

## **SC6.4 Planning scheme policy for information that the Council may require**

### **SC6.4.1 Purpose**

- (1) The purpose of this planning scheme policy is to identify information, other than that specified in another planning scheme policy, that the Council may require to inform the proper assessment of a development application.
- (2) In particular, this planning scheme policy provides advice and guidance about the circumstances when the following types of plans and reports may be required as well as the typical content to be included in such plans and reports:-
  - (a) acid sulfate soils (ASS) investigation and management plan;
  - (b) acoustic assessment report;
  - (c) bushfire hazard assessment report and management plan;
  - (d) ecological assessment;
  - (e) flood hazard assessment and mitigation report;
  - (f) koala impact assessment report; and
  - (g) traffic impact assessment report.

### **SC6.4.2 Acid sulfate soils (ASS) investigation and management plan**

- (1) Where a development is subject to the Acid sulfate soils overlay code, an applicant may be requested to provide additional information in the form of an acid sulfate soils (ASS) investigation and management plan.
- (2) The purpose of an ASS investigation and management plan is to provide additional information regarding the existence/location, treatment and management of acid sulfate soils (ASS) or potential acid sulfate soils (PASS) on a development site.
- (3) An ASS investigation is required to include the following information:-
  - (a) the lowest point in metres AHD of the proposed excavation and the volume of excavation below 5m AHD;
  - (b) the height in metres AHD of land to be filled, and the volume and thickness of the fill to be placed below 5m AHD;
  - (c) a detailed acid sulfate soils investigation which, as a minimum, is to include sufficient details on the following:-
    - (i) whether ASS/PASS are present in the area to be disturbed, and if so, the location, depth and existing/potential acidity of ASS/PASS relative to the proposed disturbance;
    - (ii) the testing results;
    - (iii) methodology used for sampling and analysis (both field and laboratory);
    - (iv) an assessment of the potential for acid sulphate soils to be disturbed either through drainage or excavation; and
    - (v) potential impacts on adjoining areas.

Note—the level of testing undertaken in the acid sulfate soils investigation should be commensurate with the level of risk.

- (4) Sampling and analysis included in an ASS investigation is to be carried out in accordance with the procedures described in the *Guidelines for Sampling and Analysis of Lowland Acid Sulfate Soils (ASS) in Queensland*, produced by the Department of Natural Resources (1998). For the purposes of the performance outcomes and acceptable outcomes in the Acid sulfate soils overlay code, the following are also relevant guidelines:-
- (a) *Acid sulfate soils laboratory methods guidelines* (Department of Natural Resources and Mines, 2004);
  - (b) *Soil management guidelines – Queensland acid sulfate soils technical manual* (Department of Natural Resources and Mines, 2002); and
  - (c) Australian Standard AS 4969 *Analysis of acid sulfate soil – Dried samples – Methods of test*.
- (5) If ASS or PASS identified in an ASS investigation is proposed to be disturbed by the development, an ASS management plan should be prepared. As a minimum, the ASS management plan is to detail the following:-
- (a) the methods of treating/managing soils;
  - (b) details of any pilot project or field trial to be undertaken to prove the effectiveness of any new technology or innovative management practice being proposed;
  - (c) details of the monitoring and reporting procedures to be established and implemented; and
  - (d) details of contingency procedures including accident/emergency response procedures, and performance criteria to be used to assess the effectiveness of the ASS management and monitoring measures.

#### **SC6.4.3 Acoustic assessment report**

- (1) An acoustic assessment report may be required where a proposed development is likely to cause noise impacts or where a proposed development site is located in close proximity to an area which may cause noise impacts on the proposed development (often referred to as reverse amenity impacts).
- (2) An acoustic assessment report should provide an assessment of:-
- (a) the potential noise impacts associated with the proposed development; and
  - (b) the measures proposed to avoid or minimise adverse noise impacts.
- (3) The acoustic assessment report should have regard to:-
- (a) Australian Standards AS 1055.2 *Acoustics – Description and measurement of environmental noise – Application to specific situations* and AS 2107 *Acoustics – Recommended design sound levels and reverberation times for building interiors*;
  - (b) *Environmental Protection Act 1994* and *Environmental Protection (Noise) Policy 1997* (EPP Noise);
  - (c) *Planning for Noise Control*, Department of Environment and Resource Management, 2004; and
  - (d) *Road Traffic Noise Management Code of Practice*, Department of Transport and Main Roads, 2008.

