Urban Design Guidelines
Monash Technology Precinct

(Monash Specialised Activity Centre)

Adopted: January 2008

URBAN DESIGN GUIDELINES - MONASH TECHNOLOGY PRECINCT

Index

The Purpose of these Guidelines

These Guidelines have been prepared to give direction for developers and Council Officers to achieve the preferred built form outcomes for new development within the Monash Technology Precinct.

They are to be used as a reference for advice to developers and in the assessment of town planning permit applications under the Monash Planning Scheme.

The guidelines are intended to provide clear objectives and standards for development within the precinct.

The prime purpose of the guidelines is to educate, inspire and assist developers in achieving high-quality, innovative design.

Council will consider each proposal having regard to the requirements of the Monash Planning Scheme. Compliance with the requirements of these guidelines will satisfy the provisions of the Monash Planning Scheme.

All parts of this document should be read to understand Council's Urban Design philosophy for the Monash Technology Precinct.

What is the Monash Technology Precinct?

"The Monash Technology Precinct is a world-class precinct which hosts a wide range of institutional activities, collaborating to provide leadership in education, health, research and innovation in an attractive urban environment, which encourages creativity and values cultural diversity."

Vision - Monash Specialised Activity Centre Final Strategy March 2005

The Municipal Strategic Statement of the Monash Planning Scheme recognises the Monash Technology Precinct as one of the most important technology based precincts in Australia.

Melbourne 2030 has identified land within the Monash Technology Precinct as one of only ten Specialised Activity Centre (SAC) in Metropolitan Melbourne which performs a specialised function outside of retailing, commercial and residential uses. It is one of the areas designated as a Technology Precinct in metropolitan Melbourne.

It contains some of the nation's most prestigious research organisations and high-technology industries including Monash University Monash Medical Centre and its only synchrotron facility.

Business and related research facilities located in the precinct play a major role in the economic and commercial profile for the city. Monash has developed a reputation as a "high-tech" centre for industry

Aside from a host of high technology and research and development uses, the precinct is also home to a large number of office, industry and warehouse uses of high quality built form, set in high amenity streetscape environments.

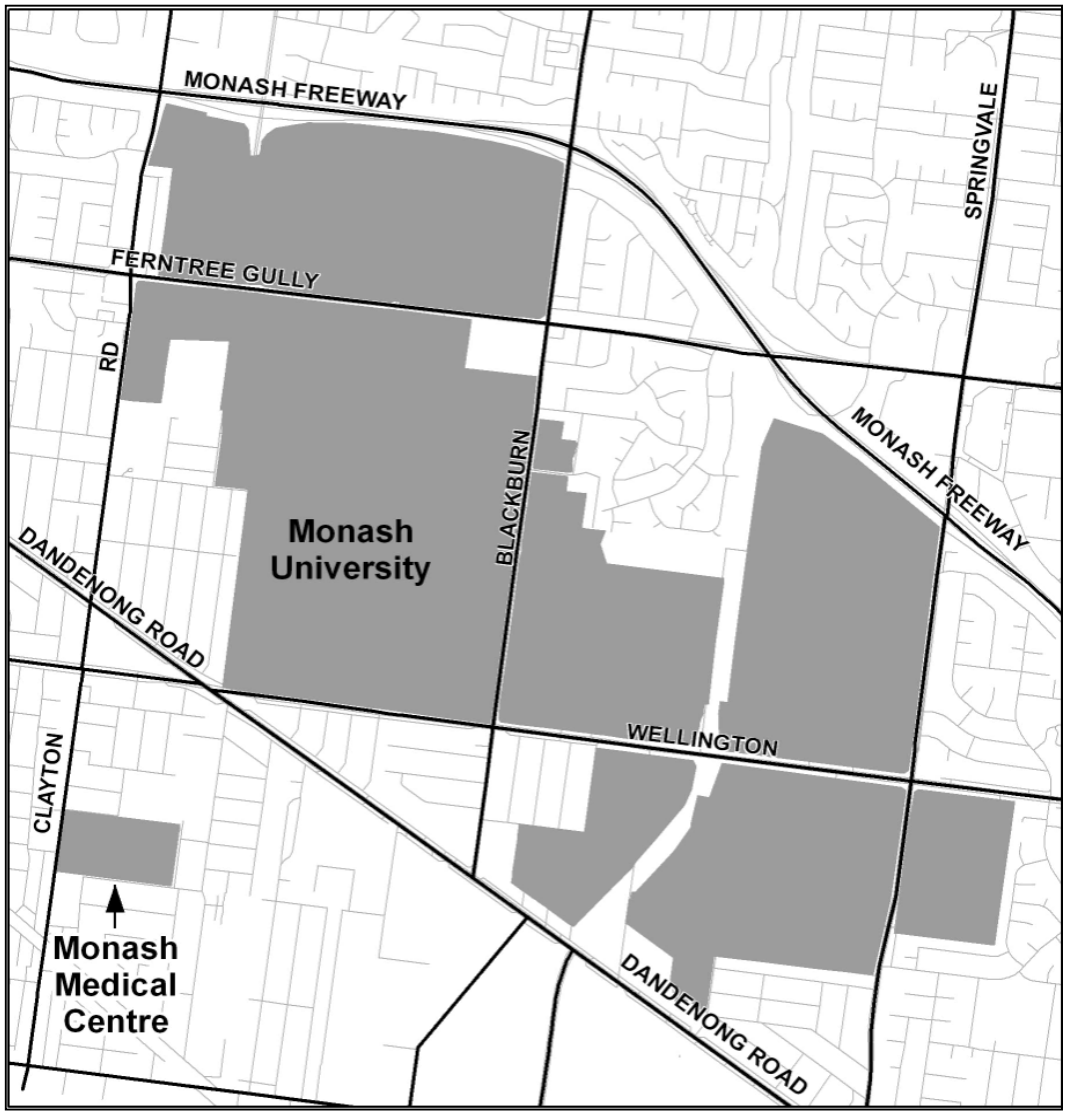
Opportunities exist for further quality developments throughout the Precinct which will reinforce this high level of streetscape amenity, quality built form, and will contribute to its enduring local image.

