



NSW GOVERNMENT
Department of Planning

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COPY

Our ref: MP 05_0113
Your ref:
File: 9041928

Mr Sid Londish,
Tiffany Developments Pty Ltd
11C/70 Alfred Street
MILSONS POINT NSW 2061

Dear Mr Londish,

Subject: Director General's Requirements for the Environmental Assessment of Proposed Concept Plan for a Seniors Living Development and Commercial Uses at Oxford Falls MP 05_0113

The Department has received your application for the proposed Concept Plan for a Seniors Living Development and a number of commercial uses at Oxford Falls (Major project: MP05_0113).

I have attached a copy of the Director General's requirements (DGR's) for environmental assessment of the project. These requirements have been prepared in consultation with the relevant government agencies including Council.

In particular you are requested to ensure that the Environmental Assessment provides the strategic context and justification of the proposed development relative to surrounding land uses and demonstrates compatibility with the regional and local land use patterns.

It should be noted that the Director-General's requirements have been prepared based on the information provided to date. Under section 75F(3) of the Act, the Director-General may alter or supplement these requirements if necessary and in light of any additional information that may be provided prior to the proponent seeking approval for the project.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit the Environmental Assessment for the project to determine:

- the fees applicable to the application;
- relevant land owner notification requirements;
- consultation and public exhibition arrangements that will apply;
- options available in publishing the Environmental Assessment via the Internet.

Prior to exhibiting the Environmental Assessment, the Department will review the document to determine if it adequately addresses the DGR's. The Department will consult with other relevant government agencies in making this decision. If the Director-General considers that the Environmental Assessment does not adequately address the DGR's, the Director-General may require the proponent to revise the Environmental Assessment to address the matters notified to the proponent. Following this review period the Environmental Assessment will be made publicly available for a minimum period of 30 days.

If your proposal includes any actions that could have a significant impact on matters of National Environmental Significance, it will require an additional approval under the Commonwealth Environment Protection Biodiversity Conservation Act 1999 (EPBC Act). This approval would be in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Commonwealth Department of Environment and Heritage in Canberra (02 6274 1111 or www.deh.gov.au).

If you have any enquiries about these requirements, please contact Josephine Wing on 02 9228 6528 or via e-mail at josephine.wing@planning.nsw.gov.au.

Yours sincerely

Sam Haddad

Sam Haddad
Director General

16/8/2006.

Director General's Requirements

Section 76F of the Environmental Planning and Assessment Act 1979

Application number	05_0113
Project	Concept Plan application for a Seniors Living Development and Commercial Uses, Oxford Falls.
Location	Lots 1108, 1110, 1111 and 1336 DP 752038, Lot 20 DP 842523, Lot 21 DP 829321 and Lot 80 DP 846099;
Proponent	Tiffany Developments Pty Ltd
Date Issued	
Expiry date	2 years from date of issue
General requirements	<p>The Environmental Assessment (EA) must include:</p> <ol style="list-style-type: none"> 1. An executive summary; 2. A description of the proposal including: <ul style="list-style-type: none"> - description of the site and surrounds - suitability of the site for the proposed development; - likely environmental, social and economic impacts; - justification for undertaking the project; and - alternatives considered 3. Consideration of: <ul style="list-style-type: none"> • any relevant statutory provisions; • overview of other environmental issues and any relevant provisions arising from environmental planning instruments; • an environmental risk analysis of the project which takes into consideration the issues raised during consultation; • a detailed assessment of the key issues specified below, which includes: <ul style="list-style-type: none"> - description of the existing environment; - an assessment of the potential impacts of the project; - a description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage, and/or monitor the impacts of the project; • a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures • a conclusion justifying the project, taking into consideration the environmental impacts of the proposal, the suitability of the site, and whether or not the project is in the public interest; • a signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading.
Key issues	<p>The Environmental Assessment must address the following key issues:</p> <ul style="list-style-type: none"> • Statutory and Other Requirements Assess the proposal against all relevant legislation and planning provisions applying to the site, including SEPP 65 Design Quality of Residential Flat Development and SEPP (Building Sustainability Index: BASIX) 2004; addressing the nature, extent and justification for any non-compliance. Where non-compliance results in environmental impacts, consideration of alternative or compensatory works to address the impacts is to be included. Clearly delineate staging, if any. • Site Suitability Provide an assessment of the suitability of the site for all proposed uses including relative to the Sydney Metropolitan Strategy and Metropolitan Development Program, having regard to the terms of the Sustainability Criteria for New Urban Release. Certification by a suitably qualified Access Consultant in relation to access to and within the site for the

