



**LITHGOW CITY COUNCIL**

**DEVELOPMENT CONTROL PLAN**

**ADI LIMITED SITE  
LITHGOW SMALL ARMS FACTORY  
METHVEN STREET, LITHGOW**

**6 November 2003**



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## **1. INTRODUCTION**

### **1.1 Purpose**

This Draft Development Control Plan has been prepared in accordance with Section 72 of the Environmental Planning and Assessment Act, 1979 and Part 3 of the EPA Regulation 2000 to provide a site-specific development framework.

The DCP identifies Objectives, performance Criteria and Requirements (numerical controls) to guide and control adaptive reuse and redevelopment of the existing industrial facility.

The provisions of the DCP must be taken into consideration in the assessment of development applications for the site pursuant to Section 79C(1)(a)(iii) of the Environmental Planning and Assessment Act, 1979.

### **1.2 Citation**

This Development Control Plan may be cited as City of Lithgow Development Control Plan – ADI Limited Site, Lithgow.

### **1.3 Adoption**

This plan was adopted by Council pursuant to Section 72 of the EPA Act, 1979 and Regulation and came into effect on 6 November 2003

### **1.4 Land to Which This Plan Applies**

The Plan applies to the industrial developed portion of the ADI Site, including the consolidation of the Lithgow Small Arms Factory, Methven Street, Lithgow; identified in Figure 1.

The current legal description of the land is DP 789197 Lot 1, City of Lithgow Council, Parish of Lett, County of Cook.

### **1.5 Relationship to Other Plans and Policies**

The DCP is made under Lithgow Local Environmental Plan, 1994 and conforms with its statutory provisions.

The DCP is to be read in conjunction with the following planning instruments.

- Lithgow Local Environmental Plan, 1994.

## 2. ADMINISTRATION

### 2.1 Consultation

Developers are encouraged to use the services of qualified professionals in the preparation of development proposal, and provision of supporting information.

It is desirable to consult the adjoining owners during formulation of the development proposal. Council strongly recommends that applicants hold pre-lodgment meeting with Council's officers to discuss the proposed development and to determine the matters and issues that need to be addressed in the development application and supporting information.

Pre-lodgment meetings can be arranged by contacting Council's Environmental and Planning Services Division on 02 63521077.

Council's address and phone numbers are provided below:-

**Postal Address:** The General Manager  
Lithgow City Council  
PO Box 19  
LITHGOW NSW 2790

**Address:** Administration Building  
180 Mort Street  
LITHGOW NSW 2790

**Telephone:** 02 6352 1077

**Facsimile:** 02 6351 4259

**Office Hours:** Council officers are generally available between the hours of 8.15am and 4.30pm or by appointment.

Consultation should also take place with Council on the availability of water and sewerage services, limitations on discharges and whether amplification of services or other charges will be involved.

Other servicing authorities should also be consulted as required including Integral

Energy, the AGL Company, Public Works etc.

### 2.2 Documentation

Information to be submitted with a development application is listed in Appendix B.

### 2.3 Lodgment of a Development Application

Development applications are to be lodged with Council's Environmental and Planning Services Division. If you wish to lodge a development application it is recommended but not essential that you make an appointment with Council on telephone (02) 63512077.

### 2.4 Notification and Advertising

Upon receiving a development application, Council will notify adjoining and neighbouring landowners in writing of the development application. Some developments will also be advertised in the local press.

When adjoining and neighbouring landowners are to be notified of a development application the period of exhibition will be a minimum period of 14 days unless otherwise prescribed by the EPA Act Regulation.

A fee will be levied on the applicant for the cost of notification of the development application. The fee will be payable at the time of lodgment of the development application.

### 2.5 Referral to Government Authorities

Council may determine to refer for reasons other than Integrated Development Assessment, a development application to one or more Government Authorities for their comments, such as the Roads and Traffic Authority, Environment Protection Authority or NSW Heritage Office.

## **2.6 Assessment**

The development application will be assessed and determined by Council having regard to the following matters:-

- Section 79C(1) of the Environmental Planning and Assessment Act, 1979.
- Any relevant State or Regional Planning Policy.
- The aims, objectives and land use provisions of City of Lithgow LEP1994.
- The provisions of this Development Control Plan.
- The provisions of any relevant Council's Codes, DCP's or Policies.

### 3. PLANNING CONTEXT AND OBJECTIVES

#### 3.1 Lithgow LEP1994

The Lithgow LEP 1994 provides the statutory planning framework to guide the growth of the City of Lithgow in the 21st Century.

