

**21.10**31/08/2017  
GC42**ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT****21.10-1**31/08/2017  
GC42**Overview**

Manningham is committed to Environmentally Sustainable Development (ESD), which recognises, values and protects the natural environment and ecological process on which life depends both now and in the future.

Council supports and encourages land use planning and development, design and construction using ESD principles. Key ESD principles include energy conservation, water conservation, protecting human health, and protecting and enhancing the built, natural and cultural environments. ESD initiatives should incorporate current best practice, emerging technology and continuous innovation.

Council's Environmentally Sustainable Development Policy seeks to achieve best practice design, construction and operation for new development. This will accelerate Manningham's commitment to being an environmentally sustainable city.

Best practice is defined as a combination of commercially proven techniques, methodologies and systems, appropriate to the scale of development and site specific opportunities and constraints, which are demonstrated and locally available and have already led to optimum ESD outcomes. Best practice in the built environment encompasses the full life of the build.

**Building energy management**

Many buildings use active mechanisms and non-renewable energy sources to provide thermal comfort. Effective passive heating and cooling relies on building orientation, window design and placement

**Water sensitive design**

Water is a scarce resource and needs to be conserved. Manningham Council has developed a Sustainable Water Management Plan. Council has also set a target for reduction in water usage of 15% (based on 2001-2004 water consumption levels) by 2015. It is essential to reduce the amount of water used through water conservation and recycling. Water sensitive design offers an alternative to traditional approaches to water management.

**External environmental amenity**

Ensuring appropriate acoustic quality within residential and work environments, including the placement of plant and equipment (eg exhaust fans), has been proven to improve the productivity and well-being of building occupants.

**Waste management**

Council encourages a reduction in waste generated by building occupants. Therefore design strategies should include easily accessible recycling facilities on site and in public spaces.

**Quality of public and private realm**

Public and private spaces should be safe and accessible, promote activity and enhance the quality of the development.

**Transport**

Moving and transporting people, materials, equipment and systems impacts on the environment. 14% of greenhouse emissions are related to transport in Australia.

## Urban Ecology

Council recognises the need to maintain and improve the health of our urban ecosystem.

### 21.10-2

31/08/2017  
GC42

## Energy performance

### Key issues

- Poor orientation, siting and design of buildings.
- The consumption of non-renewable energy resources and generation of waste and emissions.
- Increasing levels of greenhouse gas emissions.
- High levels of embodied energy in building materials.

### Objectives

- To achieve appropriate siting and design, to minimise non-renewable energy consumption and greenhouse gas emissions.
- To require development to incorporate efficient use of energy, by including current best practice in passive design, and resource use, which demonstrates low environmental impact.
- To encourage development which incorporates sustainable building materials.

### Strategies

Strategies to achieve these objectives include:

- Orientate a development's most used spaces (e.g. living rooms and work areas) to face north to take advantage of winter solar heat gain and natural light.
- Shade north facing windows from the summer sun, such as eaves, overhangs, awnings, pergolas, upper floor balconies or deciduous vegetation.
- East and west facing windows to be externally shaded with devices such as blinds, shutters or awnings.
- Reliance on natural daylight into internal spaces.
- The preparation of sustainability management plans for developments, where required, which minimise use of non-renewable resources, waste, emissions and energy.
- Promotion of current best practice in environmentally sustainable development, including resource use which demonstrates low environmental impact.

### Implementation

These strategies will be implemented by:

### Zones and overlays

None specified

### Policy guidelines

- Implementing the *Doncaster Hill Strategy* (2002).
- Applying the Environmentally Sustainable Development Policy (Clause 22.12) in considering an application for development specified in Table 1 of that policy.
- Assessing all planning applications for new development against the objectives and strategies of this Clause, and requiring development to incorporate current best practice sustainable design principles and techniques.

### **Further strategic work**

- Continue development of Environmental Sustainable Development Guidelines for the municipality.

