



Planning

Contact: Pilar Aberasturi
Phone: 02 9228 6430
Fax: 02 9228 6488
Email: pilar.aberasturi@planning.nsw.gov.au

Ms Kim Bauer
JBA Urban Planning Consultants Pty Ltd
Level 7, 77 Berry Street,
North Sydney NSW 2060

Our ref: MP 09_0167
File: S09/01869-1

Dear Ms Bauer,

**Director-General's Requirements for the Project Application for a mixed use development,
45-47 Macquarie Street and 134 – 140 Marsden Street, Parramatta (MP 09_0167)**

Thank you for your recent request for Director-General's Environmental Assessment Requirements (DGRs) for the above project. The DGRs attached, have been prepared from the information provided within your application and in consultation with relevant Government agencies.

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.

Prior to exhibiting the Environmental Assessment, the Department will review the document to determine if it adequately addresses the DGRs. If the Director-General considers that the Environmental Assessment does not adequately address the DGRs, 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. Please contact the Department at least two weeks before you propose to submit the Environmental Assessment to determine the fees applicable to the application.

Please also find attached copies of submissions received from agencies addressing their key issues received so far. If any other agency submissions are received for the proposal, they will be forwarded to you separately. Any agency responses provided to you will be for information only and will not form part of the DGRs for the Environmental Assessment.

If you have any enquiries about these requirements, please contact Ms Pilar Aberasturi on 02 9228 6430 or via e-mail at pilar.aberasturi@planning.nsw.gov.au.

Yours sincerely

26.10.09

Chris Wilson
Executive Director
Major Projects Assessment
(as delegate for the Director-General)

Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Application number	MP 09_0167
Project	Project Application for a mixed use development and associated car parking.
Location	45 – 47 Macquarie Street and 134 – 140 Marsden Street, Parramatta
Proponent	Crown International Holdings (Crown)
Date issued	
Expiry date	If the environmental assessment is not exhibited within 2 years after this date, the applicant must consult further with the Director-General in relation to the preparation of the environmental assessment.
Key issues (Core)	The Environmental Assessment (EA) must address the following key issues: 1. Relevant EPI's policies and Guidelines to be Addressed Planning provisions applying to the site, including permissibility and the provisions of all plans and policies including: • SEPP (Building Sustainability Index: BASIX) 2004; • SEPP 65 – Design Quality of Residential Flat Development; • Residential Flat Design Code (Planning NSW, 2002); • SEPP (Infrastructure) 2007; • Draft West Central Sub-regional Strategy; and • Nature and extent of any non-compliance with Parramatta City Council's environmental planning instruments (including Parramatta City Centre LEP 2007 and Parramatta City Centre DCP 2007). 2. Built Form The EA shall address the height, bulk and scale of the proposed development within the context of the locality and existing planning controls. The EA shall also provide the following: • Comparable height study to demonstrate how the proposed height relates to the height of the existing/approved developments surrounding the subject site and Council controls for the site (Council height limits are to be indicated by a broken line on all elevations and sections); • A thorough and detailed justification of any height and FSR non compliance; and • Advice / recommendations from the design review panel. 3. Urban Design The EA shall address the design quality with specific consideration of the façade, massing, setbacks, building articulation, use of appropriate colours, materials/finishes, landscaping, safety by design and public domain. The EA shall also address street activation. All car park/ loading dock areas shall be minimised to ensure priority is given to an active street frontage at ground floor level. 4. Heritage <u>European Heritage:</u> The EA shall provide a Heritage Impact Statement prepared by a qualified Heritage Consultant in accordance with relevant guidelines listed below. The assessment is to provide the following in relation to the heritage and archaeological impacts and/or benefits associated with the project and should provide specific detail regarding: a) Intended opportunities for the display, preservation and interpretation of the relics. b) An assessment of the physical and materials conservation requirements for the extant structural remains and archaeological fabric of the site, including recommended actions to mitigate impacts. The report should also provide an indicative schedule of materials conservation needs of the archaeological remains.

- c) Construction management and services reticulation (including waste and stormwater disposal) strategies to minimise impact on the site's archaeological remains.

Aboriginal Heritage – The EA shall provide an archaeological and an Aboriginal cultural heritage assessment are required which should be conducted in line with the Aboriginal Cultural Heritage Impact Assessment and Community Consultation Guidelines.