The **aims** of the Lithgow Local Environmental Plan 1994 are:-

- (a) to recognise and promote the City of Greater Lithgow as a desirable and viable place in which to live and visit and invest;
- (b) to encourage the proper management, development and conservation of natural resources and the built environment within the City of Greater Lithgow by protecting, enhancing or conserving:-
  - (i) prime crop and pasture land;
  - (ii) timber, minerals, soil, water quality, stream environment and other natural resources;
  - (iii) places of significance for nature or heritage conservation;
  - (iv) places or features of high scenic or recreational value; and
- (c) to replace the former local planning controls with a comprehensive local environmental plan to help facilitate growth and development of the City of Greater Lithgow in a manner which is consistent with the aims specified in paragraph (a) and which:-
  - (i) minimises the environmental cost to the community of fragmented and isolated development of rural land which has less than full provision of services;
  - (ii) facilitates the efficient and effective provision of amenities and services;
  - (iii) facilitates a range of residential and employment opportunities in accordance with demand;
  - (iv) facilitates farm adjustments;
  - (v) ensures that the safety and efficiency of arterial roads is not adversely affected by development on adjacent land;
  - (vi) minimises the impact of flooding and bushfires;

- (vii) encourages the separation of conflicting land uses;
- (viii) establishes measures to preserve water quality in the City's streams and waterways; and
- (ix) facilitates the protection of the catchment areas within and downstream of the City area in accordance with the principles of total catchment management.

#### 3.2 Objectives of the DCP

The provisions of the DCP are formulated to achieve the relevant aims of the Lithgow LEP1994 through appropriate performance criteria and requirements.

The objectives of the DCP are:-

- (1) Utilise, where practicable, the existing physical infrastructure and maintain the long association of the Small Arms Factory with Lithgow.
- (2) Provide industrial allotments of varying sizes that can be economically developed to suit modern light industrial, high technology and service facilities and provide local employment.
- (3) Facilitate adaptive reuse of buildings of significance, which are structurally and economically suited for adaptation.
- (4) To promote energy conservation and environmentally sustainable industrial development.
- (5) To encourage improvements to the character and appearance of industrial development and promote visual and operational compatibility with residential areas.
- (6) To protect the amenity and health of the residents as well as the

environmental assets including air,  
water, soil and native vegetation.

## 4. DEVELOPMENT CONTROLS – BUILDINGS AND STRUCTURES

### 4.1 The Development Control Framework

The DCP adopts performance based development control approach that focuses on desired outcomes outlined in objectives and performance criteria. Prescriptive, numerical controls (requirements) are provided to illustrate one possible means of advising the objectives. The performance based development control approach seeks to achieve environmentally and aesthetically acceptable results while allowing flexibility and encouraging innovative design.

Each *design element* of the DCP comprises a set of objectives, performance criteria and where applicable, requirements (numerical controls).

**Objectives** – state the purpose of the controls and the desired outcomes relating to the particular design element. the objectives are deemed to be achieved by meeting the performance criteria or requirements.

**Performance criteria** – specify the means to achieve the objectives. They provide a guide to “best practice” concerning design and amenity and encourage innovative design solutions. Not all performance criteria will be applicable to every development. In submitting an application, the developer must indicate those criteria not relevant to the particular development.

**Requirements** – are prescriptive (numerical) controls and complement the performance criteria. The requirements reflect Council’s planning practice in relation to other industrial sites, site constraints and opportunities and generally accepted standards concerning industrial development.

A development proposal needs to satisfy all objectives, performance criteria and requirements that are relevant to the proposal. Departures from the requirements will be considered if it can be demonstrated that the variations satisfy the objectives and performance criteria of each respective design element.

### 4.2 Site Analysis

#### 4.2.1 Objectives

The Site Analysis Plan provides graphic examination of physical context of the development and identifies the major physical influences, constraints and opportunities. These include existing built environment, topography, climatic factors, infrastructure, access and natural hazards.

#### 4.2.2 Performance Criteria

The content of a Site Analysis Plan will depend on scale and nature of the development proposal and should document, but not be limited to, the following aspects:-

- Lot numbers and Deposited Plan numbers;
- Boundaries, easements and fences;
- Topographic features such as contours, drainage and ridge lines;
- The orientation of true solar north;
- Location of street access and connection points (vehicular, pedestrian, cyclist etc);
- Groundwater vulnerability;
- Flood prone areas/ waterways/
- Trees on or affecting the site, identifying location, type, size and condition;
- Existing buildings and other structures;
- Services such as telephone, power, water, public transport and roads;
- Prevailing seasonal wind direction;
- Sources of any emissions such as noise, odours, dust etc on and beyond the site;

- Contaminated soils, fill and waste disposal areas;
- Areas affected by land degradation i.e. erosion, salinity;
- Location and height of walls and fences built to the boundary;
- The built form and character of adjacent and nearby development, including characteristic fencing and landscaping styles;
- Archaeological and heritage sites;
- Use of adjoining land.

A Site Analysis Plan must be to scale.

#### **4.2.3 Controls**

- (a) A detailed Site Analysis Plan is mandatory for all development and subdivision proposals with the exception of minor development such as alterations or changes of use.

For minor development a simple plan showing key site characteristics and relationships with existing site features will be sufficient.