Where is the Monash Technology Precinct?

The Monash Technology Precinct is generally located to the north and east of Monash University. The precinct includes a large number of properties, the majority of which are located north of Dandenong Road, east of Clayton Road, south of the Monash Freeway and west of Springvale Road.

The Monash Medical Centre, located in Clayton Road, is included within the Monash Technology Precinct.

Location of Monash Technology Precinct.



When is a planning permit required for development in the Monash Technology Precinct?

The Monash Planning Scheme regulates the need for planning permit approval for all land within the Monash Technology Precinct.

Most of the land in the Precinct is zoned B3Z - Business 3 and is located within the DDO1 - Design and Development Overlay 1 area.

The details of these scheme provisions are at Clauses 34.03 and 43.02 of the Monash Planning Scheme

Generally a planning permit for new construction works is required for:

- New developments.
- External Buildings and Works for alterations and additions to existing buildings.
- Internal Buildings and Works which increase floor area.
- Signage.

Planning permit approval is also required for various changes of use. Retail sales or shop type uses are generally prohibited within the precinct.

You should contact Council's Town Planning Department to confirm whether your proposal requires planning permit approval for either the development/construction works or any change of use involved in your project.

This includes the erection and display of advertising signage.

Separate guidelines may apply to different aspects of your proposal and these can be obtained from Council.

Unanswered Questions? Who should I ask?

Should you have any questions regarding this Guide, the Monash Planning Scheme or about development in the City of Monash, you should contact Council's Town Planning Section.

Phone 9518 3555

or

Call into the Town Planning Section at 293 Springvale Road, Glen Waverley.

URBAN DESIGN GUIDELINES – Monash Technology Precinct

These Urban Design Guidelines address the major design parameters which are common to all properties and have the most significant impact on the achievement of a high quality built environment, while maintaining the existing high amenity streetscapes.

Eight (8) significant urban design elements have been identified.

The detail provided for each element is intended to provide clear objectives and standards for development within the precinct to assist developers in achieving high-quality innovative design outcomes.

The challenge for new development within the Monash Technology Precinct is to do business and provide services in a sustainable way by addressing social and environmental impacts as well as economic considerations.