- (4) The acoustic assessment report should include identification of:-
  - (a) noise standards;
  - (b) nature of the noise;
  - (c) times of operation of the noise source and use/development on site;
  - (d) the use categories from AS 2107 that may apply;
  - (e) type and proximity of adjacent land uses;
  - (f) details of any prescribed planning levels in the EPP (Noise) that may apply to the adjacent land uses; and
  - (g) whether any noise data exists for those adjacent land uses.
- (5) The report should include justification of the appropriate noise planning assessment methodology to determine the noise impacts on and from the land uses and structures both on the subject site and adjacent sites. The report should also provide an assessment of whether the noise emission complies with the calculated limiting criteria. If noise is likely to be unacceptable, the report should describe the control measures that will be used to ensure compliance.

#### **SC6.4.4 Bushfire hazard assessment report and management plan**

- (1) This component of the planning scheme policy applies to development which requires assessment against the Bushfire hazard overlay code.
- (2) Where development requires assessment against the Bushfire hazard overlay code, an applicant may be requested to provide additional information in the form of a bushfire hazard assessment report and management plan.
- (3) In particular, compliance with the Bushfire hazard overlay code may be demonstrated (in part) by the submission of a bushfire hazard assessment report and/or a bushfire hazard management plan prepared by a competent person in accordance with the following guidelines.

##### Bushfire hazard assessment report

- (4) The level of bushfire hazard identified on a bushfire hazard overlay map in **Schedule 2 (Mapping)** needs to be confirmed via the preparation of a site-specific bushfire hazard assessment report. A bushfire hazard assessment report is to:-
  - (a) be prepared generally in accordance with the methodology prescribed in Appendix 5 of the *State Planning Policy Guideline – Guidance on flood, bushfire and landslide hazards*;
  - (b) include more detailed site specific calculations of the bushfire hazard score(s) for the development site based upon:-
    - (i) a quantitative assessment of predicted bushfire behaviour including calculation of predicted fire intensity and rate of spread using McArthur's equation and radiant heat flux using a recognised model (i.e. the View Factor Model or the Leicester Model). Calculations should be based on an forest fire danger index (FFDI) of 50 and maximum predicted fuel loads to determine appropriate setbacks;
    - (ii) a quantitative assessment including discussion of past fire behaviour/history, any prescribed burning undertaken on the site or adjoining sites, likely fire paths, site factors that would minimise or maximise fire behaviour, fuel arrangements and loads, potential ignition

- points, fire run distances towards houses (or proposed house sites), slopes and any other matter considered important in respect to the issue; and
- (iii) a comparison of the above to the more general calculation methodology prescribed in Appendix 5 of the *State Planning Policy Guideline – Guidance on flood, bushfire and landslide hazards*;
- (c) include a bushfire hazard management summary detailed on an A3 size map/s at a scale of 1:500; and
- (d) be informed by consultation with the local Fire Brigade and where the land adjoins Council, State or Commonwealth land, the relevant land manager.