- (b) An explanatory statement must accompany the Site Analysis Plan outlining the principles and response to the Site Analysis Plan.

The following is a list of sources to guide you in the preparation of a Site Analysis Plan:-

- Lithgow City Council  
Topographic maps, land capability maps, property descriptions, deposited plans, parish maps, heritage items.
- Department of Land & Water Conservation  
Ground water vulnerability, flood records, aerial photos, erosion and sediment control.
- Environment Protection Authority

Contaminated land.

- Integral Energy, Telstra & AGL

Electricity, Telephone and Natural Gas.

#### **4.3 Heritage**

The site contains no Heritage Items as listed under Greater Lithgow Local Environmental Plan 1994. However, a heritage assessment of the site has identified a small number of buildings as having potential heritage significance (Significant Buildings).

##### **4.3.1 Objectives**

- (1) To encourage the conservation or adaptive reuse where economically and structurally feasible of Significant Buildings, identified and shown on Map No.2 of this DCP.

##### **4.3.2 Performance Criteria**

- (1) All development proposals involving Significant Buildings need to be supported by a Heritage Impact Statement.

##### **4.3.3 Requirements**

- (1) The following buildings are identified as Significant Buildings. Refer to Map No. 2:-
- Building No 44;
  - Building No 48 (chimney stack only);
  - Building No 60;
  - Building No 65/66.
- (2) Application for demolition or adaptive reuse of identified Significant Buildings, must be accompanied by a Heritage Impact Statement. The Statement is to provide comprehensive documentation and justification of the development proposal. All other applications for demolition of buildings or works are to

consider and assess the impact upon  
heritage values of the site

(3) In assessing an application for  
demolition of a Significant Building

Council needs to take into consideration the following matters:-

- (1) The relative significance of the building.
- (2) The structural condition and adaptability of the building for modern manufacturing and high technology purposes.
- (3) The economic feasibility of retention and conservation of the building.
- (4) The impact of retention of the building on the proposed Industrial Park.

#### 4.4 Building Design

##### 4.4.1 Objectives

- (1) To promote redevelopment or adaptive reuse of selected existing buildings which is functional, well designed, economically feasible and compatible with the local natural and built environment.

##### 4.4.2 Performance Criteria

- (1) *Building design*
  - Buildings are designed to integrate with the streetscape and be compatible with their surroundings.
  - Adaptive reuse of Significant Buildings should respect and preserve as far as feasible their original forms and character. This is subject to economic feasibility, including all costs of demolition, rehabilitation and rebuilding.
- (2) *Architectural interest*
  - The development is designed to contribute positively to the streetscape and provide architectural interest to both the industrial and surrounding residential areas.

##### (3) *Building height*

Building height is maintained at a scale appropriate to the location of the site and scale of the retained buildings.

##### (4) *Ancillary uses*

- Ancillary uses are designed, constructed and located in a sympathetic manner which enhances the visual amenity of the development.
- Ancillary office space is designed to integrate with the industrial character and function of the site.

##### (5) *Security*

Building design facilitates surveillance of streets and open spaces.

##### (6) *Building materials*

The form, colours, textures and materials of buildings should enhance the quality and character of the site.

##### 4.4.3 Requirements

##### (1) *Building design*

- Facades adopt an appearance, appropriate to the function of the building.
- Adaptive reuse of Significant Buildings respects their original character and fabric.
- Where the side or rear elevation of a new industrial building is visible from residential areas, colours and wall profiles should be selected to minimise their visual impact.

Other features which are encouraged include balustrades, pergolas, expressed structure and downpipes, glazed skylights, sun shading devices and distinctive entries.

##### (2) *Building height*

- New buildings should be generally compatible with the scale of existing buildings on the site.
- Building height does not adversely impact on the visual amenity of the locality or the City.
- Building height does not result in the loss of solar access to adjacent residential properties between the hours of 9.00am and 3.00pm on 22 June.

#### (3) *Ancillary uses*

- Showroom display areas, offices, staff amenities and other low-scale building elements should be, wherever practicable, located adjacent to the entrance of the premises.
- The office component of the development is to be ancillary to the functions of the manufacturing process, warehouse or factory etc.

#### (4) *Security*

Buildings to address the street and open spaces where applicable to allow surveillance.

#### (5) *Building materials*

- External walls and roofing materials of new buildings are to be of a non-reflective material, such as brick, concrete block, rendered concrete or masonry, metal or fibre cement cladding systems of Colourbond sheeting.
- All external building materials including roofing of new buildings shall be of a colour appropriate to the site.
- Mirror glass with a reflectivity in excess of 15% is not permitted.

## 4.5 Setbacks

### 4.5.1 Objectives

- (1) To ensure that adequate area is available to accommodate landscaping and access to and around the site;
- (2) To reduce the visual impact of development on the streetscape;
- (3) To ensure there is emergency vehicle access at side boundaries.