Developments should be based upon Ecologically Sustainable Development (ESD) principles addressing a range of ecological, social and economic issues, including:

- sustainable use of natural resources
- reduction and disposal of wastes
- energy conservation
- materials re-use and recycling
- reduction or elimination of toxic material flows
- risk reduction
- sustainable environmental planning and design
- development of infrastructure for community health and safety
- equitable access
- meeting current regulatory standards

	Road and Boundary Setbacks	Element No. E1

Design Objectives

The primary purpose of building setbacks is to provide an opportunity for the development of mature landscapes and gardens to soften the hard edged interface which might otherwise occur between the road and its adjacent built forms.

The principal intention is to maintain and enhance the Monash Technology Precinct's well treed, parklike image along the main roads, in compliance with the Garden City character objectives of the Monash Planning Scheme.

Promotion of a high level of amenity in streetscape and built form will reinforce the significance of the Monash Technology Precinct on the local, regional, national and international scale.

Encouragement of a high quality streetscape and built form throughout the Precinct will ensure a quality environment that is critical for maintaining existing values and attracting new business investment to the Precinct.

Promotion of the Precinct as a premium quality urban environment that is attractive to high-profile businesses will contribute to and enhance economic development within the Precinct.

New development should respect the amenity of abutting properties, particularly on those sites that interface with adjoining residential uses.

Landscape setback areas should be free from any unnecessary intrusions by car parking, vehicle access ways, service infrastructure and facilities or built form elements to maintain the visual integrity of the streetscape.

	Road and Boundary Setbacks (Continued)	**Element No. E1**

Design Guidelines

Setback from Road Boundary

Schedule 1 to Clause 43.02 - Design and Development Overlay of the Monash Planning Scheme specifies minimum setbacks of buildings from roads within the Monash Technology Precinct.

Those setback requirements are:-

- Buildings, including basement and car park areas, must be setback from the road boundary of a site at least the distance specified in the table to this Guideline.

In addition:-

- No structures, including electric supply equipment and utility meters, fire services equipment, other service facilities, mechanical plant and equipment, storage, waste disposal or bin areas and bicycle parking may be located within the minimum setback areas specified in the table to this Guideline.
- Canopies over entrances, elevated disabled access ramps, and other architectural features must not obtrusively intrude into the minimum setback areas specified in the table to this Guideline. Such elements shall be carefully integrated within both the building architecture and the landscape design.
- Approved advertising signage may be located within the front setback areas specified in the table to this Guideline provided that it is sympathetic to the building architecture and landscape design.

Setback from Residential Zones

- Buildings must be setback from land in a residential zone or land used for a hospital or school at least the distance calculated by the following formula:

  Distance = H/2 + 1.5m

  where H = height of building nearest the boundary in metres.

Setback from Freeway Boundary

- Buildings and car park areas must be set back at least 3 metres from a boundary with the Monash Freeway or Route 7 reservation.

Table to Element E1:-

Road Boundary Setbacks for the Monash Technology Precinct

Road Frontage/Sideage	Minimum Setback
Blackburn Road Clayton Road Ferntree Gully Road Princes Highway (incl. service rds) (also known as Dandenong Rd) Springvale Road (incl. service rds) Stephensons Road Wellington Road (incl. service rds)	20.0 metres
Forster Road McNaughton Road	13.7 metres
Duerdin Street Dunlop Road Faigh Street Garden Road Gardiner Road Gilby Road Glenvale Crescent (east/west alignment) Hardner Road Lexia Place Nantilla Road Normanby Road Redwood Court Ricketts Road	10.6 metres
Any other road within the Monash Technology Precinct	7.6 metres

	Building Design & Form	Element No. E2

Design Objectives

New developments within the Monash Technology Precinct should be designed to a high standard and quality to enhance the visual image of the precinct.

Construction of well-designed, high quality built forms will reinforce the significance of the Monash Technology Precinct on the local regional national and interstate scale.

Quality built form constructed throughout the precinct will enhance existing values and will attract new investment in the precinct.

Refurbished buildings and new buildings should be designed in a manner that creates a visually pleasing and interesting complementary range of buildings within a streetscape, and avoids overly imposing built forms and overly uniform repetitive architecture.

All development should strive to provide an aesthetically elegant and harmonious exterior appearance which promotes the high visual quality of the streetscapes within the Monash Technology Precinct.

In most cases, building materials, textures and colours, should be selected such that the building appears to grow out of the surrounding landscape in a relatively natural manner rather than appearing as if the building has been set down on a building pad as a structure which could have been designed for almost any site.