*Bushfire hazard management plan*

- (5) Where a site-specific bushfire hazard assessment confirms that a development site is subject to a medium, high or very high bushfire hazard, a bushfire hazard management plan may need to be prepared to mitigate the adverse impacts of the hazard.
- (6) A bushfire hazard management plan is to:-
  - (a) state the purpose, aim and objectives of the bushfire hazard management plan (e.g. having regard to the level of hazard on the land, identify measures, actions and responsibilities for the management of the hazard);
  - (b) summarise the results of the bushfire hazard assessment undertaken for the land, including identification of the various parts of the land that have been determined to be very high, high and medium bushfire hazard area;
  - (c) be informed by consultation with the local Fire Brigade and where the land adjoins Council, State or Commonwealth land, the relevant land manager;
  - (d) include consideration of potential off-site sources of fire hazard including particular land uses or physical features of the surrounding area (including details of properties within 100m of the land);
  - (e) address the impacts of the proposed development on the level of fire hazard experienced by other land in the surrounding area, including any land containing water, electricity, gas or telecommunications infrastructure;
  - (f) address any implications for ecologically important areas<sup>1</sup>, areas of cultural heritage significance or areas of landscape significance, including steps taken to minimise the potential impacts of specified fire hazard mitigation measures;
  - (g) address the potential impacts of bushfire hazard mitigation measures on slope stability, and on water quality in local receiving waters;
  - (h) specify fire hazard mitigation measures, such as:-
    - (i) elements of the development design, including the layout of roads and driveways, and the location, size and orientation of lots and buildings;
    - (ii) specifications and materials for building design and construction in accordance with the Building Code of Queensland;
    - (iii) fire fighting infrastructure, including water supply and storage, equipment and fittings, fire breaks and maintenance/access trails;
    - (iv) potential areas of clearing of native vegetation based on an ecological assessment report or environmental management plan recently prepared for the site;

<sup>1</sup> Ecologically important areas are defined in **Schedule 1 (Definitions)** and are identified on the Biodiversity areas, waterways and wetlands overlay maps in **Schedule 2 (Mapping)**.

- (v) details of landscape design requirements, including installation and maintenance requirements;
  - (vi) information for occupants, including required training for persons employed on the site during both construction and operational phases;
  - (vii) details of long term management requirements, including the frequency, extent and intensity of burning in areas proposed to be subject to regular controlled ignitions;
  - (viii) details of areas to be subject to mosaic or patch burning techniques and manual fuel reduction zones; and
  - (ix) any other measures based on or identified in a recently approved ecological assessment report or environmental management plan for the site;
- (i) identify the parties to be responsible for specific actions taken under the terms of the bushfire management plan; and
  - (j) provide justification for any variation from the bushfire hazard mitigation measures outlined in the Bushfire hazard overlay code.

### **SC6.4.5 Ecological assessment**

- (1) Where development requires assessment against the Biodiversity areas, waterways and wetlands overlay code, an applicant may be requested to provide additional information in the form of an ecological assessment.
- (2) In particular, compliance with the Biodiversity areas, waterways and wetlands overlay code may be demonstrated (in part) by the submission of an ecological assessment report prepared by a suitably qualified and competent person in accordance with the following guidelines.
- (3) Persons preparing or undertaking field work for detailed ecological reports must have relevant tertiary qualifications in ecology, biology, environmental science or other appropriate disciplines. Assessment and mapping of remnant vegetation must be carried out by accredited persons trained in regional ecosystem identification by the Queensland Herbarium. Tree management inspections, reports and plans must be carried out and produced by an arborist with a tertiary qualification in arboriculture or a person with a minimum of 5 years arboriculture experience and possessing a Level 4 Diploma in Arboriculture.

#### Ecological assessment report

- (4) The purpose of an ecological assessment is to:-
  - (a) identify the ecological values and ecosystem processes on and adjacent to the site;
  - (b) determine the potential impacts of the proposed development on the values and processes;
  - (c) identify measures required for long-term protection of ecologically important areas and ecosystem processes; and
  - (d) provide measures to mitigate potential impacts identified.
- (5) An ecological assessment report is required to include the following parts and sub-parts, although Council accepts that the level of detail and the scale of assessment will be dependent on the specifics of the site and the development. A request for further information will take precedence over these guidelines.

