Director General's RequirementsSection 75F of the *Environmental Planning and Assessment Act* 1979

Application	MP11_0052
number	
Project	City Walk Pedestrian Bridge, Barangaroo South
Location	Hickson Road and Napoleon Street, Barangaroo, Sydney
Proponent	Lend Lease (Millers Point) Pty Ltd
Date issued	18 September 2011
Key issues	The Environmental Assessment (EA) must address the following key issues: 1. Relevant EPI's, policies and guidelines Demonstrate that the project will comply with the requirements set out in the following provisions: Clauses 8, 9, 17 and 18 of Part 12 (Barangaroo site) of Schedule 3 to State Environmental Planning Policy (Major Development) 2005. Address the provisions of State environmental planning policies that would apply to the development of the Barangaroo site requiring development consent under Part 4 of the Environmental Planning and Assessment Act 1979, as if those provisions applied to the carrying out of the project, including the following: State Environmental Planning Policy (Major Development) 2005; State Environmental Planning Policy (No 55 – Remediation of Land; Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005; and Sydney Local Environmental Plan 2005. Demonstrate that the project is consistent with the Metropolitan Plan for Sydney 2036 and the draft Sydney City Subregional Strategy. 2. Concept Plan, CBD Metro Project, Commercial Buildings C2, C3, C4 and C8 Demonstrate consistency with the terms of approval of Concept Plan MP06_0162 (as modified). Outline in detail the relationship, linkages, connections and staging of the development with the CBD Metro Project MP09_0036 (as modified). Outline in detail the relationship, linkages and connections of the development with Commercial Buildings C2, C3, C4 and C8. 3. Barangaroo Review The EA shall outline how the proposal: Integrates and responds to the recommendations made by the Design Review Panel in relation to the C3 and C4 podia, and public domain areas; Addresses the requirement for site remediation plans (RAPs) to be reviewed by another independent NSW EPA accredited site auditor (if relevant); Addresses the requirement for the site auditor to report to a specially constituted Contamination Panel (if relevant); and Addresses previous commitments in relation to transport arrangements and findings of the Audito
	4. Urban Design and Built Form Demonstrate how the proposed development will achieve design excellence including: The design process leading to the proposal; A high standard of architectural design, materials and detailing that will complement future development within the Barangaroo site and surrounding built form;

- The form and appearance of the proposed pedestrian bridge and how it will improve the quality and amenity of the public domain;
- The sustainable design principles incorporated into the development in terms of sunlight, wind, reflectivity, safety and security;
- Detailed plans, elevations and sections;
- A view analysis is to be undertaken inclusive of photomontages and perspectives of key elements and views of the development from key locations (including, but not limited to, from Napoleon Street, Kent Street/Margaret Street intersection, Hickson Road, Sussex Street and City Walk);
- Compliance with Australia Standard AS5100 Bridge Design and consideration of the RTA's Technical Direction TD2002/RS02 Policy for safety screening of bridges;
- The design of the bridge shall fully comply with accessibility requirements. Bridge cross sections shall cater for both pedestrians and cyclists;
- Crime Prevention Through Environmental Design (CPTED) safety strategies;
- A materials/finishes sample board and detailed elevations confirming the application of materials and finishes for the development; and
- 3D modelling and of the proposed development in accordance with the City of Sydney requirements.

5. Public Domain and Public Access

- Provision of a Draft Public Domain Plan identifying all temporary and permanent works within the public domain.
- Identify proposed public domain and linkages with and between other public domain spaces, including the Waterfront, Napoleon Street, City Walk and Kent Street/Margaret Street intersection.
- Details on the interface between the proposed pedestrian bridge, public domain, and the relationship to, and impact upon, the existing public domain and future built form, including C2, C3, C4 and C8.
- Consideration of design and safety measures for pedestrians and cyclists.
- Outline specific design features, including but not limited to:
 - Footpaths and pavements:
 - Materials and finishes;
 - Furniture and fixtures;
 - Street lighting, pedestrian lighting and feature lighting;
 - Edges, screens and fences;
 - Walls, embankments and mounds;
 - Steps, ramps, decks and pathways;
 - Services where affected, utility poles, and service pits;
 - Civil and stormwater infrastructure;
 - Tree planting;
 - Mass planting beds, planter boxes and individual plantings; and
 - Extent of temporary and permanent features to be clearly shown, including furnishing or footings, finished surfaces, service and planting.