SEPP (BASIX)
Site compatibility
outcomes

disabled and the elderly.

• **Development Context**

Demonstrate that the proposed development is consistent and compatible with surrounding land uses and activities and strategically justifiable in the locality.

• **State Environmental Planning Policy (Seniors Living) 2004 (SEPP Seniors Living 2004)** *provide assessment against*

Demonstrate Compliance with SEPP Seniors Living 2004. — HSPD

• **Design, Visual Impacts and Design Quality Principles**

The environmental assessment is to demonstrate that the design and visual impact of the development is consistent with the desired future character for the Oxford Falls Valley Locality as described in the planning instruments and studies which apply to Oxford Falls and the proposed development. The discussion of the design and visual impact should address but not be limited to the consideration of layout and location, density, visual prominence; street frontage; bulk and scale; massing; built form including roof form; aesthetics; visibility from surrounding areas, energy and water efficiency; safety; pedestrian footpath; pedestrian connectivity through to, within and through the development.

• **Environmental and Residential Amenity**

The project must achieve a high level of environmental amenity within the site and for the surrounding sites and residents in terms of:

- **Solar access:** Overshadowing is to be minimised. Shadow diagrams demonstrating impacts of the proposal are to be submitted. The new residences are to be designed to receive optimum solar access.

- **Wind impacts:** The massing, location and design of buildings must minimise wind impacts on pedestrian amenity. Where necessary wind modelling is to be undertaken to determine the existing and future wind conditions on site.

- **Noise:** An acoustic assessment, including mitigation measures, is required. The acoustic assessment should demonstrate that the proposal will be designed, operated and maintained so that there is no unacceptable level of noise impacts on the amenity of the locality.

• **Social and Economic Context**

Provide a social impact study and an economic impact study which address the social and economic context of the development including infrastructure requirements, access, community services and facilities; and staging and monitoring of infrastructure works.

The economic impact study is to detail the capacity of the local housing and aged care market to absorb the density proposed in addition to the density increases which are already provided for by the planning controls and strategies governing land in the locality. The economic impact study is to also address the impact of the proposed commercial and retail component on existing commercial and retail centres within the Warringah Local Government Area.

• **Traffic Impacts (Operational)** *Assessment against*

Demonstrate compliance with relevant Council and RTA's traffic and car parking codes; prepare a detailed Traffic Impact Study (TIS) in accordance with Table 2.1 of the RTA's *Guide to Traffic Generating Developments*.

The SIDRA program must be used for traffic modelling. The Study and modelling must address impacts on local and arterial roads (Wakehurst Parkway) and intersection of Wakehurst Parkway/Dreadnaught Road and the need and associated funding for upgrading or road improvement works; adjacent road intersections and the need to upgrade the intersection of Oxford Falls Road and Barnes Road in accordance with Warringah Council's requirements; access points to development; existing traffic volumes with and without the development; AM and PM peak volumes; deliveries and servicing of the site, pedestrian traffic; proposed number of car parking spaces and compliance or otherwise with Council's

✓
SEPP 4980
Culter
25(5b)

✓

X

+ PA
at PA
stage

✓

✓

parking code and Draft State Environmental Planning Policy No. 66 ; address future management of roads; and dedication of public area to Council, if any.

