

6659 – NU Instruments Rev A
Design & Access Statement

I S P

ARCHITECTS LTD

Site Address: NU Instruments, Unit 74, Clywedog Road South, Wrexham Ind. Estate. LL13 9XS
Date: May 2010

Applicants Details

Name: NU Instruments
Address: As Above
Tel: 01978 661 304

Agents Details

Name: ISP Architects Ltd
Address: 61 Regent Street, Wrexham.
Post Code: LL11 1AY
Tel: 01978 362050
Fax: 01978 362052

Description of Development/General:

The scheme is an extension of an existing Industrial Unit on Wrexham Industrial Estate for NU Instruments. Nu Instruments design and manufacture a range of mass spectrometers and accessories. They are a successful and expanding company that require more production and testing spaces but wanted to stay at their current location.

Pre-application Consultation:

Pre-application consultations have taken place between ISP Architects and Gerry Kellet from Wrexham Planning Department, and Emma Broad of the Ecological Department.

1) Appraisal of the context of the proposed development**a) Introduction**

This Design and Access Statement should be read in support of the Full Planning Application for an extension to the existing NU Instruments unit on Wrexham Ind. Estate. This statement responds to the requirements of the Town and Country Planning (General Development Procedure) (Amendment) (Wales) Order 2009.

The statement should be read giving full regard to the applications' documentation including the attached appendices and proposed drawings.

b) Physical context

The application site consists of a parcel of land located on the southern side of Wrexham Industrial Estate. The site currently houses an industrial unit and associated car parking spaces.

The aerial photograph below identifies the application site in context of its surroundings.

I S P ARCHITECTS LTD

6659 – NU Instruments Rev A
Design & Access Statement

I S P

ARCHITECTS LTD



Wrexham Industrial Estate is the largest industrial estate in the north of Wales, (2nd largest in United Kingdom by size) situated on the eastern side of the town of Wrexham and located within the Wrexham Unitary Development Plan Settlement Limit 1996 – 2011 (Map 3).

The estate covers some 5.5 square kilometers of land and is the tenth largest industrial estate in Europe, with more than 7000 employees in over 300 businesses including Kellogg's, JCB, Cytec, Ball Packaging and Pirelli Cables. The development of the estate was financially supported by the Welsh Development Agency (WDA), to try and ensure stability of employment.

Access is provided through many major B roads. To rectify this, there is currently a scheme to complete a Dual carriageway straight into the industrial estate, and thus increase accessibility, and promote growth. The Welsh Assembly Government have granted £1 million to complete the dual carriageway to the industrial estate.

An analysis of the surrounding area identifies that the existing building and surrounding units are of a traditional industrial shed type with metal cladding to walls and roofs. Existing plot boundaries generally metal palisade fencing or landscaping. The design process has ensured that the proposed development will be in-keeping and complimentary to the existing unit.

In terms of topography, the site is fairly flat with a gentle slope to the South.

I S P ARCHITECTS LTD

6659 – NU Instruments

Rev A

Design & Access Statement

I S P

ARCHITECTS

LTD

c) Social Context

It is considered that the proposed development will offer additional dedicated production and testing space to the existing unit. This would increase the need for further employees to carry out these processes.

The site is adjacent to the hamlet of Pentre Maelor which built up in the post war years to provide affordable housing to residents who saw major unemployment in the area following the return of the troops.

Wrexham Industrial Estate started as the Royal Ordnance Factory which manufactured cordite for explosive shells. The complex was spread over a large area to minimise damage from air raid attacks. Roads and services were extended to the site from Wrexham town centre for the factory. After the war was over much of the site and buildings were abandoned and left to local agriculture. The land was offered cheaply to new businesses and the estate grew. Housing was provided to the outskirts for easy access to employment.

d) Economic Context

In the short-term the proposal will provide employment for those contracted to build the new extension. The extension to the unit will ensure that a successful and growing company will remain on the estate which will therefore provide future employment opportunities and local revenue.

Although our site does not fall within the allocated employment areas shown on Wrexham UDP Map 3, it is part of that overall area so does follow policy E1 of the Development Plan.

Policy E1 Sufficient land will be allocated for employment development between 2001 and 2011 at :-

WREXHAM INDUSTRIAL ESTATE;

10.	Clywedog Road South (i)	3.3
11.	Clywedog Road South (ii)	5.0
12.	Clywedog Road South (iii)	6.5

e) Policy Context

The policy guidance which has been taken into account in relation to the design of the proposed development is set out within Planning Policy Wales, MIPPS 01/2008 and Technical Advice Notes 12 and 18. Wrexham's Local Planning Guidance notes have also been taken into account.

