

**LEND LEASE RECYCLED WATER (BARANGAROO SOUTH) PTY LTD**

**Network Operator and Retail Supplier  
Licence Application**

**November 2013**

**TABLE OF CONTENTS**

SECTION	DESCRIPTION
A	Cover letter
B	Application form
C	Attachments

## **SECTION A – COVER LETTER**



1 November 2013

Gary Drysdale, Program Manager Compliance  
IPART Independent Pricing and Regulatory Tribunal  
Level 8, 1 Market Street  
Sydney NSW 2000

Dear Gary

**Barangaroo South Development  
Network Operator and Retail Supplier License Application**

Lend Lease Recycled Water (Barangaroo South) Pty Limited are pleased to submit this WICA License Application for the Barangaroo South development for IPART's assessment/review and approval.

This follows IPART's preliminary feedback and comments on the draft Application in the form of a high level assessment of the documentation.

In addition, please find hereunder relevant information for Barangaroo South Development and related information regarding the proposed water and wastewater infrastructure.

**Sustainability and Water Infrastructure**

As previously described Barangaroo is a uniquely scaled opportunity to showcase Sydney as a world leader in sustainability. Sustainable designs and initiatives are being created throughout the delivery of the program - environmentally, socially and economically. Barangaroo's goal is to be the first precinct of its size in the world and certainly the first CBD precinct in Australia, to be climate positive.

As a key feature of our sustainability approach it is planned to generate recycled water (for both on-site and export use) to match or exceed the precincts potable water consumption – a water positive outcome.

The water strategy involves the following key steps:

- Demand reduction devices
- Removal of cooling tower demand and adoption of a Harbour Heat Rejection system
- Replacement of potable water with recycled water for the majority of non-potable end uses
- Export of recycled water.

It is proposed that the Recycled Water Scheme will be owned and operated by Lend Lease Recycled Water (Barangaroo South) Pty Ltd (LLRWBS) which will collect wastewater, treat wastewater and provide recycled water to Barangaroo South and Barangaroo Central customers. LLRWBS will also act as the retail provider for potable water for the residential developments at Barangaroo.

Lend Lease Recycled Water (Barangaroo South) Pty Limited

ABN 30 158 168 686  
Level 4, 30 The Bond  
30 Hickson Road  
Millers Point NSW 2000  
Australia

Postal Address  
Locked Bag 1  
Millers Point NSW 2000

Telephone +61 2 9236 6111  
Facsimile +61 2 9383 8259  
[www.lendlease.com](http://www.lendlease.com)

The following steps have been undertaken in respect to the design and delivery of the proposed water and wastewater infrastructure:

- Lend Lease Recycled Water (Barangaroo South) Pty Ltd will engage Lend Lease (Millers Point), the Developer, for the delivery of the plant with Lend Lease Project Management & Construction (Australia) engaged as Principal Contractor for the design and construction of the proposed water and wastewater infrastructure.
- Lend Lease Project Management & Construction (Australia) has engaged consultants to design the proposed water and wastewater infrastructure and prepare relevant documentation for authority approvals. It is expected that a Design and Construction Sub-contractor for key components (i.e. recycled water plant) of the proposed water and wastewater infrastructure will be contracted in mid 2013 with construction commencement scheduled for early 2014.

#### **WICA License Application**

The Applicant is Lend Lease Recycled Water (Barangaroo South) Pty Limited, a Lend Lease Corporation subsidiary company, owner of the proposed water and wastewater infrastructure and also responsible for the operations, productivity and maintenance of the scheme.

It is proposed that WJP Solutions, a company partially owned by Lend Lease Corporation, be employed to design and construct the Recycled Water Plant as a sub-contractor to Lend Lease Project Management & Construction (Australia). The recycled water reticulation network, sewer collection network and potable water metering will be designed by Lend Lease Design Group and constructed by approved trade sub-contractors.

WJP Solutions are proposed to operate and maintain the proposed water and wastewater infrastructure. .

Lend Lease Recycled Water (Barangaroo South) Pty Limited will undertake all retail activities using a combination of internal (ie Lend Lease) and external resources.