5. Environmental and Residential Amenity

The EA must address solar access, acoustic privacy, visual privacy, view loss and wind impacts and achieve a high level of environmental and residential amenity (including high level of environmental amenity for private and communal open space on the site).

6. Car parking

The EA must demonstrate the provision of sufficient on-site car parking for the proposal having regard to local planning controls and RTA guidelines (**Note: The Department supports reduced car parking rates in an area well-served by public transport**).

7. Transport and Accessibility (Construction and Operational)

The EA shall provide a Traffic and Accessibility Study prepared in accordance with the RTA's Guide to Traffic Generating Developments, considering traffic generation, any required road / intersection upgrades, access (including service vehicle movements, loading dock(s), car parking, measures to promote public transport usage and pedestrian and bicycle linkages and potential for implementing a location-specific sustainable travel plan (e.g. Travel smart or other travel behaviour change initiative). A traffic management plan for all demolition / construction activities and measures to mitigate potential impacts for pedestrians and cyclists during the construction stage of the project.

8. Ecologically Sustainable Development (ESD)

The EA shall detail how the development will incorporate ESD principles / initiatives in the design, construction and ongoing operation phases of the development. The EA shall also demonstrate that the development is also capable of achieving a high level of energy efficiency.

9. Contributions

The EA shall address Council's Section 94 Contribution Plan and/or details of any Voluntary Planning Agreement.

10. Drainage

The EA shall address drainage/flooding issues associated with the development/site, including: stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures.

11. Utilities

In consultation with relevant agencies, the EA shall address the existing capacity and requirements of the development for the provision of utilities including staging of infrastructure works.

12. Staging

The EA must include details regarding the staging of the proposed development (if proposed).

13. Contamination/Acid Sulphate Soils

The EA is to demonstrate compliance that the site is suitable for the proposed use in accordance with SEPP 55. The EA shall also address acid sulphate soils management.

14. Sydney CBD Metro

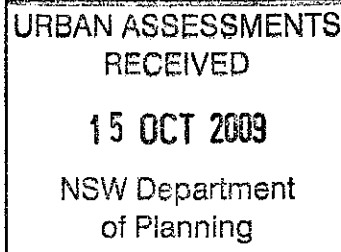
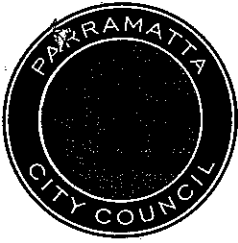
The site falls within the Metro West Tunnel Alignment and Tunnel Protection Zone. Consultation with Sydney Metro is required. The EA is to address any issues associated with the proposed Sydney Metro alignment during the construction and operational phases

	of development. The EA must also give due consideration to ensure that the proposed development will not significantly prevent/affect the future planning of this line. 15 Consultation Undertake an appropriate and justified level of consultation in accordance with the Department's <i>Major Project Community Consultation Guidelines October 2007</i>.
Deemed refusal period	60 days

Plans and Documents to accompany the Application

<u>General</u>	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.
<u>Plans and Documents</u>	The following plans, architectural drawings, diagrams and relevant documentation shall be submitted; 1. 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). 3. 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 floor plans, sections and elevations of the proposed buildings; • elevation plans providing details of external building materials and colours proposed; • fenestrations, balconies and other features; • 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 lowest floor, the level of any unbuilt area and the level of the ground;

	- any changes that will be made to the level of the land by excavation, filling or otherwise; - Natural ground levels / proposed ground levels and Council's height limit is to be superimposed by a broken line on all elevations and sections. 5. Other plans (to be required where relevant): Stormwater Concept Plan - illustrating the concept for stormwater management; 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 recognized 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; View Analysis - Visual aids such as a photomontage must be used to demonstrate visual impacts of the proposed building envelopes in particular having regard to the siting, bulk and scale relationships from key areas; Landscape plan - illustrating treatment of open space areas on the site, screen planting along common boundaries 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.
<u>Documents to be submitted</u>	1 copy of the EA, plans and documentation for the Test of Adequacy; 12 hard copies of the EA (once the EA has been determined adequate); 12 sets of architectural and landscape plans to scale, including one (1) set at A3 size (to scale); and 12 copies of the Environmental Assessment and plans on CD-ROM (PDF format), not exceeding 5Mb in size.