6. Land Use

- Identify proposed staging and timing for the delivery of the development.
- Demonstrate that the proposed development will not impede the metro rail corridor or affect the future operations of the metro project.

7. Transport and Accessibility Impacts

- Prepare a Transport Impact Assessment (TIA) consistent with the Barangaroo Transport Management and Accessibility Plan (TMAP) as modified. The TIA must evaluate:
 - Details of the short, medium and long term population that form the potential catchment for potential use of the bridge;
 - o Details and analysis of the proposed access points for the project and their suitability and

- capacity to meet predicted demands;
- Pedestrian and cycle access/circulation to meet the likely future demand within the precinct and connections to the external networks; particularly the City of Sydney Cycle Network;
- Provide details on the integration with and pedestrian access to other existing and proposed transport modes (including bus, ferry and proposed future light rail);
- Demonstrate that the proposed development will not impede the Wynyard Walkway project or affect its future operations;
- Measures to promote access and usage of the proposal and associated pedestrian and bicycle linkages; and
- Identification of any capacity constraints on pedestrian and cycling linkages to City Walk including both on-street and off-street.
- Government commitments and plans for the provision of public transport (with reference to the TMAP, Barangaroo Audit Report and outcomes of the Barangaroo Review); and
- Justification of the allocation of on-site car parking having regard to the Concept Plan approval (as amended), RTA guidelines and accessibility of the site to public transport.
- Prepare a Travel Demand Management Plan that provides an analysis of public transport provision, walking and cycling connections within the vicinity of the proposed site, and measures that will optimise the opportunity provided by the project site's proximity to public transport.
- Prepare a Construction Traffic Management Plan outlining:
 - o Cumulative impacts associated with other construction activities on the Barangaroo site;
 - Details of anticipated truck movements to and from the site;
 - Details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements;
 - Impacts on the temporary cruise ship terminal;
 - Details of any proposed transportation of waste materials via the Harbour and proposed locations for handling materials; and
 - Mitigation measures to reduce impacts on accessibility and amenity, including for pedestrians and cyclists.

8. Water, drainage, stormwater and groundwater

- Prepare a Stormwater and Drainage Assessment to assess the impacts of the proposal on surface and groundwater hydrology and quality.
- Water quality management focussing on potential impacts from the works on Sydney Harbour.
- Prepare a Water Management Plan. This should include stormwater and wastewater management, including any re-use and disposal requirements, demonstration of water sensitive urban design and any water conservation measures.
- Prepare an Infrastructure Management Plan. The proponent shall provide information on the required water and wastewater services and any augmentation of Sydney Water infrastructure that may be required for the proposed development.

9. Air, Noise, Vibration and Odour Quality

 Address potential air quality, noise, vibration and odour impacts, in particular during the construction and operation of the development and appropriate mitigation measures. In particular the following must be addressed:

Air and Odour

The Environmental Assessment must include an Air Quality Impact Assessment that is prepared strictly in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales 2005*, available at:

 $\underline{\text{http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf}}.$

The Air Quality Impact Assessment must also make appropriate reference to the Assessment and Management of Odour from Stationary Sources in NSW: Technical Framework 2006 and Assessment

and Management of Odour from Stationary Sources in NSW: Technical Notes 2006, available at: http://www.environment.nsw.gov.au/air/odour.htm.

The key air quality issues for the proposal will depend on the methods used to manage and remediate the contaminated material. Potential matters that must be covered in the Air Quality Impact Assessment include, where applicable:

- the identification of the pollutants of concern, including individual toxic air pollutants, dust and odours:
- the identification and assessment of all relevant fugitive and point source emissions;
- appropriate coverage of all aspects of the remediation, including the excavation, storage, transport and treatment of contaminated material; and
- proposed air quality management and monitoring procedures during remediation.