Assessment against 2006

- **Bushfire Impacts**

Demonstrate compliance with Section 100B of *Rural Fires Act 1997*, Section 79BA of *Environmental Planning and Assessment Act 1979*; *Planning for Bush Fire Protection 2001* and *Australian Standard 3959 - Building in Bush Fire Prone Areas*. Address development and maintenance of asset protection zones; setbacks to protect against bushfire hazards; management control of fuel levels; provision of egress/access to the development and water supplies for bushfire suppression operations; increased bushfire risk from revegetation. Address future management of any areas of hazard remaining within the subject area, focussing on the level of hazard posed to future development and adjacent land and how the hazard may change as a result of the development.

- **Impacts on Water Quality, Natural Watercourses and Riparian Areas; Soil and Water Management**

Demonstrate consistency with objectives of *Rivers and Foreshores Improvements Act 1948 (RFI Act)*, specifically in the context of the subject site containing a watercourse (an unnamed tributary of Middle Creek) which is a "river" for the purposes of the RFI Act as well as several natural drainage lines.

Address the: "*Watercourse and Riparian Area Planning, Assessment and Design Version 4*" guideline. Assess the proposal relative to the Warringah Creek Management Study March 2004, Narrabeen Lagoon Estuary Management Plan 2002 and the Northern Beaches Stormwater Management Plan 1999.

Demonstrate an acceptable level of water quality protection with respect to downstream receiving waters. Address impacts on existing natural drainage lines on the site. Address and recommend appropriate sediment and erosion control regime during and post-construction.

- **Threatened Species and Corridor Values**

Address impacts on threatened species having regard to the Draft *Guidelines for Threatened Species Assessment* and recommend offset measures to avoid or mitigate the impacts. Provide a peer review of the threatened species component of the EA prior to submission. Address corridor values or connective importance of any vegetation on the subject land; the possible loss of connectivity to bushland areas to the south, east and west, impacts on adjoining and nearby bushland areas, demonstrate adequate buffer and address long-term protection of threatened species. Identify mitigation measures for long-term protection of threatened species. Clearly map and quantify the total area of vegetation to be modified.

- **Riparian Planting and Asset Protection Zones**

Address the following guidelines: "*Watercourse and Riparian Area Planning, Assessment and Design Version 4*", "*The Design and Construction of Paths and Cycleways in Riparian Areas Version 2*"

A riparian setback from the watercourse on site (in which no development or built structures can be located) is to be provided. The setback is to be a minimum of 30 metres measured horizontally landward from the top of the bank on both sides of the watercourse within the subject site. The proposed pedestrian pathway is to be located at the outside edge of the riparian zone. Any protrusion into the riparian zone is to be constructed as an elevated boardwalk.

- **Heritage**

Prepare a Heritage Impact Statement (HIS) in accordance with the NSW Heritage Office's guidelines to address the impact of the proposal on the site and any measures to minimise and mitigate impacts, the relationship