### 4.5.2 Performance Criteria

#### (1) *Front/road setbacks*

Setbacks complement the streetscape and allow for landscaping and open space between buildings.

#### (2) *Side and rear setbacks*

Side and rear setbacks provide emergency services access and reduces adverse impacts on adjoining properties.

### 4.5.3 Requirements

- (1) New buildings are to be set back a minimum distance of 7m from Martini Parade, Methven Street, Park Parade and 5 metres from the road alignment of the internal roads.
- (2) On corner allotments buildings are set back a minimum distance of 3m from the boundary on the return frontage.
- (3) Buildings are set back a minimum distance of 3m from the side and rear boundaries.
- (4) The setback requirements do not apply to retained buildings.

## 4.6 Landscaping

### 4.6.1 Objectives

- (1) To provide landscaping which contributes to the streetscape, enhances the amenity of the site and

preserve, where feasible, significant stands of trees or natural vegetation.

- (2) To improve the visual quality of industrial development and integrate the buildings with the natural landscape.

#### 4.6.2 Performance Criteria

##### (1) Site planning

Landscaping is considered as a component of the site planning process and reflects the scale of development.

##### (2) Existing trees and shrubs

Development is designed to maximise the number of trees retained on site.

##### (3) Visual amenity

Landscaping is used to soften the impact of buildings, as a screen to visual intrusions, parking areas and for recreation space.

#### 4.6.3 Requirements

##### (1) Site planning

- Development proposals should be accompanied by a landscaping plan prepared by a qualified landscape architect, designer or other suitably qualified person, and is to show:-

the main planting groups,

any proposed plantings in verges and public open spaces,

the location of fixed underground watering equipment, and provide a schedule of species, though indigenous species will be preferred.

- Upon approval of such a plan, landscaping is to be carried out prior to the occupation of the new building.

##### (2) Existing trees and shrubs

- Where there are significant existing trees on-site, where possible the building design provides for their protection.
- During site work and construction, protective measures will be required around trees to be retained and the means to illustrate these measures will be required with the development application.

##### (3) Visual amenity

- Landscaping is provided in front setback areas to soften the appearance of buildings and improve the streetscape.
- Landscaping includes species that will grow to a height consistent with the height and scale of the building.
- The following areas of the site shall be landscaped:-

between the front boundary and the building(s),

between the front lot boundary and building line;

- For developments facing a highway, a major local road, public open space or nearby residential area, trees with a mature height of at least 8 metres are to be planted. Trees except for shrubs must be 3m in height at planting.

#### 4.7 Vehicular Access and Parking

##### 4.7.1 Objectives

- (1) To ensure vehicle access to and from a development is adequate, safe and direct;

- (2) To provide sufficient, convenient and functional parking and loading/unloading areas;
- (3) To provide for safe and environmentally compatible hard stand areas
- (4) To provide suitable access for vehicles to the site that does not unduly compromise residential amenity.

#### 4.7.2 Performance Criteria

##### (1) *Ingress and egress*

Ingress and egress points are located and sized to facilitate the safe and efficient movement of vehicles to and from the site.

**Note:** The design vehicle used to determine the width of the ingress, egress, driveways, accessways and manoeuvring areas is to be the largest vehicle likely to enter the site.

##### (2) *Accessways*

Accessways and driveways are sized to facilitate the safe and efficient movement of vehicles to, from and within the site

##### (3) *Carparking*

- Carparking does not adversely impact upon the visual amenity of the site and the locality.
- Carparking is conveniently located and easily accessed.
- Carparking areas are designed to facilitate the safe movement of vehicles and provide a sufficient number of spaces for the projected needs of the development.

##### (4) *Loading/unloading and manoeuvring areas*

- Facilities are provided on-site for the loading and unloading of goods.
- Manoeuvring areas are provided to ensure that the design vehicle can enter and leave the site in a forward direction.

##### (5) *Sealing and drainage*

All driveways, carparks, loading, unloading, manoeuvring areas etc are appropriately drained and sealed.

#### 4.7.3 Requirements

##### (1) *Ingress and egress*

- Vehicle access driveways are not within 6m of an intersection or break in a median strip.
- Ingress and egress points are signposted.
- Where separate ingress and egress points are proposed the ingress point is the first point reached when approaching the site by road from the side of the road upon which the development is located.
- Where a separate ingress and egress are provided they must be separated by a minimum distance of 3m.

##### (2) *Accessways*

- Driveway widths are to be assessed on an individual lot basis. The widths are to be performance based.
- All internal accessways, manoeuvring areas etc are provided with directional signposting and linemarking,
- Access for heavy vehicles to be focussed on Methven and Martini Streets. Consideration of other access roads are to be subject to a traffic report assessing the impacts on the access

roads, including consideration of impacts on amenity

- All internal accessways are of a width and geometry to facilitate the safe and efficient movement of the design vehicle.
- All vehicles are able to enter and leave the site in a forward direction.

