

Sustainable Subdivisions Framework - Explained

Subdivision design for a sustainable future



What's included in this fact sheet:

What is sustainable design in subdivisions?

Sustainable subdivision design and your planning application

What is the Sustainable Subdivisions Framework?

Submitting sustainable design information

What is a Sustainable Subdivision Management Plan (SSMP)?

Determining your SSMP category (diagram)

7 key sustainable subdivision categories

Resources for sustainable subdivisions

Where can I find out more?

To build resilient and liveable cities and towns, we need to ensure that our neighbourhoods are low carbon and climate resilient

For a great deal of Victorian Councils, single residential dwellings do not require a planning permit, but decisions made at the point of subdivision can make a substantial impact on the achievement of sustainability in a new development.

The Sustainable Design Assessment in the Planning Process (SDAPP) framework, in place across metropolitan Melbourne and larger regional Councils has successfully embedded Environmentally Sustainable

Design (ESD) into the planning approvals process for buildings. The Sustainable Subdivisions Framework seeks to build on this, to ensure that sustainability is embedded at the subdivision scale, recognising its role in the making of new communities.

This fact sheet explains what this voluntary framework means for applicants and the resources available.

What is sustainable design in subdivisions?

Sustainable design is design that works to minimise resource use and impact on ecosystems while improving the lives of those affected by it. Sustainable design protects our environment, secures today's living standards and future proofs our communities against the impacts of climate change.

Residential subdivision represents a significant opportunity to influence sustainability outcomes in the built environment, from how streets are designed to maximise solar access for future dwellings through to the planning of open space and integration with transport networks.

Sustainable subdivision design and planning

The Sustainable Subdivisions Framework sets out a series of sustainable built environment opportunities which can be influenced through the development planning and subdivision planning processes.

Sustainable subdivisions can be facilitated through a number of planning stages including Precinct Structure Plans, Development Plans, and through provisions already contained within the Planning Scheme. Clause 56 (Residential Subdivisions) contains a number of

objectives and standards around Lot Design (Cl. 56.04), Urban Landscape (Cl. 56.05), Integrated Water Management (C. 56.07) and others). This Framework responds specifically to the subdivision stage, but recognises precinct structure planning as a foundation of good subdivisions.

Subdivisions vary greatly in size and location. The chart overleaf sets out the different scales of subdivision and what requirements there are for each category.

What is the Sustainable Subdivisions Framework?

The Framework has been developed to assist Council Planners in providing a more holistic evaluation of environmental

outcomes of subdivision applications, with clear quantitative metrics and requirements for meeting Councils Best Practice Standard.

Submitting Sustainable Design Information

Submitting sustainable design information

Applicants should communicate the sustainability credentials of the subdivision by submitting the following documents as relevant (addressing the 7 categories on Page 3):

- Regional Context Plan
- Site Analysis Plan
- Subdivision / Design Response Plan
- Subdivision Sustainability Management Plan (SSMP) (if required)
- Street Sections and Plans
- Where Applicable, Supporting Plans and Assessments

Applicants should describe the development's sustainable design approach and summarise the project's key sustainability objectives.