*delete
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along
direction*

	<p>between the new development and the heritage components of the conservation area, impact on any significant archaeological relics and visual impact of the proposal on the curtilage and setting of the conservation area.</p> <p>Address the possible impacts on Aboriginal Cultural Heritage Values specifically addressing the Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation.</p> <ul style="list-style-type: none"> • Drainage and Flooding Address drainage issues associated with changes in the hydrological regime of the catchment as a result of the development, including impacts on Narrabeen Lagoon. Consult the Council to develop suitable flood planning levels for the development having regard to the <i>NSW Floodplain Management Manual</i>. • Cumulative Impacts – Address cumulative impacts, having regard to the proposed development; and existing, approved and proposed development within 5km radius of the subject site. In consultation with relevant agencies this assessment is to address existing capacity of and impacts on existing infrastructure services including water supply, sewerage, electricity, waste disposal, telecommunications, gas; traffic, and social infrastructure including health services and schools in consultation with service providers and Council; RTA, Department of Health and Department of Education. Identify staging, if any, of infrastructure works. Sydney Water have advised that the existing water and sewer infrastructure are inadequate to service the development and that extensive new infrastructure will need to be supplied to support the proposal. • Waste Management Address waste management practices to be employed for the proposed development. • Remediation of Site The environmental assessment is to <u>demonstrate compliance with the requirements of SEPP 55.</u> <i>provide assessment agent</i> Provide a human health risk assessment for occupants of the development, having regard to cumulative health implications which may arise from contaminants on the site. The risk assessment shall be conducted in accordance with DEC's <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>; WorkCover's <i>Occupational Health and Safety Requirements</i>; <i>SEPP 55</i> and <i>Managing Land Contamination: Planning Guidelines</i> (Department of Planning and EPA). • Provision of Public Services and Infrastructure Address provision of public services and infrastructure having regard to the Council's <i>Section 94 Contribution Plan</i>. • Subsidence Assess impacts on surface and groundwater resources, cliff lines and other geological formations, cultural sites, public access and infrastructure including roads, utilities, buildings and other structures. • General Environmental Risk Analysis Undertake environmental risk analysis to identify environmental impacts associated with operation of the project; recommend mitigation measures and potential significant residual environmental impacts after application of the mitigation measures.
Consultation	<p>During the preparation of the Environmental Assessment, you must consult with the relevant local, State or Commonwealth government authorities, service providers, community groups or affected landowners. In particular you must consult with;</p> <ul style="list-style-type: none"> • Department of Natural Resources (Jo Ann Moore (9895 5016) in relation to river and foreshore matters and Warren Miller (9895 7764 in relation to water licensing matters);

	<div>delete name?</div> <ul style="list-style-type: none">• Warringah Council (Steve Findlay - 9942 2481)• Rural Fire Service (Ashley West)• RTA (James Hall - 8814 2047)• Department of Environment and Conservation (Giselle Howard - 9995 6851)• Sydney Water (Kate Powell - 9350 5842)• Heritage Council (Rajeev Maini - 9873 8592)• relevant community organisation contact (s); and• relevant Indigenous agency contact. <div>✓</div>
Deemed refusal period	<p>The consultation process and the issues raised should be described in the Environmental Assessment</p> <p>Under clause 8E(2) of the <i>Environmental Planning and Assessment Regulation 2000</i>, the applicable deemed refusal period is 60 days from the end of the proponent's Environment Assessment period for the project.</p>

State Government technical and policy guidelines

Aspect	Policy /Methodology
Biodiversity	Draft Guideline for assessment of impacts on Threatened Species under Part 3A (Planning 2005)
	Threatened Species Assessment under the EP&A Act: The '8 Part Test' of Significance (NPWS, 1996)
Flora and Fauna	Guidelines for Threatened Species Assessment (DEC, 2004) <i>Draft</i>
Terrestrial	Threatened Species Management Manual (NPWS, 1998)
Community Consultation	Community Involvement Practice Notes and Resource Manual (RTA, 1998)
	Best Practice Community Consultation and Involvement (Commonwealth DEH, 1995, ISBN 0 642 19421 1)
Contamination of Land	Best Practice in Contaminated Sites (Commonwealth DEH, 1999, ISBN 0 642 546460)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (NHMRC, 1992)
Economics	Economic Analysis Manual (RTA)
	Government Guidelines for Economic Appraisal (NSW Treasury, 1997)
Heritage	Aboriginal
Non-Indigenous	Assessing Heritage Significance Update for Heritage Manual (Heritage Office, 2000)
	Heritage Manual Heritage Office and Department of Urban Affairs and Planning (Heritage Office & DUAP, 1996)
	NSW Heritage Manual (NSW Heritage Office, 1996)
	Assessing Heritage Significance (NSW Heritage Office, 2001)
	How to Prepare Archival Records of Heritage Items (NSW Heritage Office, 1994)