### **Other actions**

- Promoting and distributing the *Doncaster Hill Sustainability Guidelines* (2004).

## **21.10-3**

31/08/2017  
GC42

### **Water sensitive design**

#### **Key issues**

- The capture and re-use of water.
- Poor water quality of our waterways and creeks.
- Increased and unnecessary usage of potable water.

#### **Objectives**

- To minimise water use.
- To encourage the capture and re-use of water.
- To reduce the demand on potable water.
- To improve the quality of water in our waterways and creeks.
- To encourage water sensitive urban design.
- To improve water efficiency as part of future development, including best practice that demonstrates low environmental impact.

#### **Strategies**

Strategies to achieve these objectives include:

- Encourage the installation of rainwater tanks to reduce the use of potable water.
- Encourage the re-use of grey water.
- Encourage landscape design and plant selection, which minimises the reliance on irrigation.
- Promote the detention and absorption of stormwater where practicable through use of permeable paving, pebble paths, lawns and gardens.
- Encourage the provision of appropriate on-site detention systems to reduce loadings on the stormwater systems after heavy rains.
- Encourage the use of pollutant traps to prevent garbage entering the waterways.
- Ensure water sensitive urban design elements are incorporated into subdivisions and developments.
- Encourage proposals for residential subdivisions and developments to include measures for control of potential environmental impacts during construction, in particular, to adopt good site construction techniques and to be consistent with the *Manningham Stormwater Management Plan* (2001).
- Require the preparation of sustainability management plans or sustainable design assessments for developments, where required, which demonstrate water efficiency.

#### **Implementation**

These strategies will be implemented by:

### Zones and overlays

None specified

### Policy guidelines

- Implementing the *Doncaster Hill Strategy* (2002).
- Applying the Environmentally Sustainable Development Policy (Clause 22.12) in considering an application for development specified in Table 1 of that policy.
- Assessing all planning permit applications for new development against the objectives and strategies of this Clause and ensuring development incorporates best practice sustainable design principles and techniques.

### Further strategic work

- Investigating appropriate options for the capture and recycling of water.
- Continue development of Environmentally Sustainable Development Guidelines for the municipality.

### Other actions

- Encouraging best practice water sensitive design.
- Providing/distributing information on water sensitive design.
- Promoting and distributing the *Doncaster Hill Sustainability Guidelines* (2004).
- Encourage compliance with the *Manningham Stormwater Targets* (2008), and *Stormwater Blueprint* (2012).
- Implementing the *Manningham Drainage Strategy 2004 to 2014* (2004).
- Implementing Manningham's Water Management Plan.

## 21.10-4

31/08/2017  
GC42

### External environmental amenity and internal healthy environment

#### Key issues

- Impact of noise on residential and working environments.
- Stormwater pollution.
- Adequate provision of good indoor environmental quality.

#### Objectives

- To reduce the impact of noise pollution.
- To minimise site disturbance and pollution of stormwater.
- To achieve healthy indoor environmental quality.

#### Strategies

Strategies to achieve these objectives include:

- Encourage appropriate wall construction types to ensure that sound transmittance levels between rooms or buildings meet the appropriate levels for the intended use.
- Consider the location of uses and plant equipment, such as exhaust fans, in relation to noise generation.
- Ensure plant equipment is positioned and baffled to minimise any noise impact.
- Encourage the use of appropriate acoustic treatment such as double-glazing windows and acoustic fencing to minimise any noise impact.

- The preparation of construction management plans, which aim to minimise any environmental impacts.
- Minimise site disturbance, including protecting existing vegetation and top soil where appropriate.
- Require the preparation of sustainability management plans or sustainable design assessments for development, where required, which demonstrate how the external and internal environmental quality will be improved.

### **Implementation**

These strategies will be implemented by:

### **Zones and overlays**

None specified

### **Policy and guidelines**

- Implementing the *Doncaster Hill Strategy* (2002).
- Applying the Environmentally Sustainable Development Policy (Clause 22.12) in considering an application for development specified in Table 1 of that policy.
- Assessing all planning applications for new development against the objectives and strategies of this Clause and requiring development to incorporate current best practice sustainable design principles and techniques.