The development plan consists of the Wrexham Unitary Development Plan (1996 – 2011) which was adopted in 2005.

The proposed development also fully considers the guidance contained with Policy PS1, PS2, PS3, and PS4 of the plan;

Policy PS1 New development for housing, employment, and community services will be directed to within defined settlement limits/employment areas.

Policy PS2 Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment.

I S P ARCHITECTS LTD

6659 – NU Instruments

Rev A

Design & Access Statement

I S P

ARCHITECTS

LTD

Policy PS3 Development should use previously developed Brownfield land comprising vacant, derelict or underused land in preference to the use of Greenfield land, wherever possible, particularly so where Greenfield land is of ecological, landscape or amenity value, or compromises agricultural land of grades 1, 2 or 3a quality.

Policy PS4 Development should maintain the existing settlement pattern and character and be integrated with the existing transport network to help reduce the overall need to travel and encourage the use of alternatives to the car.

The Character and design section of this statement will identify the main design elements of the proposed development and identify how they reflect the character and appearance of the surrounding area as well as compliance with the above identified policies.

2) ACCESSIBILITY

(a) Policy Approach

The following section of the statement aims to identify the national and local planning policy guidance that has been taken into consideration with regards to the means of access to and from the proposed development.

- National Planning Policy Wales

CABE defines Inclusive Design as an effort that *'aims to remove the barriers that create undue effort and separation. It enables everyone to participate equally, confidently and independently in everyday activities'*.

Planning Policy Wales (PPW) as amended by MIPPS 01/2008 'Design' is the principal planning document of the Welsh Assembly Government, which sets out the context for the consideration and evaluation of all types of development.

The main thrust of PPW is to promote sustainable development by ensuring that the planning system provides for an adequate and continuous supply of land, available and suitable for development to meet society's needs in a way that is consistent with overall sustainability principles.

PPW advises that all Local Authorities should consider the issue of accessibility for all, including the needs of those with visual and hearing impairments and those with limited mobility such as wheelchair users, elderly people and people with young children.

PPW, paragraph 2.3.2 advises to locate development so as to minimise the demand for travel, especially by private car.

TAN 18: Transport has also been taken into consideration. The main aim of TAN 18 is to ensure that new development is located where there is, or will be, good access by public transport, walking and cycling thereby minimising the need for travel and fostering social inclusion.

Paragraph 2.4 of TAN 18 identifies that the inter-relationship between land use planning and transport is complex and varied. The development of land is dependant, in part, upon transport infrastructure and services to function efficiently. By influencing the location, scale, density and mix of land uses and new development, land use planning can help reduce the

I S P ARCHITECTS LTD

6659 – NU Instruments

Rev A

Design & Access Statement

I S P

ARCHITECTS

LTD

need to travel and length of journeys, whilst making it easier for people to walk, cycle or use public transport.

TAN 18 also considers people with disabilities. TAN 18 identifies that it is important to consider their needs in terms of parking, in particular ensuring that adequate numbers of suitably designed parking spaces are provided in appropriate locations.

- **Local Planning Approach (Wrexham UDP – Section 10)**

Policy T8 of the plan refers to highway and parking provision and states that;

Development granted planning permission will be required to provide vehicle parking spaces either on site or nearby, in accordance with the Council's current parking standards. Special regard will be paid to the following factors, as appropriate:-

a) the availability of public transport nearby,

b) proximity to public car parking,

c) proximity to local services and facilities,

d) road safety hazards and amenity considerations arising from on-street parking in the vicinity of the site.

Where implementation difficulties arise in making parking provision on-site or nearby, the Council will require a developer to make financial contributions for measures to assist public transport, or walking and cycling as appropriate.

b) Locational criteria and detailed design considerations

The application site is accessible by a range of transport methods including private and public transport and is located along the existing B access road 'Clywedog Road South'.

The existing parking area has been extended to provide a further 20 parking spaces with a minimum 6m wide access road.

46 car parking spaces have been provided in total which is in line with recommendations set out in Local Planning Guidance Note 16. Our extension increases the total floor area of the building to 2300m² which based on B2 Light Industry use requires 46 spaces. There is ample space for the provision of a Cycle Shelter for Employee use.

In terms of accessing the site by public transport, the nearest bus stop is located approximately a 10 minute walk from the application site, located on 'Clywedog Road South'. The stop is used for bus services 41 & 42 which provide a direct link to and from Wrexham Town centre approx every 30 mins.

Employers should provide Employees with Bus Timetables as well as encouraging car-share schemes between employees.