Aspect	Policy /Methodology
	Aboriginal Cultural Heritage Standards & Guidelines Kit (DEC, 1997)
	Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DEC, 2005) <i>Draft</i>
Lighting	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, 1997, AS 4282-1997)
Noise	
	Environmental Criteria for Road Traffic Noise (EPA, 1999)
	Environmental Noise Management - NSW Industrial Noise Policy (DEC, Dec, 1999)
	Environmental Noise Management Manual (RTA, 2001)
	Environmental Criteria for Road Traffic Noise (DEC, June, 1999)
	Noise Guide for Local Government (DEC, 2004)
	Acoustics - Description and measurement of environmental noise - General procedures (Standards Australia, 1997, AS 1055.1-1997)
Reporting	
	Numerical values - Rounding and interpretation of limiting values. (Standards Australia, 2003, AS 2706-2003)
Risk Management	
	Australian Standard – Risk Management (Standards Australia, 1999, AS 4360)
	Planning NSW Multi-Level Risk Assessment guidelines. (DUAP, 1999)
	Best Practice in Environmental Risk Management (Commonwealth DEH, 1999, ISBN 0 642 546304)
Safety and Hazards	
	Safety Signs for Road Traffic Control. (Standards Australia, 2001, AS-1742, 1743, 1744)
Soils	
	Acid Sulfate Soil Manual (ASSMAC)
	Contaminated Sites: Sampling Design Guidelines (EPA, 1999)
	Contaminated Sites: Guidelines for the NSW Auditor Scheme (EPA, 1999)
	Contaminated Sites: Guidelines on Significant Risk of Harm from Contaminated Land and Duty to Report (EPA, 1999)
Traffic & Transport	
	Alternative route options
	Intersection Level of Service
	Bus lane/pedestrian/cycleway standards (Austroads/RTA guidelines)
	Guide to Traffic Generating Development (RTA, 1993)
	RTAs Road Design Guide (RTA, 1996)
Urban Design/Pathway Design	
	Guidelines for the Design and Construction of Paths and Cycleways

Aspect	Policy /Methodology
	along Watercourses and Riparian Areas (Version 2) (DIPNR/DNR)
	Planning and Design Guide (RTA, 1990)
	Beyond the Pavement: RTA Urban and Regional Design Practice Notes (RTA, 1999)
Water	
	Best Practice in Water Management (Commonwealth DEH, 1999, ISBN 0 642 546231)
	NSW State Rivers & Estuaries Policy (DEPT of NR, 1992)
Floodplain	NSW Government Floodplain Development Manual - the Management of Flood Liable Land (DIPNR, 2005)
Groundwater	The NSW State Groundwater Protection Policy (DLWC)
	NSW Salinity Strategy
	State Groundwater Policy Framework Document (DLWC, 1997)
	NSW State Groundwater Quality Protection Policy (DLWC, 1998, 0 7313 0379 2)
	NSW State Groundwater Quantity Management Policy (DLWC) <i>Draft</i>
	NSW State Groundwater Dependent Ecosystems Policy (DLWC, 2002, ISBN 0 7347 5225 3)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC, 1995)
Stormwater	Managing Urban Stormwater: Soils & Construction (NSW Landcom, March 2004) - "The Blue Book"
	Stormwater Outlet Structures to Streams (for pipes, culverts, drains and spillways – Version 1) (DIPNR)
	Managing Urban Stormwater: Source Control (DEC, 1998)
	Managing Urban Stormwater: Treatment Techniques (DEC, 1998)
Water quality	Australian Water Quality Guidelines for Fresh and Marine Waters (Australian and New Zealand Environment and Conservation Council, 1992 & 2000)
	Guideline for Construction Water Quality Monitoring (RTA, undated)
	Code of Practice for Water Management (RTA, 1999)
	National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC, 2000, ISBN09578245 2 1)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC, 2000)
Waterways	Waterways Crossing Design & Construction (Version 4 – DIPNR/DNR Draft Guidelines)
	Materials not suitable for use in Watercourse and Riparian Areas (Version 1)
	Guideline - Watercourse & Riparian Zone Rehabilitation Requirements (Version 3) (DLWC)