**Note:** The above dimensions are minimum only. The width must be suitable given the turning path of the required design vehicle.

#### (3) *Carparking*

- Visitor carparking is conveniently located to the main visitor entrance to the building, behind the building line.
- Carparking areas are designed in accordance with Lithgow City Council Development Control Plan for Off Street Parking of Motor Vehicles.
- The number of carparking spaces provided is in accordance with Lithgow City Council Development Control Plan for Off Street Parking of Motor Vehicles.

#### (4) *Loading/unloading and manoeuvring areas*

- On-site loading and unloading areas are provided.
- Loading/unloading areas are designed and provided to facilitate their use by the design vehicle.
- Details of intended marking of entry and exit points, driveways, traffic flow, disabled parking, turning and unloading areas are required with the development application.

#### (5) *Sealing and drainage*

- All areas are sealed in accordance with Lithgow City Council's

Development Control Plan for Off Street Parking of Motor Vehicles.

- All sealed areas are drained to Council's stormwater system.
- No surface drainage is discharged across Council's footpaths or reserves.

### 4.8 **Fencing**

#### 4.8.1 **Objectives**

- (1) To minimise the visual impact of fencing on the locality.
- (2) To provide security to development on the site.

#### 4.8.2 **Performance Criteria**

- Other than the specialised security requirements of ADI Limited, fencing and screen walls do not adversely impact upon the visual amenity of the area.
- Fencing provides adequate security for the ADI Limited establishment.

#### 4.8.3 **Requirements**

##### (1) *General Industrial Development*

- Solid fencing exceeding 1m in height is not provided forward of the front building line.
- Fencing does not exceed a maximum height of 1.8m, although higher security fencing may be provided where landscaping' colour treatment of the fencing, or other suitable amelioration is provided to protect visual amenity.
- No fencing is provided within 3m of the front boundary.
- Fencing forward of the building line is incorporated with the landscaping, including earth mounds 600mm–

1200mm above natural ground level in order to reduce its visual impact.

(2) *ADI Limited site*

The height and type of fencing for the site will be provided to ensure security of the site commensurate with its function.

#### 4.9 Design for Access and Mobility

##### 4.9.1 Objectives

- (1) To ensure that all developments, where appropriate, are designed and constructed to provide access and mobility for people with disabilities.

##### 4.9.2 Performance Criteria

- (1) Developments are designed to satisfy relevant Australian Standards for access and mobility.

##### 4.9.3 Requirements

- (1) Developments are designed in accordance with Australian Standard AS1428.1-1944 – “Design for Access and Mobility”.
- (2) The Standard may be waived for development of existing Significant Buildings when it is demonstrated that compliance with the Standard would affect the integrity of the Building.

#### 4.10 Waste Management

##### 4.10.1 Objectives

- (1) To provide for an efficient and environmentally responsible means of storage and/or disposal of waste and recyclable products.

##### 4.10.2 Performance Criteria

- (1) *Garbage*

- The capacity, size, construction and placement of both trade waste and recyclables storage facilities are determined according to estimated amounts of waste and recyclables generated, safe means of collection, cleanliness and unobtrusive effects on the building and neighbourhood.
- Trade waste means liquid wastes discharged to the sewer and containing trade or factory wastes or chemical or other impurities from any business, trade or manufacturing premises other than domestic sewage, stormwater or unpolluted water.

(2) *Excavated material*

Excavated material, demolition and builders’ waste is disposed of in an environmentally sustainable manner.

##### 4.10.3 Requirements

(1) *Garbage*

- Trade waste and recyclables storage facilities are sized at a minimum area of 3m by 2.4m, located behind the building line, and capable of accommodating trade waste and recyclables generated by the premises together with associated handling equipment and providing sufficient space for loading and unloading.
- In addition to general sewerage rates and charges, the Council may levy trade waste, special rates and charges for acceptance of trade waste into the sewer and fix fees or charges for regulatory and other services in accordance with the revenue policy set out in the Council’s management plan. Applicants wishing to discharge trade waste must enter into a Service Contract with the Council which will set out the conditions associated with the discharge of trade waste to the sewer.

(2) *Excavated material*

Sites for disposal of excavated material, demolition and builders' waste are to be nominated by the developer at the time of lodging the development application.

**4.11 Soil and Water Quality, Noise Management****4.11.1 Objectives**

- (1) To minimise soil erosion and sedimentation by minimising land disturbance and requiring control measures at the source.
- (2) To retard the flow of water into the natural drainage system and mitigate impacts from stormwater runoff.
- (3) To protect the surrounding area from unnecessary noise.

**4.11.2 Performance Criteria**(1) *Soil erosion*

- Adequate provision is made for measures during construction to ensure that the land form is stabilised and erosion is controlled.
- The system design optimises the interception, retention and removal of water-borne pollutants through the uses of appropriate criteria, prior to their discharge to receiving waters.
- The system design minimises the environmental impact of urban runoff on surface receiving water quality and on other aspects of the natural environment, such as creek configuration and existing vegetation, by employing techniques which are appropriate and effective in reducing runoff and pollution travel.