→ AW
15/10

Your Reference: MP 09_0167
Our Reference: DA/1918/2003/A
Contact: Sara Matthews
Telephone: 9806 5595
Fax: 9806 5917

NSW Department of Planning
Development Assessment and Systems
Performance - Urban Assessment
GPO Box 39
Sydney NSW 2001

Attention: Ms Pila Aberasturi

12 October 2009

Dear Ms Aberasturi

**Key Issues and Assessment Requirements - Mixed Use Development
45 Macquarie Street Parramatta**

I refer to your request for key issues and assessment requirements for a part 3A development application at 45 Macquarie Street dated 29 September 2009.

The subject site is known as 45 Macquarie Street, Parramatta (Lot 1 DP 213184).

The subject site falls under the provisions of Parramatta City Centre Local Environmental Plan 2007 and Parramatta City Centre Development Control Plan 2007 and is currently zoned B4 Mixed use and has a permissible height of 54 metres and a maximum floor area of 6:1.

A review of the Key Issues and Assessment Requirements has been undertaken and it is considered the issues to be addressed in any future application are adequately addressed. It should be noted that this advice is provided without a review of any proposed plans.

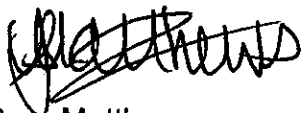
However, it is noted that the subject site is impacted by the proposed Metro West project, as the site falls within the Metro West Tunnel Alignment and Tunnel Protection Zone. Council is in receipt of West Metro Preliminary Environmental Assessment Corridor Alignment proposed to be exhibited in the first quarter of 2010.

State Environmental Planning Policy (Infrastructure) 2007 is proposed to be amended and indicate the alignment. The Infrastructure SEPP will require Councils to refer to Sydney Metro all development applications within the metro corridor that involve excavation to a depth greater than 2 metres, or a capital investment greater than \$200,000 and a height of more than 10 metres. Until the alignment is finalised, all development applications within the metro corridor are required to be referred.

G:\Docs\Matthews\45 macquarie street part 3a DA.doc

Should you require additional information please contact Sara Matthews on 9806 5595.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Sara Matthews', written over a horizontal line.

Sara Matthews

Senior Development Assessment Officer
Development Assessment Services



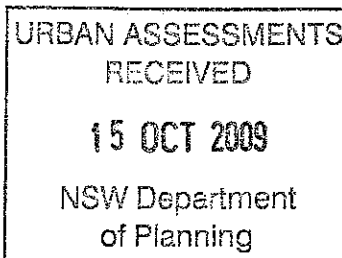
Planning

→ AW
15/10

Contact: Dr Siobhan Lavelle
Phone: 02 9873 8546
Fax: 02 9873 8599
Email: siobhan.lavelle@planning.nsw.gov.au
Our ref: HRL55919
Your ref: N/A
File: H05/00286

Mr Michael Woodland
Director
Urban Assessments
Department of Planning
GPO Box 39
SYDNEY 2001

Attention: Ms Pilar Aberasturi, Senior Planner



Dear Mr Woodland

**MAJOR PROJECT REFERRAL – MIXED USE DEVELOPMENT at 45-47 MACQUARIE STREET,
AND 134-140 MARSDEN STREET, PARRAMATTA, NSW 2150 (PARRAMATTA LGA)
MAJOR PROJECT 09_0167 – REQUEST FOR DIRECTOR-GENERAL'S REQUIREMENTS FOR
ENVIRONMENTAL ASSESSMENT**

Reference is made to an email letter dated 29 September 2009 referring the subject Major Project application to the Heritage Branch under section 75F (4) of the EP&A Act and requesting comment be provided. Reference is also made to telephone discussions between Dr Siobhan Lavelle of the Heritage Branch and Ms Pilar Aberasturi.

The information supplied with your letter has now been reviewed and it would be appreciated if the Urban Assessments Branch would have regard to the following comments in the preparation of its environmental assessment requirements for the proponent. It is noted that the Department has received the abovementioned project application from the Crown International Group pursuant to Part 3A of the *Environmental Planning and Assessment Act, 1979* (as amended).

The proposal affects an archaeological site which documents the earliest phases of the historic settlement of Parramatta from the 1790s. The area was previously subject to both an S24 Interim Heritage Order and a S129 Curtailment Order under the *Heritage Act, 1977*, due to its State heritage significance.