The plans below identify the location of the nearest bus stop to the development site.

I S P

ARCHITECTS

LTD

6659 – NU Instruments
Design & Access Statement

Rev A

I S P

ARCHITECTS

LTD



The Wrexham Shuttle Bus Operation Area [Hover over image to navigate]
Image 2 of 2

CLOSE

I S P ARCHITECTS LTD

6659 – NU Instruments

Rev A

Design & Access Statement

I S P

ARCHITECTS

LTD

In terms of inclusive access the internal layout of the extension complies with buildings regulations Approved Document M – Access to and Use of Buildings. More specifically the following issues have been addressed:

- *Approach:*

The approach to the building will offer clear and flat access (1:20) from the car parking areas.

- *Horizontal Circulation:*

Sufficient clear widths are provided to door openings and corridors with ample clear door opening widths for wheelchair access.

- *Toilet Facilities :*

A disabled WC has been provided in addition to the standard female and male toilets.

It is therefore considered that the proposed development will be accessible by all its users and therefore complies with policy GDP1 of the Wrexham UDP.

3. ENVIRONMENTAL SUSTAINABILITY

The development will meet all current Building Regulation standards in terms of environmental sustainability.

Not only it is proposed to implement energy efficiency measures to fulfil Building Regulation standards and to reduce energy demand and carbon emissions but the potential to implement other measures including Landscape/ townscape setting, biodiversity and local environment, sustainable materials, water, waste management, climate resilience and sustainable building standards has been considered as part of the design process:

- *Landscape setting:*

The existing site is located off Clywedog Road South which is on the edge of Wrexham Industrial Estate. Towards the East of the site, lies the hamlet of Pentre Maelor. Land has been designated around this residential area as a landscaped buffer zone to remain free of built development. Our site boundary lies near this but is not part of the designated area.

- *Biodiversity and local environment:*

Most existing trees have been retained on the site. We do propose the removal of 4 existing trees and scrub (see target note 17 of the submitted Ecological Appraisal). It has been agreed with the Biodiversity Officer that we will provide a planted wildlife corridor along the Southern boundary of the site as mitigation to the reduction in amenity grassland on the site, and to ensure potential habitats can be retained.

- *Energy efficiency/carbon reduction:*

The development will meet the current Building Regulation standards. Construction of the extension will be detailed to have high insulation levels and good air tightness values. Low energy light fittings will be used throughout the development and where the extension meets the existing building, appropriate energy efficient remedial measures will be implemented.

I S P ARCHITECTS LTD

6659 – NU Instruments Rev A
Design & Access Statement

I S P

ARCHITECTS

LTD

- *Sustainable Materials:*

Locally sourced sustainable materials with a low environmental impact are to be used for the development. Any timber used will be sourced from sustainable managed forests and certified by the Forest Stewardship Council.

- *Water:*

Permeable surfaces are proposed to all surfaces of footpaths and car parking areas. Although the site is fairly near to the local River Gwenfro, we have been advised by the Environment Agency that the site does not lie in a flood zone.

- *Climate Resilience and Sustainable Building Standards:*

The extension will be constructed to fulfil the current Building Regulation standards, which means u-values of the building envelope as well as air tightness measurements have to be in accordance to standards set out in the Building Regulations 2006, Conservation of fuel and power, Part L2B.

4. CHARACTER

As already identified the design process included an analysis of the context of the application site. This analysis has informed the design process and it is considered that the presented scheme offers development that compliments the character of the surrounding area.

- **Layout**

The extension has been placed in the available areas at the rear of the existing building. A link attachment connects the extension to the existing which reduces the overall impact of the new build. The North East facing elevation is set slightly forward to the existing to ensure required floor areas are met without encroaching into the proposed wildlife corridor. Also for these reasons, the footprint at the rear of the extension is staggered retaining 90° angles which enables simple wall to roof details. These will reduce the overall massing of the roof and also ensure good air-tightness values are met.

Parking spaces are continued along the North Eastern Boundary and also to the side of the extension. This enables the landscaping to the front of the site to be retained.

- **Appearance**

The aim has been to design a development that is in-keeping with the existing features of the industrial area. The proposed materials match those of the existing and surrounding units. Existing boundary treatments are to be retained.

- **Landscaping**

Existing landscaping to the site is to be mostly retained as shown on the proposed site layout drawing. We will be retaining the landscaping to the South west to provide the required wildlife corridor.

6659 – NU Instruments

Rev A

Design & Access Statement

I S P

ARCHITECTS

LTD

- **Design**a) **Policy Approach**

The following identified planning policy frameworks have influence the design of the proposed development.