(2) *Stormwater management*

- Drainage from development sties is consistent with the pre-development stormwater patterns.
- Drainage systems should be designed to ensure safety and minimise stormwater inundation of habitable floor areas.

(3) *Noise management*

- Other than the maintenance of existing ADI operational hours within their existing locations, the hours of operation of noise generating activities are restricted to avoid any noise nuisance upon surrounding residential areas.
- Developments are designed to minimise the potential for offensive noise to be generated.
- Noise control measures for any particular source should take account of all potentially affected points.

**4.11.3 Requirements**(1) *Soil erosion*

- An **Erosion and Sediment Control Plan** is prepared by properly qualified personnel using recognised and locally implemented hydrological, hydraulic, hydrogeological, soils water quality, biological data and design methodologies.
- The **Erosion and Sediment Control Plan** is to comply with the Department of Land and Water Conservations *Managing Urban Stormwater Soils and Construction*.
- Water pollution control ponds or wetlands are developed (where appropriate) for final treatment before discharge to the wider environment and should be sited to minimise impacts on the natural environment.

- Development minimises earthworks (cut and fill). Where excavation works are intended to be undertaken development proposals are accompanied by:-
  - ▶ a geotechnical report evaluating site stability;
  - ▶ a schedule of earthworks;
  - ▶ details of appropriate construction techniques.

## (2) *Stormwater management*

- The stormwater discharge for development sites does not exceed the 5 year ARI storm event. Typically, an on-site stormwater detention system will be required to reduce the volume of stormwater discharge.
- On-site stormwater and drainage control should be designed for the 20 year ARI storm. Trunk drainage systems should provide for the 20 year ARI event with overland flow paths designed for the 100 year storm ARI event.
- Stormwater should be gravity drained to Council's drainage system, which may require inter-allotment drainage.
- The habitable floor areas or dwellings constructed adjacent to trunk drainage systems, watercourses and creeks should be a minimum of 0.5m above the 100 year ARI flow level.

## (3) *Noise management*

- The hours of operation of activities in the development are between 7.00am and 6.00pm Monday to Friday and 8.00am to 4.00pm on Saturday, with no work to be undertaken on Sunday or Public Holidays. Council will consider applications outside these hours provided the activities to be undertaken at those times are designed to absolutely minimise the potential for offensive noise to be generated, especially to residential premises.

- Noise levels should not exceed the Recommended Background Planning Noise Level of 5dBa at the most affected point of the land use receiver area.
- Sources of noise such as garbage collection, machinery, parking areas and air conditioning plants should, where practicable, be sited away from adjoining properties and, where necessary, be screened by walls or other acoustical treatment.

**Note:** These controls are applicable to new development on the site. The continued operation of the existing ADI Plant maintains existing operational rights.

## 4.12 Advertising Signs

### 4.12.1 Objectives

- (1) To ensure advertising signs are compatible with the character and function of industrial development.

### 4.12.2 Performance Criteria

- (1) *Role, function and location*

Advertising signs reflect the role and function of the industries.

- (2) *Quantity and dimensions of signs*

The number and size of signs is limited to ensure equity for land uses and a pleasant visual environment.

### 4.12.3 Requirements

- (1) *Role, function and location*

- Signs are incorporated into the architecture of the building (ie located in recessed panels in the parapet or façade, or on purpose made structures including pylons, which relate to the style and materials of the building).

- Advertising signs may only be erected where they are used in conjunction with a permissible use and situated on the land on which that use is conducted.
- (2) *Quantity and dimensions of signs*
- One freestanding advertising structure may be constructed within the front landscaped area of the site. Such structures should not exceed 2m<sup>2</sup> in area and 1.5m in height.
  - One advertising structure may be placed on every façade which fronts a public road. Signs shall be no greater than 5m<sup>2</sup> in area and shall not be higher than the façade on which it is mounted.
  - On multiple occupancy sites one index board may be constructed within the front landscaped area of the site. Such structures shall not exceed 2m<sup>2</sup> in area and 1.5m in height.
  - One advertising sign may be placed on the façade of a unit and shall be no greater than 5m<sup>2</sup> in area and shall not be higher than the façade on which it is mounted.

#### 4.13 Services

##### 4.13.1 Objectives

- (1) To ensure infrastructure has the capacity or can be adapted to accommodate new development;
- (2) To efficiently provide developments with appropriate physical services; and
- (3) To minimise the impact of increased stormwater runoff on drainage systems.

##### 4.13.2 Performance Criteria

- (1) The development will not overload the capacity of public infrastructure,

including reticulated services, streets, open space and human services.