### **Further strategic work**

- Continue development of Environmentally Sustainable Development Guidelines for the municipality.

### **Other actions**

- Promoting and distributing the *Doncaster Hill Sustainability Guidelines* (2004).

## **21.10-5**

31/08/2017  
GC42

### **Waste management**

#### **Key issues**

- Minimise materials going to landfill.
- Minimise emissions, and pollution from waste.
- Minimise resource depletion.

#### **Objectives**

- To encourage the provision of recycling facilities on site and in public spaces.
- To incorporate integrated waste management in development including best practice that demonstrates low environmental impact.

#### **Strategies**

Strategies to achieve this objective include:

- Promote easily accessible recycling facilities on site to encourage use by tenants and facilitate ease of collection by contractors.
- Require the preparation of sustainability management plans or sustainable design assessments for development, where required, which demonstrate improved waste management that reduces waste.

## Implementation

These strategies will be implemented by:

## Zones and overlays

None specified

## Policy guidelines

- Implementing the *Doncaster Hill Strategy* (2002).
- Applying the Environmentally Sustainable Development Policy (Clause 22.12) in considering an application for development specified in Table 1 of that policy.
- Assessing all planning applications for new development against the objectives and strategies of this Clause, and requiring development to incorporate current best practice sustainable design principles and techniques.

## Further strategic work

- Continue development of Environmentally Sustainable Development Guidelines for the municipality.

## Other actions

- Promoting and distributing the *Doncaster Hill Sustainability Guidelines* (2004).
- Implementing the *Interim Waste Management Strategy* (2012-2017).

## 21.10-6

31/08/2017  
GC42

## Quality of private and public realm

### Key issues

- Accessibility.
- Retention of vegetation and opportunities for landscaping.
- Safer design.
- Size and quality of open space areas for private and public realm.

### Objectives

- To ensure that private and public spaces are safe and accessible.
- To ensure public spaces are appropriately designed and located to promote activity and use of these areas and enhance the quality of developments.
- To promote solar access to private and public spaces.
- To encourage appropriate landscaping within private and public spaces.
- To encourage safe, and useable areas of open space in development, including best practice that demonstrates low environmental impact.

### Strategies

Strategies to achieve these objectives include:

- Encourage development to be designed to meet the highest levels of accessibility.
- Site buildings to have regard to adjacent public and private space and limit unreasonable overshadowing.
- Improve accessibility by making attractive, vibrant, walkable environments.

- Encourage the design of buildings, subdivisions, street layout, car parks and public open space that are safe.
- Require the preparation of sustainability management plans or sustainable design assessments for development, where required, which demonstrate improvements to the quality of the private and public realm.

### **Implementation**

These strategies will be implemented by:

### **Zones and overlays**

None specified

### **Policy and exercise of discretion**

- Implementing the *Doncaster Hill Strategy (2002)*.
- Using Local Policy to promote design that addresses public safety (*Safety through urban design policy, Clause 22.08*).
- Using Local Policy to promote the same level of access for people with limited mobility to buildings, public spaces, services and facilities as any other person (*Access for disabled people policy, Clause 22.09*).
- Requiring that development specified in Table 1 at Clause 22.12 meets the requirements of environmentally sustainable development policy.
- Assessing all planning permit applications for new development against the objectives and strategies of this Clause, and requiring development to incorporate best practice sustainable design principles and techniques.

### **Further strategic work**

- Continue development of Environmentally Sustainable Development Guidelines for the municipality.

### **Other actions**

- Promoting and distributing Council's Policy for *Disability Access and Inclusion Policy 2013-2017*.
- Promoting and distributing the *Doncaster Hill Sustainability Guidelines (2004)*.