Plans and Documents to accompany the Application

Plans and Documents of the development

The following plans, architectural drawings and diagrams of your proposal as well as the relevant documents will be required to be submitted for your application:

1. The **existing site survey plan** is to be drawn to 1:500 scale (or other appropriate scale) and show:
 - the location of the land, the measurements of the boundaries of the land, the size of the land and north point;
 - the existing levels of the land in relation to buildings and roads;
 - location and height of existing structures on the site; and
 - location and height of adjacent buildings and private open space.
2. A **Site Analysis Plan** must be provided which identifies existing natural elements of the site (including all hazards and constraints), existing vegetation, property dimensions, footpath crossing levels and alignments, existing pedestrian and vehicular access points and other facilities, slope and topography, natural features such as watercourses, rock outcrops, utility services, boundaries, orientation, view corridors and all structures on neighbouring properties where relevant to the application (including windows, driveways etc.
3. A **locality/context plan** drawn to 1:500 scale (or other appropriate scale) should be submitted indicating:
 - significant local features such as parks, community facilities and open space, water courses and heritage items;
 - the location and uses of existing buildings, shopping and employment areas;
 - traffic and road patterns, pedestrian routes and public transport nodes
 - The existing site plan and locality plan should be supported by a written explanation of the local and site constraints and opportunities revealed through the above documentation.
4. The **Environmental Assessment** in accordance with the Director-General's Environmental Assessment Requirements as outlined in Attachment 1.
5. The **Architectural Concept drawings** are to be drawn to scale and illustrate the following general features:
 - the location of any existing building envelopes or structures on the land;
 - location of proposed buildings on the site;
 - the floor plans;
 - proposed densities;
 - the location of lifts, stairs and corridors;
 - adaptable housing requirements;
 - section plans;
 - fenestrations, balconies and other features;
 - communal facilities and servicing points;
 - the height of the proposed development in relation to the land;
 - significant level changes;
 - parking and vehicular access arrangements;
 - pedestrian access to, through and within the site;
 - location of proposed uses;
6. The **shadow diagrams** for developments comprising two or more storeys are to show solar access to the site and adjacent properties at summer solstice (Dec 21), winter solstice (June 21) and the equinox (March 21 and September 21) at 9.00 am, 12.00 midday and 3.00 pm.
7. **Owner's consent** is to be provided for all allotments of land constituting the development site. As the proposal relies on either the closure of or acquisition of the unformed portion of Barnes Road to allow consolidation of