An extensive archaeological 'dig' occurred on the site in accordance with the requirements of the Heritage Act in 2005, and a final report was provided to the Heritage Council of NSW in May 2007. In this respect the historical archaeological potential of the site has been recorded, but a large portion of the site contains remains of early Colonial era structures (a 'convict hut' and a cellar) which have been preserved under temporary protective buildings near the Macquarie Street frontage. There are also requirements in prior Heritage Council consents for artefacts to be stored in perpetuity and for remains to be conserved in-situ within the site.



Working with the community to know, value and care for our heritage

Heritage Branch, 3 Marist Place Parramatta 2150 | Locked Bag 5020 Parramatta NSW 2124 | DX 8225 PARRAMATTA
Phone 61 2 9873 8500 Fax 61 2 9873 8599 Email heritage@planning.nsw.gov.au Website www.heritage.nsw.gov.au

It has been noted by the Heritage Branch that the standard requirements will ensure that the Environmental Assessment will generally include a description of the project and an assessment of the potential impacts in the environmental assessment. The Project Application report indicates that key environmental issues the proponent has identified for the current project include:

Site suitability, Transport and access, Geology and soils, Flood management and water quality management, Cultural heritage and archaeology, Employment generating uses and economic development, Streetscape and public domain, Built form and visual impact, Internal amenity, Environmental sustainability, Metro West line.

The project application also notes for: *Cultural heritage and archaeology*
The in situ preservation of the archaeological heritage items on the site, as well as their integration into the building's design has been an important aspect of the project's design development and will be the subject of continued discussions with the Heritage Branch. A heritage impact assessment will be submitted with the environmental assessment.

For a site of this unique nature, it is anticipated that these key environmental issues are likely to have unique project-specific issues that may require the application of project specific, detailed mitigation measures. In this regard very few further assessments and studies have been identified within the Preliminary Project Application report which would assist the development and implementation of procedures, practices and protocols for identifying and managing the environmental impacts of the Project and the necessary mitigation measures. These procedures, practices and protocols would need to be included in the forthcoming Environmental Assessment and, as part of that process, be incorporated in the Statement of Commitments for the Project.

In particular, the Heritage Branch is concerned that physical conservation issues and requirements and the ongoing future management of the historical archaeological remains kept at the site will require further assessment and documentation to inform the design process for any new development.

It is therefore recommended that the Environmental Assessment should also address the following matters:

Heritage and Archaeological Impacts

The EA shall provide a Heritage Impact Statement prepared by a qualified Heritage Consultant in accordance with relevant guidelines listed below. The assessment is to provide the following in relation to the heritage and archaeological impacts and/or benefits associated with the project and should provide specific detail regarding:

- a) Intended opportunities for the display, preservation and interpretation of the relics.
- b) An assessment of the physical and materials conservation requirements for the extant structural remains and archaeological fabric of the site, including recommended actions to mitigate impacts. The report should also provide an indicative schedule of materials conservation needs for the archaeological remains.
- c) Construction management and services reticulation (including waste and stormwater disposal) strategies to minimise impact on the site's archaeological remains.

Relevant guidelines include:

the NSW Heritage Office/Heritage Council publications:

- *Statements of Heritage Impact'*
- *Interpreting Heritage Places and Items Guidelines*

Item (a) above might be best addressed by completion of an updated Interpretation Plan for the site. Items (b) and (c) might be best addressed by completion of a Protection Plan for the Archaeological Remains and a Schedule of Conservation Works.

Similar documents were submitted as part of the Part 3A (Major Projects) Application to the Director General of the Department of Planning for the Rocks Dig Site YHA project, which also sought to keep State significant archaeology within a new development and to interpret and display it to the public (MP 06_0265).

It is understood that the Department of Environment, Climate Change and Water will be providing separate comment on requirements for Aboriginal archaeology or 'objects'. It is also noted that an extract from the historical archaeological report of May 2007 which described the finding of some Aboriginal 'objects' on the site during the excavations was separately forwarded to the Urban Assessments Branch.

It would be appreciated if a copy of the proponent's environmental assessment is provided to the Heritage Office during the public notification of the project in accordance with section 75H of the EP&A Act. The Heritage Branch of the Department of Planning would be pleased to comment further at that stage.

Because the site has been identified as being of State heritage significance, it is also recommended that the proponents continue to liaise with the Heritage Branch of the Department of Planning and the Heritage Council of NSW.

The Heritage Branch would also be available to attend future planning meetings in relation to this major project if that would be of assistance.

For further contact in relation to this matter please phone Siobhan Lavelle on 9873 8546 or via email: siobhan.lavelle@planning.nsw.gov.au. As you are aware, Dr Lavelle is also the Department's representative on the Design Review Panel for the project.