Yours Sincerely



David Radford  
Director  
Lend Lease Recycled Water (Barangaroo South)

CC: Laze Kelepurovski, Nick Fisher, Andrew Boutchard

## **SECTION B – APPLICATION FORM**

# **Network Operator and Retail Supplier Licence Application Form**

*Water Industry Competition Act 2006*

**Water — Application form**  
July 2011

Inquiries regarding this document should be directed to a staff member:

Gary Drysdale	(02) 9290 8477
Narelle Berry	(02) 9113 7722
Carly Price	(02) 9113 7732
Kaye Power	(02) 9113 7753

Independent Pricing and Regulatory Tribunal of New South Wales  
PO Box Q290, QVB Post Office NSW 1230  
Level 8, 1 Market Street, Sydney NSW 2000  
T (02) 9290 8400 F (02) 9290 2061  
[www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)



## Contents

<b>1</b>	<b>Instructions</b>	<b>2</b>
1.1	Who should complete this form?	2
1.2	Information on filling out and submitting this form	2
1.3	If you require further information	5
1.4	Where to from here?	6
<b>2</b>	<b>Contact Information</b>	<b>8</b>
2.1	Contact Details	8
<b>3</b>	<b>General Information</b>	<b>9</b>
3.1	Applicant Details	9
3.2	Activities for which a licence is sought	10
3.3	Insurance Details	11
3.4	Third parties undertaking activities	12
3.5	Other regulatory approvals	14
3.6	Monopoly supply	15
3.7	Licensing principles	15
<b>4</b>	<b>Network Operator</b>	<b>18</b>
4.1	Water infrastructure – drinking water	19
4.2	Water infrastructure – non-potable water	23
4.3	Sewerage infrastructure	37
<b>5</b>	<b>Retail Supplier</b>	<b>42</b>
5.1	Supply of water	42
5.2	Provision of sewerage services	45
<b>6</b>	<b>Applicant experience and systems</b>	<b>48</b>
6.1	Network operator	48
6.2	Retail supplier	53
<b>7</b>	<b>Financial capacity</b>	<b>55</b>
7.1	How will the applicant corporation finance the proposed activity?	55
7.2	Are there any events that could affect the applicant corporation's future financial capacity?	56
7.3	What is the projected financial performance of the proposed activities?	56
7.4	What is the applicant corporation's financial history?	56
7.5	Contacts	57
7.6	Internal accounting records	58
<b>8</b>	<b>Statutory declaration and acknowledgement</b>	<b>59</b>
8.1	Statutory declaration	59
8.2	Acknowledgement	61

## 1 Instructions

The *Water Industry Competition Act 2006* (the WIC Act or Act) came into operation on 8 August 2008 and, among other things, provides for the licensing of private sector water utilities.

Under the WIC Act, the Minister for Finance and Services (the Minister) is responsible for granting the following licences:

- ▼ **Network Operator's Licence** for constructing, maintaining and operating water industry infrastructure.
- ▼ **Retail Supplier's Licence** to supply water or provide sewerage services, by means of water industry infrastructure.

The Independent Pricing and Regulatory Tribunal of NSW (IPART) is responsible for receiving and assessing licence applications and for the ongoing administration and enforcement of licences.

### 1.1 Who should complete this form?

This form is for corporations that wish to become licensees under the WIC Act. Under section 8(1) of the WIC Act, an application for a licence can only be made by or on behalf of a corporation.

A copy of the WIC Act is available on the NSW Government's legislation website at [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au).

### 1.2 Information on filling out and submitting this form

#### 1.2.1 General instructions to applicants

The questions asked in the application form are designed to allow you to establish your capacity and expertise to carry out the proposed activities in compliance with your licence (if granted), the WIC Act and the Water Industry Competition (General) Regulation 2008 (the General Regulation).

Your response should include sufficient information to demonstrate an extensive understanding of the activities you are proposing to undertake, the issues or impacts associated with these activities, and the processes required to address or manage these issues or impacts. The information provided in your application should reflect

the type, size, complexity and level of risk associated with the activities to be licensed.<sup>1</sup>

Following each question in the application form is an explanation (in italics) as to why we have requested the information and how it will be assessed in relation to the requirements of the WIC Act and the General Regulation. These explanations are provided as a general guide to help applicants understand the main ways in which the information sought is likely to be relevant for the assessment of their application. However, we may use the information provided for any other relevant purpose when we assess your application.

We will also have regard to the following licensing principles, in accordance with section 7 of the WIC Act:

- ▼ the protection of public health, the environment, public safety and consumers
- ▼ the encouragement of competition in the supply of water and the provision of sewerage services
- ▼ the ensuring of sustainability of water resources, and
- ▼ the promotion of production and use of recycled water.

Where more extensive information is required in response to a question (ie, example plans), the information is requested to be included as an appendix to the question. Unless indicated otherwise the appendices must be attached to the application to ensure there is sufficient information for IPART to make an assessment in accordance with the relevant legislation. An application that does not attach the necessary appendices may be considered to be an incomplete application resulting in a delay in processing. All appendices should be labelled as per the instructions.

### 1.2.2 Confidential information

IPART uses open public processes to consider applications and must invite submissions on applications from the public. Unless they are confidential, we treat your applications and appendices as public documents. We publish these documents on our website and distribute them to interested parties as appropriate.