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of types*

*separate
of types*

	<p>the site, owner's consent for this roadway from Warringah Council is required.</p> <p>8. The Other plans including (where relevant):</p> <ul style="list-style-type: none"> • Stormwater Concept Plan - illustrating the concept for stormwater management from the site; • View analysis - artists impression, photomontages, etc of the proposed development in the context of the surrounding development; • Coloured elevations - of the proposed buildings drawn to the same scale as the architectural drawings; • Landscape Concept Plan - plan or drawing that shows the basic detail of planting design and plant species to be used, listing botanical and common names, mature height and spread, number of plants to be utilised and surface treatments (i.e. pavers, lawn etc).
Specialist advice	<p>Specialist advice, where required to support your Environmental Assessment, must be prepared by suitably qualified and practising consultants in relation to issues including, but not limited to, the following:</p> <ul style="list-style-type: none"> • Flora and Fauna; ✓ • Bushfire; ✓ • Traffic; ✓ • Heritage; ✓ • Landscaping; ✓ • Geotechnical and/or hydro geological (groundwater); ✓ • stormwater/drainage; ✓ • Urban Design/Architectural; ✓ • Contamination in accordance with the requirements of SEPP 55; ✓ • Acid Sulphate Soil Management Plan; ✓ • BCA compliance. ✓
Documents to be submitted	<ul style="list-style-type: none"> • 19 hard copies of the Environmental Assessment; ✓ • 19 sets of architectural and landscape plans to scale, including one (1) set at A3 size (to scale); and ✓ * 1 copy of the Environmental Assessment and plans on CD-ROM (PDF format), not exceeding 5Mb in size (see below). * If the Environmental Assessment is bulky and lengthy in volume, you will be required to package up each Environmental Assessment ready for distribution by the Department to key agencies.
Electronic Documents	<p>Electronic documents presented to the NSW Department of Planning for publication via the Internet must satisfy the following criteria:-</p> <ul style="list-style-type: none"> • Adobe Acrobat PDF files and Microsoft Word documents must be no bigger than 1.5 Mb. Large files of more than 1.5 Mb will need to be broken down and supplied as different files. • File names will need to be logical so that the Department can publish them in the correct order. Avoid sending documents that are broken down in more than 10 files. • Image files should not be bigger than 2Mb. The file names will need to be clear and logical so the Department can publish them in the correct order. • Graphic images will need to be provided as [.gif] files. • Photographic images should be provided as [.jpg] files. • Large maps will need to be presented as individual files and will need to be calibrated to be no more than 2Mb each. • Images inserted into the document will need to be calibrated to produce files smaller than 1.5Mb. Large images will need to be presented as individual files and will need to be calibrated to be no more than 2Mb each. The file names will need to be clear and logical so the Department can publish them in the correct order. <p>Alternatively, these electronic documents may be placed on your own web site with a link to the Department of Planning's website.</p>

Attachment 1 – DEC's Recommended EA requirements

1. Impacts on threatened species and their habitat

- a) A field survey of the site should be conducted and documented in accordance with the gazetted draft *Guideline for Threatened Species Assessment* and any relevant environmental impact assessment guidelines where these have been prepared by DEC. Surveys should include targeting the following threatened species and communities :
 - *Tetratheca glandulosa*
 - *Grevillea caleyi*
 - *Acacia bynoeana*
 - *Syzygium paniculatum*
 - Rosenberg's Goanna
 - Grey-headed Flying Fox
 - Powerful Owl
 - Barking Owl
 - Giant Burrowing Frog
 - Koala
 - Spotted tailed Quoll
 - Duffy's Forest Endangered Ecological Community
- b) Describe the actions that will be taken to avoid or mitigate impacts or compensate for unavoidable impacts of the project on threatened species and their habitat. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- c) The EA needs to clearly state whether it meets each of the key thresholds set out in Step 5 of the guideline.

2. Impacts on Aboriginal cultural heritage values

- a) The EA should address and document the information requirements set out in the draft *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* involving surveys and consultation with the Aboriginal community.
- b) Identify the nature and extent of impacts on Aboriginal cultural heritage values across the project area.
- c) Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal cultural heritage values. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- d) The EA needs to clearly demonstrate that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.

3. Impacts on the environment

The following environmental impacts of the project need to be assessed, quantified and reported. The EA will need to describe mitigation and management options that will be used to prevent, control, abate or minimise identified environmental impacts associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

a) Water Management

Stormwater runoff from urban developments can have a significant, adverse impact on receiving environment(s). New development areas (including residential, employment, industrial and tourism) should be designed to minimise these impacts and to contribute to the achievement of the government-endorsed Water Quality and River Flow Objectives for the catchment.

The NSW Stormwater Trust is finalising a new series of *Managing Urban Stormwater* documents that will include a new volume on stormwater planning. A key element of this will be a more targeted approach to setting stormwater objectives that better reflect the needs or sensitivities of the receiving environment and translate the water quality objectives to a framework that can be readily used:

- in the conceptual and detailed design of urban developments and associated stormwater management systems; and
- in the assessment of those designs by consent authorities.