In general, good design should not only meet the criteria of safety, efficiency, sound construction, comfort, convenience, durability and value, but should also result in a building with an exterior appearance which

- visually harmonises with the environment
- maintains and enhances scenic views and the special character and amenity of the streetscape and surrounding area
- minimises adverse visual impact on the surrounding landscape and streetscape

- create streetscapes which maintain mutual interest and provide a rich visual environment when viewed at various distances.

	Building Design & Form **(Continued)**	**Element No.** **E2**

New developments on sites that abut existing residential properties must be carefully designed to ensure that their residential interface respects the amenity of those adjoining residential areas.

New buildings must be designed to have regard to the specific needs and requirements of all people including those with limited mobility.

Design Guidelines

General

- o Buildings should be designed to be resource and energy efficient using best practice Ecologically Sustainable Design (ESD) and Green Building Design principles.
- o Building should create variety of forms to achieve visual character and interest within the streetscape.
- o The rhythm of architectural features, fenestration, scale, materials, finishes and colour should harmonise with and enhance the streetscape. Complementary design should not necessarily imply a replication of existing adjacent buildings.

- Facades of freestanding buildings should reveal a diversity of building and architectural elements. Buildings with long continuous facades should be broken into smaller vertical sections using variations in wall articulation, window sizes, blank wall areas, materials, colours and textures.

	Building Design & Form (Continued)	**Element No. E2**

- Building elevations should employ a diversity in window fenestration and or level change and setbacks to minimise its visual mass and scale.
- Patterns of light and shadow should be used to reduce the apparent scale of buildings.
- Blank walls should be screened or otherwise treated to reduce their visual impact.
- The location of fire service facilities should be integrated into the building and/or landscape design of the site.

Building Access and Entries

- The primary building entry should be oriented to the street, not internal parking areas.
- Building entries should provide a strong identity and transition from the street to the interior entry and foyer areas. They should be:-
    - easily identified and be distinct from the remainder of the building through the use of architectural form, colour, material and texture of the façade.
    - of high-quality appearance while being architecturally tied to the overall mass and composition of the building
    - protected from inclement weather through the inclusion of awnings or other structures
    - have clear sightlines and visual connection to the street

- Disabled access should be provided to all floor levels of multi storey "large plate" office buildings. The provision of a lift for access is preferred.

	Building Design & Form (Continued)	**Element No. E2**

- Disabled access to and within buildings must be provided in accordance with the relevant Building Regulations.
- Disabled access ramps should be integrated into the design of the building and landscape and should not intrude into the landscaped road setback areas.

Interface with Residential Areas

- Buildings on sites which interface with residential areas, should respect the scale and mass of the abutting development and ensure that residential amenity is not adversely affected.
- Issues such as overshadowing and overlooking have greater significance for development adjacent to residential properties.
- Unnecessary bulk and mass in close proximity to residential boundaries is discouraged.
- The use of high-quality architectural solutions and landscaping buffers should be incorporated into building designs to interface with adjacent residential areas.

Water Management

- New buildings should:-
    - minimise the demand for water by providing water efficient fixtures & fittings, including water-less urinals and low flush volume toilets;
    - use collected rainwater and storm water on-site for reuse to replace fresh mains water consumption wherever possible including use in toilets and for landscape irrigation;
    - treat grey-water (basins and sinks) on-site for reuse in toilets pans and for landscape irrigation.
    - Water management facilities should not be located within the landscaped road setback area or where they are visually intrusive when viewed from outside the site.
    - Under ground water storage solutions are recommended.

	Building Design & Form **(Continued)**	**Element No.** **E2**

Solar and Alternative Energy Sources

- The demand for energy use in buildings should be minimised through:-
  - building design utilising best practice passive solar design principles particularly for both heating and lighting;
  - equipment design;
  - technology selection;
  - taking advantage of both active and passive design strategies.