- (a) Desktop assessment:-
- (i) identification of records of flora and fauna species known to occur, currently occurring and likely to occur on and surrounding the site. Records may include published and unpublished reports, local knowledge and anecdotal reports, Wildnet database searches, Queensland Museum and Queensland Herbarium records;
  - (ii) review of the available commonwealth, state and local habitat and vegetation mapping for the area;
  - (iii) identification of the history of land use on and surrounding the site; and
  - (iv) identification of broad habitat types and ecological corridors on and surrounding the site.
- (b) Field assessment must (noting that when designing and conducting the field assessment adequate consideration needs to be given to seasonal variation, timing and duration and climatic conditions):-
- (i) utilise the results of the desktop assessment to design the field survey. The field assessment should be comprehensive enough to cover all habitat types within the subject site including ecotones;
  - (ii) undertake ground survey and map areas of remnant vegetation and high value regrowth. Methodology for mapping is to be consistent with the Regional Ecosystem mapping methodology adopted by the Queensland Herbarium and accepted by the Department of Environment and Heritage Protection under the *Vegetation Management Act 1999*;
  - (iii) undertake a fauna and flora survey for the species known to, or likely to, occur in the area, including a targeted survey in habitats that may support significant species from the region;
  - (iv) identify and map pest species declared under the current state pest management legislation and the Fraser Coast Pest Management Plan;
  - (v) identify and map wetlands and waterways on site. For wetlands the wetland Mapping and Classification Methodology Version EPA 2005 is to be used;
  - (vi) map any ecological corridors present on or adjacent to the site; and
  - (vii) identify and map key habitat features or evidence of fauna species, for example:-
    - (A) trees supporting scratch marks and hollows;
    - (B) location and identification of scats, tracks and other traces;
    - (C) fruit and seed falls;
    - (D) fauna trails;
    - (E) fallen logs;
    - (F) termite mounds;
    - (G) ground diggings;
    - (H) rock outcrops;
    - (I) nests in banks; and
    - (J) roost/nest/den trees.
- (c) Conservation status assessment:-
- (i) identify the conservation significance of the ecological values. The Department of Environment and Heritage Protection uses the Method for Mapping Ecological State Interests for Land-use Planning and Development Assessment DERM 2010 to determine conservation status of terrestrial habitat areas and the Aquatic Biodiversity Assessment and Mapping Method (EPA, 2006) for wetlands and waterways; and
  - (ii) identify spatial and temporal ecological processes operating on and adjacent to the site.

- (d) Impact assessment:-
  - (i) outline the proposed development and identify relevant statutory and non-statutory planning mechanisms that affect the development site and adjacent lands or trigger development controls; and
  - (ii) provide details of potential spatial and temporal (short, long-term and cumulative) impacts of the operational and construction phases of the development on the ecological values and ecological processes identified on and adjoining the site.
  
- (e) Mitigation and management:-
  - (i) prepare proposal plans and management plans detailing the location, extent and nature of all measures designed to prevent, avoid, mitigate and/or manage the identified impacts;
  - (ii) determine an appropriate buffer to protect identified ecological values. For wetlands, the Department of Environment and Heritage Protection has developed the *Queensland Wetland Buffer Planning Guidelines* (EHP, 2011). For terrestrial areas, the buffer needs to mitigate the impacts of edge effects, ensure adequate bushfire management buffers and provide long-term protection for vegetation to be protected (a minimum setback of at least 1.5 times the mature height of the vegetation is considered an appropriate buffer for individual trees unless otherwise determined by an arborist);
  - (iii) design appropriate ecological corridors. As a guide, local ecological corridors and koala corridors are to be a minimum of 100m in width, regional corridors a minimum of 200m in width and state corridors 500m in width;
  - (iv) incorporate tree protection measures as outlined in *AS4940 – Protection of Trees on Development Sites*;
  - (v) if an environmental offset is proposed then an Environmental Rehabilitation Plan is to be submitted as per the Planning scheme policy for development works; and
  - (vi) in some circumstances, a Construction and Environmental Management Plan that contains a Flora and Fauna Management Plan may be required. If required this report is to be compiled in accordance with the Planning scheme policy for development works.
  
- (f) Reporting is to include:-
  - (i) a scaled map showing the location of all ecological values including corridors, fauna species habitat including habitat trees, remnant, high value regrowth and non-remnant vegetation overlaying a plan of development. The plan is to include any Water Sensitive Urban Design features, associated stormwater infrastructure, services, roads (noting that a differential GPS or Total Station-EDM must be used to accurately map ecological features);
  - (ii) a detailed description of the methods used and assumptions made; and
  - (iii) a scaled drawing showing areas surveyed across the site.