The Air Quality Impact Assessment must consider the requirements of the Protection of the Environment Operations (Clean Air) Regulation 2010.

Noise

The Environmental Assessment should include an assessment of noise and vibration impacts, including cumulative construction related noise impacts, prepared in consultation with Office of Environment and Heritage. All feasible and reasonable noise impact mitigation measures should be implemented. The assessment should be prepared in accordance with the NSW government's Interim Construction Noise Guideline, Industrial Noise Policy and Application Notes, Environmental Criteria for Road Traffic Noise Guide. and Assessing Vibration: Α Technical as appropriate, available http://www.environment.nsw.gov.au/noise/ and Development Near Rail Corridors and Busy Roads -Interim Guidelines 2009.

10. Climate Change and Sea Level Rise

 An assessment of the risks associated with sea level rise on the proposal as set out in the NSW Coastal Planning Guideline: Adapting to Sea Level Rise.

11. Heritage

- An archaeological assessment of the likely impacts of the proposal on any Aboriginal cultural heritage, European cultural heritage and other archaeological items and outline proposed mitigation and conservation measures.
- An interpretation strategy that includes the provision for interpretation of any archaeological resources uncovered during the works.

12. Infrastructure Provision

- Detail the existing infrastructure on site and identify possible impacts on any such infrastructure from the proposal, including the RailCorp 33Kv underground cable located in Hickson Road.
- Detail measures to mitigate the impacts of the proposal on any infrastructure items, including proposed relocation.

13. Ecologically Sustainable Development (ESD)

- Identify how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.
- Address water quality management for the site including an "Integrated Water Management Plan" to demonstrate water sensitive urban design and any water conservation measures.
- Operational waste management and reduction measures.

14. Remediation and Contamination

• The Environmental Assessment must include a Remedial Action Plan (RAP). The RAP must be prepared in accordance with the contaminated land planning guidelines under section 145C of the

Environmental Planning and Assessment Act 1979 and relevant guidelines produced or approved under section 105 of the Contaminated Land Management Act 1997.

Note: The current guidelines under section 145C of the *Environmental Planning and Assessment Act* 1979 are the guidelines "Managing Land Contamination, Planning Guidelines, SEPP 55 – Remediation of Land" 1998.

15. Waste

- Provide details of the quantity and type of liquid and non-liquid waste generated, handled, processed or disposed of on-site. Waste must be classified according to the Office of Environment and Heritage's Waste Classification Guidelines 2008.
- Provide details of the quantity, type and specifications for all output products proposed to be produced. The description should include the physical, chemical and biological characteristics (including contaminant concentrations) of those output products as well as relevant accredited standards against which the products would comply.
- Provide details of intended (or potential) end uses for output products and the relevant product standards used against which those products would be assessed.
- Provide details of the layout, the treatment process and the environmental controls of the proposal.
- Provide details of liquid waste and non-liquid waste management, including:
 - o the transportation, assessment and handling of waste arriving at or generated at the site;
 - any stockpiling of wastes or recovered materials at the site;
 - o any waste processing related to the proposal, including reuse, recycling, reprocessing or treatment both on- and off-site;
 - o the method for disposing of all wastes or recovered materials;
 - o the emissions arising from the handling, storage, processing and reprocessing of waste; and
 - o the proposed controls for managing the environmental impacts of these activities.
- Provide details of spoil disposal (if applicable) with particular attention to:
 - o the quantity of spoil material likely to be generated;
 - o proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil;
 - o the need to maximise reuse of spoil material in the construction industry;
 - o identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material; and
 - designation of transportation routes for transport of spoil.
- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of, in addition to the requirements for liquid and non-liquid wastes.
- Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.
- In documenting or describing the composition of output products and/or wastes generated, reference should be made to the Office of Environment and Heritage's Waste Classification Guidelines 2008.

16. Planning Agreements / Developer Contributions

• Scope and justification for any planning agreement / developer contributions proposed.