Waste Management

- Waste management facilities, including collection and storage areas, MUST be integrated into the design of the buildings and site layout.
- Storage areas external to buildings, including waste material, rubbish and refuse facilities, must be specifically designed for this purpose and be designed to prevent the proliferation of litter.
- The design should ensure that no waste bin or receptacle or any form of rubbish or refuse is visible from any adjoining road.
- Waste, rubbish or refuse must be managed to ensure that no odour is emitted that causes offence to persons outside the land.
- The requirements for waste, rubbish or refuse facilities, including collection and storage areas, MUST be considered as part of the early design stages of the development process.
- A Waste Management Plan should be prepared that provides for:-
  - The method of storage of waste, rubbish and refuse as well as recyclables;
  - The method of collection, either private services or utilisation of Council services;
  - The designation of appropriate on-site areas for waste, rubbish and refuse storage;
  - The designation of adequate areas to access the waste, rubbish and refuse storage facilities to allow for safe loading and removal off the site;
  - Measures to minimise the impact upon local amenity caused by the operation, management and maintenance of the waste, rubbish and refuse facilities;
  - Litter management.

	Building Design & Form **(Continued)**	**Element No.** **E2**

Electric Supply Substations and Meter Boxes

- Substation and meter box installations should not visually intrude into the streetscape.
    - Substation and meter installations should be located at a distance from the street which is at or behind the setback alignment of buildings on the site.
    - Substation and meter facilities should be incorporated into the design of the building wherever possible.
    - Substation and meter installations must not be located within the landscaped road setback area.
    - The requirements for the supply of electricity and the location of any meter box or substation facility MUST be considered as part of the early design stages of the development process.

Gas, Water and other Services

- Infrastructure for Water, Gas or other services, including meter facilities, should be integrated into the building design to ensure that they do not visually intrude into the streetscape.
- Meter facilities should not be located within the landscapes road setback area.

Fire Services

- While the location of fire services equipment MUST comply with the standards set by the relevant emergency services authority, every endeavour should be made to minimise the visual intrusion into the streetscape. Fire services equipment should not be located within the landscaped road setback area.
- The requirements for fire service equipment and its location MUST be considered as part of the early design stages of the development process

Telecommunication Facilities

- Telecommunication facilities should be integrated into the design of the buildings to minimise any visual impact when viewed from outside the site.
- Telecommunication facilities should be avoided in rooftop locations wherever possible.
- The requirements for telecommunication facilities including any associated architectural features or screens should be considered as part of the early design stages of the development process.

	Building Design & Form **(Continued)**	**Element No.** **E2**

Materials and Finishes

- All external building materials and glass should be treated to avoid undesirable or unsafe sun reflected glare. The reflectivity of exterior surfaces should not exceed 15%. This will also avoid unnecessary heat load on adjacent buildings.

Rooftop, Plant and Equipment

- Building plant and other service facilities including plant equipment, vents or lift overruns, solar energy facilities, stormwater collectors and telecommunication facilities should be avoided in rooftop locations wherever possible. However, where necessary these elements should be designed to the lowest possible height within the building envelope.
- Rooftop elements should be integrated into the design of the building so that they are screened from view from the surrounding streets and other buildings by intervening rooftops and parapets.
- Roof spaces can be used as outdoor recreation areas.
- The design of outdoor recreation areas on roof top areas must protect the amenity of residential properties

Front Fences

- Fences should not be located adjacent to Street boundaries as they destroy the open Garden City Character streetscapes of the Monash Technology Precinct.
- Security fencing can be provided at the alignment of the building facade to protect storage areas and limit access to the site.
- The Security fencing should be designed as part of an integrated design solution for the site and should be visually recessive in its use of materials and colours.

	Building Height	Element No. E3

Design Objectives

Within the Monash Technology Precinct, new buildings should be designed in context and scale of the surrounding built form.

Building height should not visually overwhelm the built form or dominate the urban character of a streetscape.

Some flexibility in building heights is possible within the main road streetscapes to provide for diversity in building forms while generally maintaining an open and spacious built form appearance to the roads which is typified in the Monash Technology Precinct.

However it is not appropriate to make drastic changes in the Precincts overall image by significantly exaggerating its built form in a vertical fashion.

Maintenance of the two to three storey appearance of the Monash Technology Precinct is appropriate for most situations. Four or five story building heights, particularly for office type uses fronting main roads, is possible in areas where the height and conditions are appropriate having regard to location and design qualities.

Taller buildings should be designed to relate sensitively to existing lower scale buildings that will remain in the area.

The height of the new buildings adjacent to residential boundaries should transition to reflect the scale of the adjacent residential development.

Design Guidelines

- The height of buildings should generally reflect the height of buildings in the immediate area.
- Buildings proposed on sites, which interface with residential areas, must not display excessive scale to these elevations.
- Building height should respect and transition to abutting residential scale.