- (2) The design and layout of development provides space (and easements where required) and facilities to enable efficient and cost-effective provision of reticulated services.
- (3) The development is connected to a reticulated sewerage, water supply and electricity system, and to gas where available.
- (4) *Runoff control*

Stormwater drainage control measures could include:-

constructing on-site stormwater detention with delayed release into the stormwater system;

designing the site to minimise impervious areas;

incorporating an onsite water recycling system; or

a combination of the above.

In areas where drainage infrastructure has little or no excess capacity, developments which would generate stormwater runoff beyond that equivalent to 35% site cover (or beyond that presently generated by the site if greater) should provide for stormwater drainage mitigation or upgrading of the local drainage system.

##### 4.13.3 Requirements

- (1) The development is connected to Council's reticulated water supply stormwater drainage and sewerage system to Council's requirements (including separate water meters).
- (2) The development is connected to the Integral Energy reticulated electricity system to the authority's requirements.

- (3) The development is connected to a telecommunication system to the appropriate authority's requirements.

## 5. DEVELOPMENT CONTROLS – SUBDIVISION

### 5.1 Lot Size and Dimension

#### 5.1.1 Objectives

- (1) To provide reasonable site area for buildings, manoeuvring, carparking and landscaping.
- (2) To provide allotments of sufficient size to accommodate future potential uses.
- (3) To ensure that the site is not developed to a level which prevents its efficient operation.

#### 5.1.2 Performance Criteria

##### (1) *Minimum lot size*

Lots are of an adequate size for the location of buildings, manoeuvring and parking of vehicles and landscaping.

##### (2) *Battle-axe lots*

Battle-axe lots have adequate access to and from the street.

#### 5.1.3 Requirements

##### (1) *Minimum lot size*

Minimum lot size of 1500m<sup>2</sup> and 20 metre frontage. However, Council will allow flexibility of this control to encourage the provision of smaller lots as required.

##### (2) *Battle-axe lots*

Minimum areas and dimensions are as specified for each zone, with battle-axe handles a minimum width of 10m, and no longer than 50m.

## 5.2 Subdivision Design

### 5.2.1 Objectives

- (1) To ensure lots are designed to acknowledge site constraints and protect natural and cultural features.

- (2) To design subdivisions that are sustainable and contain allotments which are capable of meeting current and future demands for industrial land.

### 5.2.2 Performance Criteria

#### (1) *Natural and cultural features*

Lot layout acknowledges natural and cultural features such as archaeological sites, Significant Buildings etc.

#### (2) *Site constraints*

Site constraints such as erosion and bushfire risk are acknowledged in subdivision design.

#### (3) *Special features*

Trees and views are retained through the careful layout of lots.

### 5.2.3 Requirements

#### (1) *Natural and cultural features*

- Significant Buildings are included as features in the subdivision design.

#### (2) *Site constraints*

Subdivision pattern to respond to site constraints to maximise safety and efficiency.

#### (3) *Special features*

- Stands of trees and individual specimens are designed as part of the subdivision.

- Lot layout allows future buildings to address any views.

## 5.3 Open Space and Landscaping

### 5.3.1 Objectives

- (1) To ensure subdivisions acknowledge public open space networks.
- (2) To provide street landscaping to assist in creating a microclimate and improving visual amenity of the site.

### 5.3.2 Performance Criteria

- (1) *Public open space*
  - The multi-functional role of public open space, and its use as a community facility and for stormwater management, is recognised.
- (2) *Street trees*

Street trees are selected and provided to assist in providing microclimate and improving streetscape amenity in the estate.

### 5.3.3 Requirements

- (1) *Public open space*
  - Links from the development to public open space are provided to facilitate public access and stormwater management.
  - Lots design encourages the siting of buildings in a position to face adjoining public open space.
- (2) *Street trees*

Street trees are provided at the rate of 1 tree per 20m of street frontage where practicable.

## 5.4 Infrastructure

### 5.4.1 Objectives

- (1) To ensure that the allotments are provided with essential services in a cost effective and timely manner.

### 5.4.2 Performance Criteria

- (1) *Utilities*

Design and provision of utility services including sewerage, water, electricity, gas, street lighting and communication services are cost-effective over their life cycle and incorporate provisions to minimise adverse environmental impact in the short and long term.
- (2) *Common trenching*

Compatible public utility services are located in common trenching in order to minimise the land required and the costs for underground services.
- (3) *Availability of services*

Water supply and sewerage networks are available, accessible, easy to maintain, and cost-effective.

### 5.4.3 Requirements

- (1) *Utilities*
  - The design and provision of new utility services conform to the requirements of the relevant service authorities.
  - Water and sewerage services are to be provided to each allotment at the full cost of the developer.
  - New water and sewerage services are to be designed and constructed in accordance with the requirements of Lithgow Council's Development and Subdivision Code.
  - All utility services are designed, constructed and provided in accordance with the requirements of the appropriate authority.
- (2) *Common trenching*

Services are located in common trenches in accordance with the Plumbing and Drainage Code. Where possible electricity supply is to be underground.