#### **SC6.4.6 Flood hazard assessment and mitigation report**

- (1) This component of the planning scheme policy applies to development which requires assessment against the Flood hazard overlay code.
- (2) This component of the planning scheme policy is intended to identify and provide guidance about information that may be required to support a development application where subject to the Flood hazard overlay code.
- (3) In particular, compliance with the Flood hazard overlay code may be demonstrated (in part) by the submission of a flood hazard assessment report and/or a flood hazard

mitigation report prepared by a competent person in accordance with the following guidelines.

Flood hazard assessment report

- (4) A flood hazard assessment report is to:-
- (a) be prepared in accordance with the methodology prescribed in SC6.3.5 of *the Planning scheme policy for development works*;
  - (b) consider Council's adopted flood and drainage studies for the relevant catchment(s); and
  - (c) as relevant, include accurate hydrological and hydraulic modelling of the waterway network and assessment of existing flooding and flood levels of major water systems, including modelling of the 50%, 10%, 5%, 1%, 0.5% and 0.2% AEP flood events and the PMF.

Flood hazard mitigation report

- (5) A flood hazard mitigation report is to:-
- (a) assess the potential impacts of the development on flood hazard;
  - (b) assess the potential impacts of flood hazard on the development;
  - (c) recommend strategies to be incorporated into the proposed development to satisfy the outcomes of the Flood hazard overlay code;
  - (d) describe and evaluate the impact of the proposed mitigation strategies on the existing and likely future use of land and buildings in proximity to the proposed development; and
  - (e) address the following:-
    - (i) water quality;
    - (ii) waterways, including bank stability;
    - (iii) impacts on adjacent properties both upstream and downstream;
    - (iv) preferred areas and non-preferred areas on site for various activities, based on the probability of inundation and the volume and velocity of flows;
    - (v) the use of flood resistant materials and construction techniques able to withstand relevant hydraulic and debris loads where appropriate;
    - (vi) the location and height of means of ingress and egress, including possible flood-free escape routes;
    - (vii) the location and height of buildings, particularly habitable floor areas;
    - (viii) structural design, including the design of footings and foundations to take account of static and dynamic loads (including debris loads and any reduced bearing capacity owing to submerged soils);
    - (ix) the location and design of plant and equipment, including electrical fittings;
    - (x) access requirements for maintenance of proposed infrastructure;
    - (xi) the storage of materials which are likely to cause environmental harm if released as a result of inundation or stormwater flows;
    - (xii) the appropriate treatment of water supply, sanitation systems and other relevant infrastructure;
    - (xiii) relevant management practices, including flood warning and evacuation measures;
    - (xiv) details of any easements or reserves required for stormwater design; and
    - (xv) details of detention/retention storages.

- (6) The level of detail required for a particular development application should be determined in consultation with Council's development assessment officers.