	Landscaping	Element No. E4

Design Objectives

The development of a high level of amenity in streetscape, including both the private and public landscaped areas, will ensure a quality environment that is critical for maintaining existing values and attracting new business investment, and reinforce the significance of the Monash Technology Precinct on the local, regional, national and international scale.

Quality landscape architecture and gardens will soften the hard edged interface between the road and its adjacent built forms.

Landscaped areas, particularly front setbacks areas, should be designed to enhance the development and contribute to the well treed, parklike Garden City character of the Monash Technology Precinct.

Landscape enhancement can be achieved through a combination of appropriate softscape design (planting, earthworks, water features) and hardscape design treatments. (eg. footpaths, furniture, lighting and sculptures)

New landscape developments are expected to deliver environmental, community and economic benefits to the Precinct as a whole. They are expected to address precinct context and urban character issues, Ecologically Sustainable Design (ESD) principles, community health and safety, Water Sensitive Urban Design (WSUD) treatments, and long-term maintenance requirements.

Landscape planting should be interspersed throughout vehicle parking areas where they are located at ground level. This landscaping should provide planted islands and/or trees separating car park spaces.

All existing significant on-site vegetation should be retained wherever possible.

Design Guidelines

- Native trees and shrubs should be used within the design of landscape areas. This planting should reinforce the native avenue of trees planted along nature strips and give added depth to the natural park like setting of the Precincts streetscapes. Signature tree species planted along nature strips within the Precinct are Corymbia citriodora (lemon-scented gum) and Corymbia maculate (spotted gum).
- Road setback areas should be design to create a sculptured landscape enhance the sense of place and streetscape value of the built form.
- Road setback areas should be grassed, with planted areas mulched with organic materials. The use of water sustainable dry land plants is encouraged.
- Native groundcovers and climbers are preferred as low maintenance plants that complement the native theme.
- Natural appearing mounds, rock works and tasteful sculptures are encouraged as part of the setback landscape design.
- Canopy trees should be clustered in odd numbered groups.
- Landscaping around the base of new buildings should be undertaken to soften the edge between parking areas and the building and to accentuate building entries.

- Where screening is required, a combination of elements should be used including solid masonry walls, berms, and landscaping.
- Landscaping and ground shaping should be used to reduce the visual impact of vehicle parking areas.
- Generously proportioned landscaped islands should be provided throughout vehicle car park areas and along access driveways to soften the visual appearance of these hard surfaces.
- Canopy trees should also be planted within vehicle parking areas, at the intersection of spaces, to provide shade and enhance the visual appearance of the car park.
- Well planted, generously proportioned landscape areas must be provided as buffers to adjoining residential properties.
- The landscaped buffer areas should be designed to protect the amenity of abutting residential properties.
- If required, these designs should include screen or acoustic fence treatments.

	Vehicle Crossings	Element No. E5

Design Objectives

High-level of amenity in streetscapes are achieved where landscape areas and streetscapes are not fragmented by a concentration of vehicle crossings.

Hard paving within the street should be minimised to maximise the amount of nature strip and landscaped areas.

A concentration of vehicle crossings or excessively large vehicle crossings can fragment the streetscape, limit opportunities for avenue planting and have a detrimental impact on an area.

However, Council recognises that adequate vehicle access for both private vehicles and commercial vehicles must be provided for both the effective and viable operation of business uses on sites within the Monash Technology Precinct.

Vehicle crossing design and location should be carefully planned to successfully integrate into the existing character of the streetscape with minimal amenity impact, while providing for safe road access.

Design Guidelines

- The number of vehicle crossovers to a site should be minimised to limit the fragmentation of landscaped and nature strip areas that define the character of the streetscape.
- The provision of vehicle access from streets that are primarily used for residential access purposes is discouraged. Mixing residential traffic is not considered to be safe or appropriate and every effort should be made to ensure that alternative access is provided. Where alternative access is available, the development of new access to a residential street will not be supported.
- The location and design of vehicle crossovers must have regard to the location of all existing street services and street trees. Street trees form a significant elements of streetscape character and should be retained to maintain streetscape integrity.
- The detailed design and construction of Vehicle Crossovers must comply with the Engineering Design Construction Standards of the City of Monash and take into consideration the size of commercial vehicles likely to use the site. Details can be obtained from Council's Engineering Department and plans must be forwarded to Council for approval prior to construction.