- **National Planning Policy**

Planning Policy Wales (PPW) as amended by MIPPS 01/2008 'Design' and TAN 12 are the principal planning documents of the Welsh Assembly Government, which sets out the context for the consideration and evaluation of all types of development.

The main thrust of both documents is to promote sustainable development by ensuring that the planning system provides for an adequate and continuous supply of land, available and suitable for development to meet society's needs in a way that is consistent with overall sustainability principles.

PPW seeks to promote resource-efficient settlements that minimise land-take and urban sprawl, locates development so as to minimise the demand for travel, ensure that all communities have good quality housing for their needs in safe neighbourhoods, promote access to employment, shopping, education, health, community, leisure and sports facilities and open space.

It is identified in paragraph 2.9.1 of MIPPS 01/2008 that;

'Design is taken to mean the relationship between all elements of the natural and built environment. To create sustainable development, design must go beyond aesthetics, and include the social, environmental and economic aspects of the development, including its construction, operation and management, and its relationship to its surroundings'.

Paragraph 2.9.3 identifies that;

'Good design is also inclusive design. The principles of inclusive design are that it places people at the heart of the design process, acknowledges diversity and difference, offers choice where a single design solution cannot accommodate all users, provides for flexibility in use, and, provides buildings and environments that are convenient and enjoyable to use for everyone'.

In terms of the development relationship with its surroundings, paragraph 2.9.8 identifies that;

'The visual appearance of proposed development, its scale and its relationship to its surroundings and context are material planning considerations. Local Planning Authorities should reject poor building and contextual designs. However, they should not attempt to impose a particular architectural'.

TAN 12 has offered guidance to the contents of this Design and Access Statement.

- **Local Planning Policy**- **Wrexham UDP**

I S P ARCHITECTS LTD

6659 – NU Instruments

Rev A

Design & Access Statement

I S P

ARCHITECTS

LTD

Policy GDP1 outlines the general development principles for all new developments:-

- a) Ensure that built development in its scale, design and layout, and in its use of materials and landscaping, accords with the character of the site and makes a positive contribution to the appearance of the nearby locality.
- b) Take account of personal and community safety and security in the design and layout of development and public / private spaces.
- c) Make the best use of design techniques, siting and orientation in order to conserve energy and water resources.
- d) Ensure safe and convenient pedestrian and vehicular access to and from development sites, both on site and in the nearby locality.
- e) Ensure that built development is located where it has convenient access to public transport facilities, and is well related to pedestrian and cycle routes wherever possible.
- f) Ensure the safety and amenity of the public and safeguard the environment from the adverse effects of pollution of water, land or air, hazards from industry and quarrying, and associated noise, odour or vibration arising from development.
- g) Secure public services (e.g. gas, water, electricity) to development at minimum public cost.
- h) Safeguard sites and areas of nature conservation and wildlife interest, and to provide new habitats where there is an unavoidable loss of existing habitats and areas of wildlife interest.
- i) Ensure that development does not result in, or is subject to, flooding, soil erosion, landslides or contamination, either on or off the site.
- j) Have regard to the need to safeguard those areas that possess a strong Welsh cultural and/or linguistic identity from development that could harm this identity.
- k) Secure the development of sustainable communities, through the promotion of the economic, social and environmental well-being of the area.

The following design principles and concepts have been applied to the proposed development which ensures that the development conforms with national and local planning policy;

5. COMMUNITY SAFETY

During the design progress, design measures such as layout, appearance and landscaping have been carefully assessed to help to prevent crime. The following safety measures have been implemented as part of the design process:-

- adequate street lighting for all communal areas including car parking
- External environment to be designed to avoid inadvertent creation of opportunities for crime through, for example, providing hiding places or facilitating access to the upper floors of buildings. The positioning and choice of planting in a way to minimize the potential for such problems.

I S P ARCHITECTS LTD

6659 – NU Instruments

Rev A

Design & Access Statement

I S P

ARCHITECTS

LTD

6. MOVEMENT TO, FROM AND WITHIN THE DEVELOPMENT

Matters relating to accessing the proposed development has been dealt with in detail in section 2 of this statement.

In terms of design, the proposed site layout has been carefully designed to ensure that the site's future users can effectively access the site.

7. SEPARATE SUBMISSIONS

- 1) Ecological Appraisal**
(Marches Ecology, May 2010)

This statement has identified that all Design and Access matters have been fully considered at the design stage and that the scheme presented offers a sustainable form of development that compliments its surroundings and a form of development that will be accessible by all its users.

I S P

ARCHITECTS

LTD