Thank you for referring this matter to the Heritage Branch for comment.

Yours sincerely



9/10/09

Vincent Sicari
Manager
Conservation Team
Heritage Branch
Department of Planning

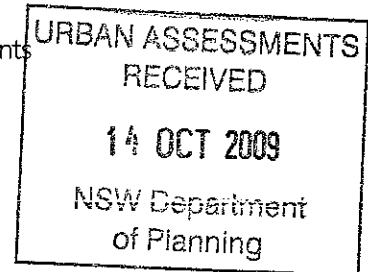
Our Reference:
Your Reference:
Contact:
Telephone:

RDC 09M1486
MP09_0167
Edmond Platon
8849 2906



→ AW
14/10

The Director
Development Assessment and System Performance – Urban Assessments
Department of Planning
GPO Box 39
Sydney NSW 2001



Attention: Pilar Aberasturi

REQUEST FOR PROVISION OF KEY ISSUES AND ASSESSMENT REQUIREMENTS – PROJECT APPLICATION FOR THE CONSTRUCTION OF A MIXED USE DEVELOPMENT, 45-47 MACQUARIE STREET AND 134-140 MARSDEN STREET, PARRAMATTA (MP 09_0167)

Dear Sir / Madam,

I refer to your letter of 29 September 2009 (Ref: MP09_0167) requesting the Roads and Traffic Authority (RTA) to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Director General's Environmental Assessment (EA) requirements.

The RTA would like the following issues to be included in the transport and traffic impact assessment of the proposed development:

1. It is noted that the Metropolitan Strategy has designated Parramatta as a Regional City and a major focal point for regional transport connections and jobs growth. It is important that the development of the proposed mixed-use commercial and residential development takes into consideration, and contributes to the achievement of, transport objectives contained in this and other high-level NSW Government strategies.

These strategies include the NSW State Plan and draft West Central Subregional Strategy. These policies share the aims of increasing the use of walking, cycling and public transport; appropriately co-locating new urban development with existing and improved transport services; and improving the efficiency of the road network.

By addressing both the supply of transport services and measures to manage demand for car use, the EA report should demonstrate how users of the mixed use development, will be able to make travel choices that support the achievement of relevant State Plan targets.

2. Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections and the need / associated funding for upgrading or road improvement works (if required).

Roads and Traffic Authority

The key intersections to be examined / modelled include:

- Argyle Street/Pitt Street
 - Argyle Street/O'Connell Street
 - Argyle Street/Marsden Street
 - Hunter Street/O'Connell Street
 - Hunter Street/Marsden Street
 - Macquarie Street/O'Connell Street
 - Macquarie Street/Marsden Street
 - George Street/O'Connell Street
 - George Street/Marsden Street
 - Any other signalised intersection affected by the proposed development
3. Details of the proposed accesses and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc).
 4. The proposed number of car parking spaces is to comply with the appropriate parking codes. As this area is serviced well by public transport, it should be ensured the parking provision is kept to the minimum.
 5. Details of service vehicle movements (including vehicle type and likely arrival and departure times).
 6. The RTA requires the EA report to assess the implications of the proposed development for non-car travel modes (including public transport use, walking and cycling); the potential for implementing a location-specific sustainable travel plan (e.g. 'Travelsmart' or other travel behaviour change initiative); and the provision of facilities to increase the non-car mode share for travel to and from the site. This will entail an assessment of the accessibility of the development site by public transport. However, an assessment of the impact of increase patronage demand on the existing public transport system as a result of the proposed development and above initiatives would also be required.
 7. It is understood that the concept plan for the proposed West Metro line may travel under the site. The EA report must give due consideration to ensure that the proposed development will not significantly prevent/affect the future planning of this line.
 8. The RTA will require in due course the provision of a traffic management plan for all demolition/construction activities, detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures.

Further enquiries on this matter can be directed to the nominated Assistant Planner, Edmond Platon on phone 8849 2906 or facsimile (02) 8849 2918.