## **21.10-7**

31/08/2017  
GC42

### **Transport**

#### **Key issues**

- Minimising car dependency
- Limitations of the local public transport system.
- Environmental impacts of vehicular traffic.
- Reducing car dependency.

#### **Objectives**

- To encourage the design and construction of car parking areas for future adaptability.
- To encourage the design of the built environment to promote the use of public transport, walking and cycling.
- To allow opportunities for equitable access to all services and activities.

- To encourage new development to incorporate sustainable transport principles and adopt best practice in environmentally sustainable development, including best practice that demonstrates low environmental impact.

### **Strategies**

Strategies to achieve these objectives include:

- Provide appropriate bicycle parking and after trip facilities.
- Require the preparation of sustainability management plans and sustainable design assessments for development, where required, which demonstrate how sustainable transport will be promoted and encouraged.

### **Implementation**

These strategies will be implemented by:

### **Zones and overlays**

None specified.

### **Policy guidelines**

- Implementing the *Doncaster Hill Strategy (2002)*.
- Implementing the *Manningham Integrated Transport Strategy (2009)*.
- Requiring that development specified in Table 1 at Clause 22.12 meets the requirements of environmentally sustainable development policy.
- Assessing all planning permit applications for new development against the objectives and strategies of this Clause and requiring development to incorporate best practice sustainable design principles and techniques.

### **Further strategic work**

- Continue development of Environmentally Sustainable Development Guidelines for the municipality.

### **Other actions**

- Promoting and distributing the *Doncaster Hill Sustainability Guidelines (2004)*.
- Conducting a review of the *Manningham Bicycle Strategy (2013)*.
- Continuing to advocate to the State Government for improved public transport in Manningham.

## **21.10-8**

31/08/2017  
GC42

### **Urban Ecology**

#### **Key issues**

- Impact of hard paved areas or impervious surfaces.
- Retention of existing significant vegetation.
- Creation of urban heat island effect.

#### **Objectives**

- To encourage healthy external environments with increased vegetation, and landscaping.
- To protect and enhance environmental values and significant landscapes.



**Strategies**

Strategies to achieve these objectives include:

- Increasing natural habitat through plant selections and water features.
- Promoting sustainable garden techniques.
- Encouraging new residential and commercial development to incorporate best practice environmentally sustainable design principles.
- Creating healthy and consistently landscaped environment that incorporates native and indigenous planting.

**Implementation**

These strategies will be implemented by:

**Zones and overlays**

None specified.

**Policy guidelines**

- Require that development specified in Table 1 at clause 22.12 meets the requirements of environmentally sustainable development policy.
- Assessing all planning permit applications for new developments against the objectives and strategies of this Clause, and requiring that development incorporates best practice sustainable design principles and techniques.

**Further strategic work**

- Continue development of Environmentally Sustainable Development Guidelines for the municipality.

**Other actions**

None specified.

**21.10-9**

31/08/2017  
GC42

**Reference documents**

- Manningham City Council (2002, revised 2004) *Doncaster Hill Strategy*, Manningham City Council, Doncaster.
- Manningham City Council (2004) *Doncaster Hill Sustainability Guidelines*, Manningham City Council, Doncaster.
- Manningham City Council (2004) *Manningham Drainage Strategy 2004 - 2014*, Manningham City Council, Doncaster.
- Manningham City Council (2009) *Making Manningham Mobile Manningham Integrated Transport Strategy*, Manningham City Council, Doncaster.
- Manningham City Council, (2013) *Manningham Bicycle Strategy*, Manningham City Council, Doncaster.
- Manningham City Council (April 2015- update of November 2011 Plan) *Domestic Wastewater Management Plan*, Manningham City Council, Doncaster.
- Manningham City Council (2005) *Water15 - Sustainable Water Management Plan (2005-2015)*, Manningham City Council, Doncaster.
- Manningham City Council (2012) *Manningham Stormwater Targets (2008)*, and Stormwater Blueprint Manningham City Council, Doncaster.