The targets are designed to provide certainty without being prescriptive, are technically and financially achievable, and allow stormwater systems to be customised to local circumstances. They can be met through the implementation of appropriate water sensitive urban (WSUD) design principles and measures.

The implementation of an appropriate WSUD strategy that can meet the stormwater management objectives for the site requires a considered process of site investigation, planning and design. The starting point should be a water management study that:

- identifies stormwater management objectives and any other water management objectives (including reuse in order to meet the requirements of BASIX, salinity hazard);
- identifies and assesses relevant site characteristics and constraints;
- identifies potentially feasible stormwater management strategies, which may comprise stormwater reuse options, best planning practices, stormwater treatment measures (in both the public and private domain) and indicative maintenance requirements and arrangements;
- assesses those potential strategies, including the nature, basis and outcomes of stormwater modelling used to assess alternative solutions. This assessment of alternative strategies should address their compliance with management objectives, life-cycle costs, ongoing operations and maintenance requirements, land-take requirements, expected reliability and likely level of community acceptance; and
- provides a suitably detailed description of the preferred WSUD strategy, in the form of documents, plans and conceptual diagrams (as appropriate).

The new *Managing Urban Stormwater* guidance documents will be available later in 2006.

b) Air Quality and Transport Planning

DEC encourages the use of public transport, walking and cycling to reduce the air quality, greenhouse and noise impacts of private vehicle use. *Action for Air*, the NSW Government's Air Quality Management Plan, was developed with the specific objective of clarifying air quality objectives, developing strategies to achieve improvements in air quality and improved integration between land use and transport planning. A key objective in *Action for Air* is the reduction in the anticipated growth of vehicle kilometres travelled through greater use of other transport modes such as public transport, walking and cycling. This is especially important for sites located close to major public transport systems. Best practice urban design should be implemented with priority given to supporting access to and promoting the use of public transport.

c) Contaminated Land

Any potential land contamination as a result of past and current activities needs to be assessed and considered. Without these studies, a full appreciation of the implications of developing these lands and specifying a suitable land use cannot be determined. This also has implications in terms of whether there are any other possible offsite impacts caused as a result of these activities. Under the *Contaminated Land Management Act* it is also the responsibility of the property owner to ensure they advise the DEC if the site assessment reveals the site is a significant risk of harm.

The following documents should form the basis for the contaminated land assessment for the proposed development:

- *Managing Land Contamination: Planning Guidelines - SEPP55 - Remediation of Land*, Department of Urban Affairs and Planning and NSW Environment Protection Authority (EPA), 1998;
- *Contaminated Sites - Guidelines for Consultants Reporting on Contaminated Sites* (EPA 1997);
- *Contaminated Sites - Guidelines on Significant Risk of Harm and Duty to Report* (EPA, 1999).

d) Other

The environmental study should also assess any potential noise sources which may impact on proposed sensitive land uses.

- In addressing these planning principles/considerations the DEC considers that the following Noise Policies and Guidelines would form the basis for noise assessment for any proposed development:
 - *Environmental Noise Management Series: Environmental Criteria for Road Traffic Noise*, May 1999; and
 - *ECRTN Environmental Criteria for Road Traffic Noise New Residential Land Use Developments affected by Freeway/Arterial* page 6 Table 1;
- any potential local air quality issues (including odour) which could impact on community wellbeing, including any industrial sources;
- general sustainability issues such as energy usage (and any synergies which could result from co-location with the co-generation plant) and waste management; and
- an assessment of acid sulfate soils. Risk maps have been published by the Department of Natural Resources for areas with potential acid sulfate soils. The assessment should take into account these risk maps and the "Acid Sulfate Soil Manual" (August 1998) issued by the NSW Acid Sulfate Soil Management Advisory Committee.