  Contact Council's Engineering Division on 95183415 for further information and advice.

New vehicle crossings or construction changes to vehicle crossings on main arterial roads require both a Planning Permit and VicRoads approval.

	Vehicle Parking	Element No. E6

Objectives

Adequate parking spaces should be provided to satisfy both:-

- the demand requirements of the potential use of the buildings, and
- the demand requirements of the proposed user of the building. This may require the provision of additional parking spaces above the minimum parking standards of the Monash Planning Scheme.

Vehicle parking areas should not have an adverse impact on streetscape character.

Vehicle parking areas should be located behind or underneath buildings to minimise their visual impact. Unfortunately this is not always possible. Car parks located at the front of buildings must be set back behind the nominated front landscaped setback area specified in Element 1 of these guidelines.

Car park areas should be designed and located so that they do not dominate the visual character and presentation of a site within the streetscape.

The design should ensure that adequate landscape areas are provided to ensure that the car park areas present as part of a natural appearing landscape that is integrated with the building developed on the site.

Parking areas at ground level, which accommodate a significant number of vehicles, should be divided into a series of connected smaller spaces. Landscape planting should be interspersed throughout these areas.

Parking areas should be designed to ensure safe pedestrian access to the entry points of the building.

Disabled parking spaces should be provided in convenient locations for ease of access to the entry points of the building.

Where parking areas interact with loading accessways careful design considerations should be given to safety.

Parking bays and traffic directional signage should be clearly marked throughout the site.

	Vehicle Parking **(Continued)**	**Element No.** **E6**

Design Guidelines

- The provision of on-site car parking must not be less than the requirements of the Monash Planning Scheme.
- Car space dimensions and the access ways widths must comply with the requirements of the Monash Planning Scheme.
- Car park and pedestrian areas should be easily identifiable by the use of materials, signs and lighting.
- All vehicle and pedestrian areas should be efficiently illuminated for safe use at all appropriate times.
- Vehicle access design should ensure appropriate access for service emergency and delivery vehicles.
- All car parking areas must be fully constructed and drained.
- Car park areas on-site can be designed to complement storm water management including surface flow and water storage.
- Car parking must be located in reasonable proximity to buildings to ensure convenience of access for employees and customers.
- Disabled car parking spaces must be provided in accordance with the relevant Building Regulations and Standards. These car spaces must be located as close as possible to the entry of the building.
- Car parks located at the front of buildings must be set back behind the nominated front landscaped setback area specified in Element 1 of these guidelines.
- At or above ground level car parks should be separated and well screened from adjacent residential properties by the provision of adequate landscape buffers and screen fencing to limit the impact of the car park on the amenity of the abutting residential properties.
- Upper levels of car parks should be set back further from residential boundaries and provided with screens to minimise any overlooking of adjacent residential properties.
- Provision should be made for the storage of bicycles on site, in areas easily accessible by users.
- Parking areas at ground level should be divided into a series of connected smaller spaces, interspersed with quality landscaping to minimise the harsh visual aspect of large car park areas.

	Loading Bays and Storage Areas	Element No. E7

Design Objectives

The visual impact and design quality of a building and its significance within a streetscape can be diminished by the inappropriate location of loading bays or external storage areas.

Loading bays and external storage areas, should be designed as an integral part of the building and the development of the site, in locations that are not highly visible from adjoining roads or detract from the amenity of any abutting residential land.

Storage areas external to the building, including waste material and refuse facilities, must be stored in areas specifically designed for this purpose and be screened and designed to prevent the proliferation of litter.

Loading bays should be located with convenient and safe access to the adjoining roads and create no conflict with either pedestrian or other vehicle movements including car parking areas. Particular care should be taken to ensure that all reversing movements are appropriate and are safely designed.

Loading and unloading of goods must only occur on site. Loading and unloading of goods outside the site on the adjoining roads is not safe and does not comply with road traffic management acts and regulations.

Where a site abuts a residential property, careful consideration must be given to the location of all loading bay and storage areas. Particular consideration must be given to the potential impact of those activities on the amenity of those abutting residential properties.

Noise from track motors and refrigerated vans or containers as well as the sound of reversing warning devices can be disruptive to residential amenity.