(3) *Availability of services*

Council will not consent to the subdivision of any land until it is satisfied that an adequate water supply and adequate facilities for sewerage and drainage are available or until arrangements satisfactory to the Council have been made for the provision of such supply and facilities.

## 5.5 Road Hierarchy and Design

### 5.5.1 Objectives

To provide for streets that:-

- (1) Fulfil their designated functions within the street network;
- (2) Accommodate public utility services;
- (3) Accommodate drainage systems; and
- (4) Create a safe and attractive environment.

### 5.5.2 Performance Criteria

(1) *Function and width*

The street reserve width is sufficient to cater for all street functions, including safe and efficient movement of all users, including pedestrians and cyclists, provision for parked vehicles, provision for landscaping and location, construction and maintenance of public utilities.

The verge width is sufficient to provide for special site conditions and future requirements.

(2) *Designing for safety*

The design facilitates safe use by pedestrians, particularly people with disabilities, the aged and children.

Speed reduction techniques are used to achieve desired speeds, as part of a design for the whole street environment.

### 5.5.3 Requirements

(1) *Function and width*

- Where possible, existing roads will be incorporated into the design of the redevelopment.
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  - 
  - Any new roads that may be required are to be designed and constructed in accordance with Lithgow Council's Development and Subdivision Code.
  - New kerb ramps and footpath crossings are provided in accordance with AS1428-1977 – "Design Rules for Access by the Disabled".
  - New verge width is increased where necessary to allow space for larger scale landscaping, indented parking, future carriageway widening, retaining walls, cycle paths or overland flow paths.
- (2) *Designing for safety*
- Providing a carriageway width which allows vehicles to proceed safely at the operating speed intended for that level of street.
  - Making allowances for restrictions caused by on-street parking.
  - Providing a horizontal and vertical alignment which is not conducive to excessive speeds.
  - Promoting the safety of pedestrians at bus stops and other crossing points.

- Promoting the safety of cyclists in streets and at crossing points.
- Slow points including either horizontal or vertical deflection are designed to slow traffic to design speeds.
- Slow points and carriageway narrowings are designed to take into account the needs of cyclists, by ensuring speed compatibility, adequate space for concurrent passage or off-street diversions.
- Landscape design, on-street parking and streetscape design are used to complement speed restriction measures.
- Speed restriction techniques and devices are not used in isolation.
- The verge provides safe sight distances, taking into account expected vehicle speeds and pedestrian and cyclist movement.
- Safe sight distances, based on vehicle travel speeds, exist at property access points, pedestrian and cyclist crossings and at junctions and intersections.
- Retain this sub clause
- The stormwater drainage system has the capacity to safely convey stormwater flows resulting from the relevant design storm under normal operating conditions, taking partial minor system blockage into account.
- The stormwater system is designed to ensure that there are no flow paths which would increase risk to public safety and property.
- Drainage networks are well defined to ensure there are no hidden flow paths which could reduce their capacity to convey design flows.
- The system design allows for the safe passage of vehicles at reduced speed on streets which have been affected by runoff from the relevant design storm.
- Subdivision design and layout provides for adequate site drainage.

## 5.6 Stormwater Management

### 5.6.1 Objectives

Where possible the existing on site drainage system is to be utilised. However where new drainage is required it should:-

- (1) Adequately protect people and the natural and built environments to an acceptable level of risk and in a cost effective manner, in terms of initial cost and maintenance; and
- (2) Contribute positively to environmental enhancement of catchment areas.

### 5.6.2 Performance Criteria

### 5.6.3 Requirements

The design and construction of any new storm drainage system are in accordance with the requirements of *Australian Rainfall and Runoff (1987)* and Lithgow Council's Development and Subdivision Code.

## 5.7 Water Quality Management

### 5.7.1 Objectives

To provide water quality management systems which:-

- (1) Ensure that disturbance to natural stream systems is minimised; and
- (2) Ensure that stormwater discharge to surface and underground receiving waters, both during construction and in developing catchments, does not degrade the quality of water in the receiving areas.

### **5.7.2 Performance Criteria**

- Adequate provision is made for measures during construction to ensure that the land form is stabilised and erosion is controlled.
- The system design optimises the interception, retention and removal of water-borne pollutants through the use of appropriate devices, prior to their discharge to receiving waters.
- The system design minimises the environmental impact of urban runoff on surface receiving water quality and on other aspects of the natural environment, such as creek configuration and existing vegetation, by employing techniques which are appropriate and effective in reducing runoff and pollution travel.

### **5.7.3 Requirements**

- An **Erosion and Sediment Control Plan** is prepared by properly qualified personnel using recognised and locally implemented hydrological, hydraulic, hydrogeological, soils, water quality and biological data and design methodologies.
- Water pollution control ponds or wetlands are developed (where appropriate) for final treatment before discharge to the wider environment and should be sited to minimise impacts on the natural environment.

