process of anaerobic digestion. Turning rubbish into energy? Now that simply makes sense!

Our People

We employ over 7,000 people in the UK – and everyone plays an important part in our company. We think it's important that our relationship is built on honesty, trust and respect, giving you responsibility as well as mutual support and development.



We're Proud Of Our Awards

In the Times Top 100 Graduate Employers 2011, we ranked 4th overall, ahead of every other retailer, and won the Employer of Choice for General Management Award.

We Like Satisfied Employees

We're committed to making sure your job is secure, and you feel good about working for us. That's why we reward performance with higher than average salaries for the industry.

We Like Opening Doors

In terms of equal opportunities, 48% of our employees in the UK are women, as are 28% of our UK directors – well above the industry average. And our Apprenticeship scheme introduced last year has been extended into 2012.

Protecting the Rainforests

From margarines and cakes to cosmetics and candles, palm oil is one of the most widely used vegetable oils in the world. Unfortunately, rainforests are often cleared to make way for palm oil plantations. This not only causes irreversible damage to the natural environment, but also places indigenous people or endangered species, such as orang-utans, at risk.



**ROUNDTABLE ON
SUSTAINABLE PALM OIL
(RSPO)**

That's why, in 2011, Aldi became a member of the Roundtable on Sustainable Palm Oil (RSPO) – a not-for-profit organisation that aims to develop and implement global standards for sustainable palm oil.

Our aim is to have certified, sustainable palm oil from well managed forests in all our food products by 2015, and non-food products by 2018.

10.0 Conclusion

This design statement is submitted in support of a proposal for the comprehensive and coherent development of a key site along High Street, Royston in Barnsley. Careful consideration along with extensive dialogue with the Local Planning Authority and has been developed to determine appropriate locations for building layout, massing and pedestrian routes, whilst also focusing on the existing topography, landscaping and neighbouring properties that are in close proximity to the site. The overall design proposal has also been influenced by the direct dialogue and comments received from the local community and councillors during pre application meetings and consultation.

The proposal comprises of a 1590sqm (gross external) Aldi foodstore with a small plot to the rear utilised for residential. The foodstore utilises a contemporary design with materials that complement the surrounding area and character of Royston. The overall massing design is consistent with many local buildings. A strong built frontage, glazing and detailing have been proposed to ensure a high quality development that integrates successfully with the existing urban grain.