Yours faithfully,



Andrew Popoff
A / Senior Land Use Planner
Transport Planning, Sydney Region

9 October 2009

Your reference : MP09_0167
Our reference: : DOC09/47842
Our Contact : Fran Kelly

URBAN ASSESSMENTS
RECEIVED

12 OCT 2009

NSW Department
of Planning

Michael Woodland
Director, Urban Assessments
Department of Planning
GPO Box 39
Sydney NSW 2001

Attn: Pilar Aberasturi

Dear Mr Woodland

Re: Key Issues and Assessment Requirements – Project Application for the Construction of a Mixed Use Development, 45-47 Macquarie St and 134-140 Marsden St, Parramatta (MP09_0167)

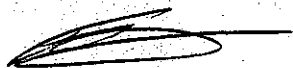
I refer to your letter dated 29 September 2009, in which you request key issues and assessment requirements which may be included in the Director-General's Environmental Assessment Requirements (DGRs).

The key information requirements for the project are summarised below:

1. Aboriginal Heritage
2. Noise and vibration impacts on and off site;
3. Air quality impacts on the neighbourhood;
4. Water quality management for the site;
5. Waste and chemical management.

Please note that all future Part 3A referrals should be to Ms Lou Ewins, Manager, Planning and Aboriginal Heritage Section, Metropolitan Branch. Should you have any queries regarding this matter please contact me on (02) 9995 6805.

Yours sincerely



9/10/09

Fran Kelly
A/Manager, Planning and Aboriginal Heritage Section
Metropolitan Branch
Environment Protection Regulation Group

Attachment 1 – DECCW's Recommended Environmental Assessment (EA) requirements for Frasers Broadway

Aboriginal Heritage

During the historical archaeological investigations conducted by Edward Higginbotham, it was established that *in situ* Aboriginal archaeological deposits survive at this site. Consequently, site #45-5-3186 was entered into the Aboriginal Heritage Information Management System in 2005. The Department of Environment, Climate Change and Water holds little or no information regarding this site. Both an archaeological and an Aboriginal cultural heritage assessment are required which should be conducted in line with the *Aboriginal Cultural Heritage Impact Assessment and Community Consultation Guidelines*.

Environmental Management:

Noise and Vibration

- The EA is to identify all noise and vibration sources from the development including both the construction and operation phases. It is to determine the most appropriate noise and vibration mitigation measures and expected noise and vibration reduction including both controls and management of impacts for construction and operation.
- The Acoustics Impact Statement should provide details of existing ambient noise levels; determine expected noise level and noise character (e.g. tonality, impulsiveness, vibration, etc) likely to be generated from noise sources during site establishment, construction, operation, transport and other services (including existing and future traffic noise); and determine the noise levels likely to be received at the most sensitive locations.
- The *NSW Industrial Noise Policy* (EPA, 2000) and *NSW Environmental Criteria for Road Traffic Noise* (EPA, 1999) provide guidance on noise assessment and *Assessing vibration: a technical guideline* provides guidance on vibration assessment (DEC, 2006).

Air Quality

- The EA is to identify all sources of point and fugitive air emissions, in particular dust, generated from the development.
- The Environmental and Construction Management Plan and associated Dust, Odour and Air Quality Management Plan are to outline pollution control equipment and management protocols for both point and fugitive emissions.

Water Quality

- The EA is to provide details of the project that are essential for assessing impacts to water quality. This is to include water requirements, site drainage details and surface runoff yield, and proposed storm and wastewater management methods.
- The Environmental and Construction Management Plan and associated Erosion and Sediment Control Plans should provide details of stormwater management to control pollutants at the source and contain pollutants within the site; erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment; waste water treatment measures; pollution control measures relating to storage of materials, accidental spills, appropriate disposal methods, and generation of leachate; and describe hydrological, groundwater and geomorphological impact mitigation measures.
- The *Storing and Handling Liquids: Environmental Protection - Participants Manual* (DECC, 2007) and *Environmental Compliance Report: Liquid Chemical Storage, Handling and Spill Management - Part B Review of Best Practice and Regulation* (DEC, 2005) and the Australian Standards provide guidance on the containment of spills and leaks.

Waste and Chemicals

- The EA is to provide details of the quantity and type of waste generated, handled or disposed of at the site. It is to provide details of waste management and spoil disposal at the site, including the transportation, assessment and handling of waste arriving at or generated at the site; any stockpiling of wastes or recovered materials; any waste processing related to the site; the method for disposing of all wastes or recovered materials; the emissions arising from the handling, storage, processing and reprocessing of waste; and the proposed controls for managing the environmental impacts of these activities.

- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for wastes.
- Outline measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.
- The *Waste Classification Guidelines Part 1: Classifying Waste* (DECC, 2008) provide guidance on waste classification.