#### **SC6.4.7 Koala impact assessment report**

- (1) The preparation of a koala impact assessment report may be required where development is proposed within, or adjacent to, land containing koala habitat (as shown on the Biodiversity areas, waterways and wetlands overlay maps or otherwise identified as koala habitat).
- (2) The preparation of a koala impact assessment report can assist in demonstrating compliance with performance outcome PO1 of **Table 8.2.4.3.2 (Criteria for assessable development – Koala habitat areas and Koala conservation)** of the Biodiversity areas, waterways and wetlands overlay code by providing further detail as to the type and extent of koala habitat, the value of the koala habitat, the likely impacts on koala populations, the type of mitigation measures proposed to protect koalas and koala habitat, and an assessment of the effectiveness of those mitigation measures.
- (3) The assessment of the koala habitat value is to be conducted by a suitably qualified professional experienced in conducting flora, fauna, or ecological assessments with skills in koala detection and eucalypt identification. The assessment methodology utilised is to be appropriate for the subject site and surrounds, and conducted in accordance with best practice koala survey methodology. Agreement should be sought from Council's development assessment officers as to the methodology to be employed prior to conducting the site specific survey. Third party advice may also be sought from other agencies such as the Department of Environment and Heritage Protection (DEHP) to determine an appropriate site specific survey methodology.
- (4) The koala impact assessment report may include supporting photographs, maps, plans, diagrams, tables and the like and should contain the following:-
- (a) an ecological survey of the site that locates, maps and describes koala habitat and preferred koala food trees in terms of distribution, density, species, size, condition, and other characteristics relevant to koala populations;
  - (b) an estimate of the size, composition and condition of the koala population occupying or moving through the site as part of its normal range;
  - (c) an assessment of the local ecological context of the site, including the relationship of the site to adjacent and other nearby koala habitat areas and the identification of existing and potential koala movement corridors to, from, and through the site;
  - (d) an assessment of potential impacts of development of the general form proposed (e.g. residential subdivision, motel, school) on koala habitat values on and off the site;
  - (e) a description of the scale, density and distribution of development, design elements, construction techniques and other actions recommended to be incorporated in the proposed development to avoid, minimise or ameliorate the likely detrimental impacts on koala habitat values on and off the site;
  - (f) a qualitative assessment of the extent to which the specific development proposed (incorporating the actions recommended in item (e)) would either reduce, sustain or improve the capacity of the site and the surrounding area to support koala occupation, movement and behaviours patterns in the short and long term, compared to the situation prevailing prior to development.
- (5) Koala's have strong regional preferences for certain eucalypt species, and in a particular district may feed almost entirely on one or two species. When preparing a

koala impact assessment report identification of, and reference to, the particular regional or district koala food trees is required.

#### **SC6.4.8 Traffic impact assessment report**

- (1) Performance outcome PO2 of **Table 9.4.4.3.2 (Criteria for assessable development only)** of the Transport and parking code requires that development involving high trip generating land uses minimises any adverse impacts on surrounding land uses and the external transport network, including by the provision of infrastructure and services to increase the use of public and active transport.
- (2) Compliance with this performance outcome of the Transport and parking code may be demonstrated (in part) by the submission of a traffic impact assessment report prepared by a competent person in accordance with the following guidelines.
- (3) As a minimum, the traffic impact assessment report should provide:-
  - (a) an assessment of the traffic generation and movements and/or on-site manoeuvring associated with the proposed development;
  - (b) an assessment of the proposal and its impacts in the context of the surrounding road network; and
  - (c) recommendations and/or design solutions to mitigate any traffic impacts associated with the development.
- (4) Depending on the nature and scale of the proposed development and the location and characteristics of the development site, the traffic impact assessment report may also need to consider:-
  - (a) specific measures to ensure the proposal will contribute towards encouraging walking, cycling and greater use of public transport in preference to using private cars;
  - (b) the need to improve public transport services and infrastructure as a result of the development;
  - (c) measures to ensure maximum accessibility to public transport, including future expanded services;
  - (d) a review of the existing and proposed traffic network and traffic operating conditions based on an appropriate planning horizon (with a minimum of 10 years);
  - (e) the amount of other traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect of traffic on the movement of other traffic on the road system. This includes the impact of generated traffic on:-
    - (i) key nearby intersections;
    - (ii) local streets in the neighbourhood of the development;
    - (iii) the environment;
    - (iv) existing nearby major traffic generating development;
    - (v) the major road network;
  - (f) existing parking supply and demand in the vicinity of the proposed development;
  - (g) level of provision for parking in the development based on land use and public transport provision;

- (h) whether the proposed means of ingress to or egress from the site of the development are adequate and located appropriately according to the Council's road hierarchy;
- (i) adequate provision to be made for the loading, unloading, manoeuvring and parking of vehicles within that development or on that land;
- (j) movements of freight carrying vehicles associated with the proposal and how these are to be minimised;
- (k) the possibility of integration with adjacent development;
- (l) the effects on public transport, traffic operations and parking, of any temporary works required during construction;
- (m) any comments made by the Department of Transport and Main Roads that are in accordance with the rights and powers of this agency;
- (n) the existing and likely future amenity of the surrounding area; and
- (o) a statement of all of the assumptions made in the preparation of the report and the design parameters adopted in the technical analysis.