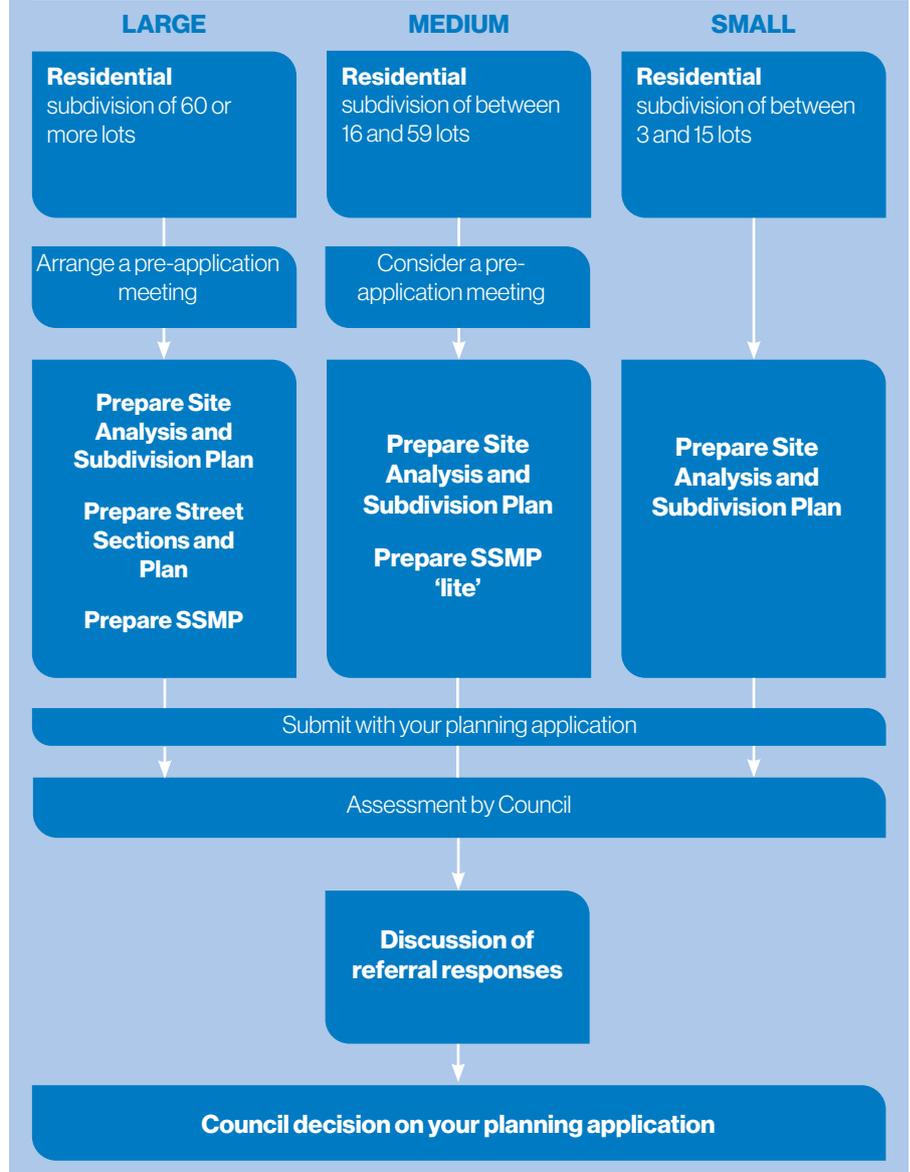
What is a Sustainable Subdivisions Management Plan (SSMP)?

An SSMP is a detailed sustainability assessment of a proposed subdivision design at the planning stage. An SSMP demonstrates best practice in the 7 Key Sustainable Subdivision Categories and;

- Provides a detailed assessment of the development. It may use relevant tools such as EnviroDevelopment, Green Star Communities or an alternative assessment approach to the satisfaction of the responsible authority;
- Identifies achievable environmental outcomes having regard to the metrics within each criteria;
- Demonstrates that the subdivision has the design potential to achieve the relevant environmental performance outcomes, having regard to the site's opportunities and constraints; and
- Documents the means by which the performance outcomes can be achieved.

A simplified version of an SSMP (SSMP 'lite') documents the approach in template form. The template is downloadable from Council's website.

Determining Sustainable Subdivisions Category



The 7 Key Sustainable Subdivision Categories

1.0 Site Layout & Liveability

Objective is to improve functional site layout and liveability with a key focus on connecting residents to local amenity. Sustainability criteria include:

- Location of community infrastructure
- Lot diversity
- Connectivity of street network
- Integration with natural features
- Active transport
- Wayfinding

2.0 Streets & Public Realm

Objective is to create a people focused local street network to encourage walking whilst increasing biodiversity and mitigating the urban heat island effect. Sustainability criteria include:

- Street diversity
- Accessible and continuous cycling and pedestrian network
- Maximum street block length
- Density of street trees & vegetation
- Density of rest nodes and landscape features
- Safety

3.0 Energy

Objective is to improve energy efficiency and increase renewable sources of energy supply through maximising opportunities for solar access and support all electric suburbs. Sustainability criteria include:

- Energy efficiency
- Renewable energy
- Energy storage

4.0 Ecology

Objective is to retain and enhance ecology within the development plan or subdivision area through protecting native habitat and minimise impact on the natural environment. Sustainability criteria include:

- Canopy cover
- Biodiversity conservation
- Enhance biodiversity value

5.0 Integrated Water Management

Objective is to ensure integrated and collaborative management of all aspects of the water cycle, which includes reducing water consumption, seeking beneficial use of recycled water and stormwater, and incorporating water sensitive urban design. Sustainability criteria include:

- Stormwater harvesting and reuse
- Water supply
- Water efficiency
- Stormwater treatment
- Flood management
- Water Sensitive Urban Design
- Site permeability

6.0 Urban Heat

Objective is to achieve urban heat reduction, manage the effects of urban heat within the subdivision area and maintain human health and wellbeing through periods of extreme heat. Sustainability criteria include:

- Access to shelter
- Urban heat mitigation

7.0 Circular Economy (Materials & Waste)

Objective is to reduce resource use and improve retention of value through the materials life cycle by encouraging re-use of onsite materials, using recycled materials and providing for resource recovery infrastructure. Sustainability criteria include:

- Low embodied carbon
- Recycled content
- Local sourcing
- Future recyclability
- Durable materials
- Certification
- Organics collection and processing

Resources

Resources for sustainable subdivisions

As with the established SDAPP for buildings process, Council's website contains further information and reference documents that demonstrate how a Subdivision Sustainability Management Plan (SSMP) should be prepared.

As always, we encourage you to engage early with our Statutory Planning and sustainable design staff to ensure that the requirements are clearly understood and the sustainability outcomes of your proposal are maximised.

Establishing standards for Best Practice and Excellence

Councils are developing standards for Best Practice and Excellence through the 18 month trial period. Following development, the outcomes sought will be clearly referenced in the template provided on Council's website..

Where can I find out more?

Green Star Communities

The Green Star tools are nationally recognised tools, which are voluntary and can be used to demonstrate compliance with provisions within the planning scheme. The tools are developed and managed by the Green Building Council of Australia (GBCA), who is the nation's authority on sustainable buildings, communities and cities.

Green Star Communities assesses the planning, design and construction of large scale development projects at a precinct, neighbourhood and/or community scale. It provides a rigorous and holistic rating across five impact categories.

- Governance
- Liveability
- Economic Prosperity
- Environment
- Innovation

More information on Green Star Communities can be found at: www.gbca.org.au

EnviroDevelopment

The EnviroDevelopment tool can be used to assess six sustainability criteria: Ecosystems, Waste, Energy, Materials, Water and Community. Developers can choose which ones they want to certify. A registration fee is payable to use the tool for a specific project. A certification fee is payable for each category the developer would like to certify and annual certification renewal is required.

The tool includes both subdivision level and building level requirements, including a requirement for the provision of design guidelines.

More information on EnviroDevelopment can be found at: www.envirodevelopment.com.au

Infrastructure Design Manual and Sustainable Infrastructure Guidelines

The Infrastructure Design Manual (IDM) was developed by local government to unify councils approach to designing and assessing essential services such as roads, urban and rural drainage, stormwater treatments, public lighting, street trees and more. There are currently 44 Victorian Councils that have adopted the IDM.

The manual covers common definitions, standards and documentation requirements associated with the design and delivery of infrastructure and can be used when designing infrastructure for a subdivision.

In 2012, a number of 'green infrastructure standards' were introduced to increase the IDMs capacity to deliver sustainable infrastructure. These standards are known as the Sustainable Infrastructure Guidelines (SIG) and can be used by all Victorian Councils, not just those who have adopted the IDM.

The SIG provides alternative design and construction initiatives to achieve greater sustainability outcomes for all construction and design elements of the Infrastructure Design Manual (IDM).

The SIG provides information around:

- Material recycling and reuse
- Integrated Water Management
- Landscaping and Open Space
- Public Lighting

In addition, the SIG contains a Carbon Calculator tool which provides information on embodied carbon per unit of construction material that have been assessed.

The IDM and SIG can be viewed and downloaded at: www.designmanual.com.au