The noise of fork lifts and/or the sounds created by moving goods or stacking goods can also be disturbing.

Design Guidelines

- Clause 52.07 of the Monash Planning Scheme specifies the minimum requirements for the provision land for loading and unloading of commercial vehicles to prevent a loss of amenity and limit any adverse effect on traffic flow and road safety.

  Those requirements are:-

  Individual buildings with a net for area greater than 2,600qsm must have a Loading Bay of the following minimum dimensions:

Area	Length	Width	Height clearance
27.4sqm	7.6m,	3.6m	4.0m

  For every additional 1,800 sqm of net floor area, an additional 18 sqm area of loading bay must be provided.

	Loading Bays and Storage Areas (Continued)	Element No. E7

- Loading Bay facilities must be located internally within buildings or be designed as an integral component of the building.
- Loading Bay facilities should be located to the rear or side of a building, and should not be visible from the street.
- The width of access ways and driveways leading to a loading bay facilities must be commensurate with the scale of the commercial vehicle that will most likely be used to service the building.
- The minimum width of a driveway to a loading bay must be at least 3.6 metres.
- At driveway changes of direction or at intersections with another driveway, the minimum internal radius at the change of direction or intersection must be at least 6 metres.

	Advertising Signs	Element No. E8

Design Objectives

Advertising Signs should enhance the Garden City image of the Monash Technology Precinct and the developments or uses that front on to the landscaped streetscapes within the precinct.

Advertising signs, in both content and architecture, should complement building design and landscape. They should create a desirable streetscape and image, while allowing commercial operators to identify their business and location.

Signage should only identify the corporate entity occupying the site.

Signs present a message about a business. They should be compatible with associated buildings in terms of form, line, colour, size and materials.

The design of advertising signs should have consideration of nearby signs and buildings so that an overall cohesiveness and a sense of place can be established, rather than risking a "competitive" streetscape.

Advertising signs should use good graphic design principles to present a clear and direct message. They should tell a story visually using three dimensions or shades where possible.

Unusual shapes or three-dimensional objects make eye-catching and effective signs, and add a special character to the building and streetscape.

The proliferation of uncoordinated signs can cause visual clutter to the detriment of streetscape character and the visual presence of buildings and their architecture.

Advertising signs should be carefully located to avoid obscuring important architectural features.

Signs located on building facades should be located on wall spaces designed for this purpose and should not obscure architectural features such as windows, parapets, decoration, balconies or articulation of different stories.

	Advertising Signs **(Continued)**	**Element No.** **E8**

Freestanding signs should be located close to the edge of the footpath within the property boundary and identify the entry location for the building. Information should be kept very simple to ensure legibility of the sign.

The location, design and size should ensure adequate visibility for motorists to identify the site and insure safe access.

However oversized signs can detract from the overall streetscape character and amenity of the area.

Landscaping around the base of freestanding signs helps its integration into the development of the site. The scale of the sign must complement the streetscape.

Business Parks, consisting of multiple tenancies, should provide a single sign that addresses the street and which identifies the separate businesses on the site. The provision of multiple signs for each tenancy is likely to cause visual clutter to the detriment of the streetscape.

Effective signage is typically simple and very legible.

Guidelines

- Advertising signs for individual premises should be limited to:
  - A single high quality pole/blade sign located in the front setback, no more than 5.0 metres in height (unless signage of greater scale is prevalent in the area); and
  - A single, high quality sign located on the front façade of the building. This sign is not to intrude above the level of the building parapet.

	Advertising Signs **(Continued)**	**Element No.** **E8**

- Both signs may be illuminated.
  (subject to Planning Permit approval and VicRoads consent)

- The content of all the advertising signs should be limited to business identification information and may include information such as the name and type of the business, contact details, the business logo and slogan.
- Signage should not detail any product information.
- Where multiple tenancies exist on a site, or identification signage should be incorporated into a single high quality pole or blade type sign. Multiple pole or blade type signs to a single property will not be supported.
- Signs that promote businesses or goods and services that are not provided on the site will not be supported.
- The following signs are considered to be unsuitable in the context of the preferred Garden City Character of the Monash Technology Precinct:
  - Animated signs.
  - Bunting signs.
  - Promotion signs.
  - Portable 'A' Board signs.
  - Reflective signs.
  - Sky signs.