17. Environmental, Construction and Site Management Plan

The EA shall provide an Environmental and Construction Management Plan for the proposed works, and is to include:

- Community consultation, notification and complaints handling;
- Impacts of construction on adjoining development and proposed measures to mitigate construction impacts;
- Noise and vibration impacts on and off site;

Deemed	 Air quality impacts on the neighbourhood; Odour impacts; Water quality management for the site; and Waste and chemical management. 18. Staging Details regarding the staging of the proposed development. 19. Consultation Undertake an appropriate and justified level of consultation in accordance with the Department's Major Project Community Consultation Guidelines October 2007. Undertake an appropriate level of consultation with council and state government agencies regarding recommendations of the Barangaroo Review. Undertake and document an integrated design process with Transport NSW, RTA and Sydney Port Corporation to ensure that the proposal is integrated with approved and planned transport project and that adequate clearance heights are provided to ensure emergency requirements are not impeded.
refusal period	60 days

Plans and Documents to accompany the Application

General

The Environmental Assessment (EA) must include:

- 1. An executive summary;
- 2. A thorough site analysis including site plans, areal photographs and a description of the existing and surrounding environment;
- 3. A thorough description of the proposed development:
- 4. An assessment of the key issues specified above and a table outlining how these key issues have been addressed:
- 5. An assessment of the potential impacts of the project and a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the project;
- 6. The plans and documents outlined below;
- 7. A signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading;
- 8. A Quantity Surveyor's Certificate of Cost to verify the capital investment value of the project (in accordance with the definition contained in the Major Projects SEPP; and
- 9. 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.

Plans and Documents

The following plans, architectural drawings, diagrams and relevant documentation shall be submitted (where relevant):

- An existing site survey plan drawn at an appropriate scale illustrating;
 - the location of the land, boundary measurements, area (sq.m) 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.
 - All levels to be to Australian Height Datum.
- 2. A **Site Analysis Plan** must be provided which identifies existing natural elements of the site (including all hazards and constraints), existing vegetation, footpath crossing levels and alignments, existing pedestrian and vehicular access points and other facilities, slope and topography, utility services, boundaries, orientation, view corridors and all structures on neighbouring properties where relevant to the application (including windows, driveways, private open space etc).
- A locality/context plan drawn at an appropriate scale should be submitted indicating:
 - significant local features such as parks, community facilities and open space and heritage items:
 - the location and uses of existing buildings, shopping and employment areas:
 - traffic and road patterns, pedestrian routes and public transport nodes.
- 4. **Architectural drawings** at an appropriate scale illustrating:
 - the location of any existing building envelopes or structures on the land in relation to the boundaries of the land and any development on adjoining land;
 - detailed plans, sections and elevations of the proposed pedestrian bridge;
 - elevation plans providing details of external building materials and colours proposed;
 - accessibility requirements of the Building Code of Australia and the Disability Discrimination Act:
 - the height (AHD) of the proposed development in relation to the land;
 - the level of the proposed pedestrian bridge, the level of any unbuilt area and adjacent public domain and the level of the ground; and

any changes that will be made to the level of the land by excavation, filling or otherwise. 5. Other plans (where relevant): Erosion and Sediment Control Plan - plan or drawing that shows the nature and location of all erosion and sedimentation control measures to be utilised on the site; Geotechnical Report – prepared by a recognised professional which assesses the risk of Geotechnical failure on the site and identifies design solutions and works to be carried out to ensure the stability of the land and structures and safety of persons; Landscape/Public Domain Works plan - illustrating treatment of open space areas and public domain on the site, screen planting and tree protection measures both on and off the site. Shadow diagrams showing 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. 1 copy of the EA, plans and documentation for the Test of Adequacy; **Documents** 12 hard copies of the EA (once the EA has been determined adequate); to be 12 sets of architectural and landscape plans to scale, including one (1) set at A3 size (to scale); submitted 1 copy of the Environmental Assessment and plans on CD-ROM (PDF format), not exceeding 5Mb in size.