Subject to our disclosure obligations (referred to below), we will treat as confidential the financial information that we request for the purposes of your application. We may share that information with our consultants, but will do so on a confidential basis.

You should let us know if you consider other aspects of your application to be confidential so that we can discuss your confidentiality concerns with you.

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<sup>1</sup> For example, a recycled water scheme involving a single source, basic treatment, and single pipeline to one commercial customer will be less complex and therefore require less supporting information than a multi-source scheme, with complex treatment and a pipe network ultimately supplying a mix of commercial and residential customers.

You should provide separate confidential and public copies of your application. In particular, you should provide:

- ▼ **a confidential application**, which is clearly marked “confidential” and clearly identifies the confidential information that should not be publicly released, and
- ▼ **a public application**, which does not contain the confidential information, for publication and distribution by IPART.

If we agree with all your confidentiality concerns, we will only publish the public application on our website. However we will furnish a copy of the confidential application to the Ministers specified by the WIC Act and regulations, as we are required to do under section 9(1)(b) of the WIC Act.

Please note that third parties may apply under the *Government Information (Public Access) Act 2009* for access to applications, including applications that contain confidential information. If we receive such an application, we will determine disclosure in accordance with that Act.

Where an application includes personal information, IPART will deal with that information in accordance with the information protection principles set out in the *Privacy and Personal Information Protection Act 1998*.

### 1.2.3 Is there an application fee?

The application fee for a network operator’s licence is \$2,500. The application fee for a retail supplier’s licence is \$2,500. If you are applying for both a network operator’s licence and retail supplier’s licence, the fee is \$5,000.

The appropriate licence application fee should be paid either by cheque made payable to the Independent Pricing and Regulatory Tribunal of NSW or by electronic transfer to:

Westpac Banking Corporation  
BSB: 032-001  
Account No: 205717  
Reference: WICA app

If payment is made electronically, please provide a copy of the electronic transfer receipt with your licence application.

Please note that once an application has been submitted, the application fee(s) will not be refunded if the application is rejected or withdrawn.

#### 1.2.4 How do you submit the application?

You must submit one hard copy and one electronic copy of each of the versions (public and confidential) of the completed application form and appendices. You may wish to password protect your electronic confidential version. If so, we will contact you to request the password following submission of your application.

The electronic copy should consist of separate files for the application and the appendices for each of the sections. Where there is more than one appendix in a section, they should be combined into a single electronic file. For example, section 3 will have appendices 3.2.1 and 3.6.1 – these appendices should be combined into one electronic file. A summary of the appendices is included in attachment A to this form.

When you have completed your application, you should mark it to the attention of the Water Licensing team, and submit it to IPART in person, via email or via post:

In person	Via email	Via post
Attention: Water Licensing Independent Pricing and Regulatory Tribunal Level 8 1 Market Street Sydney NSW 2000	Attention: Water Licensing Independent Pricing and Regulatory Tribunal  <a href="mailto:compliance@ipart.nsw.gov.au">compliance@ipart.nsw.gov.au</a>	Attention: Water Licensing Independent Pricing and Regulatory Tribunal PO Box Q290 QVB Post Office Sydney NSW 1230

### 1.3 If you require further information

If you have further questions about your application, you can contact the Water Licensing team in IPART by:

- ▼ emailing: [compliance@ipart.nsw.gov.au](mailto:compliance@ipart.nsw.gov.au), or
- ▼ telephoning: (02) 9290-8400 (general number).

We encourage you to discuss your licence application form and obtain assistance from the Water Licensing team *prior* to formally submitting your application. Once we receive your application, we will assign you a contact officer, who will manage your application and remain in contact with you throughout the process.

## 1.4 Where to from here?

### 1.4.1 What will happen next?

IPART will check that your application form is complete and that you have supplied all the necessary information and supporting documentation.

If your application is complete, we will undertake consultation and a detailed assessment before preparing a recommendation to the Minister to either grant or refuse the licence(s).

If the application is incomplete, it will not be processed and you will be asked in writing to supply the outstanding information. This is likely to delay the detailed assessment of your application. We may also request additional information in response to submission or our detailed assessment of your application.

If you wish you can withdraw your application at any stage during the process.

IPART uses our best endeavors to process applications quickly. Complete applications are generally processed between 6 to 8 months depending on the complexity of the project.

### 1.4.2 Audits and ongoing compliance obligations

Licensing obligations are set out in the *Water Industry Competition Act 2006* and *Water Industry Competition (General) Regulation 2008*, which also sets out standard licence conditions.

IPART has also prepared a series of fact sheets explaining the audit and compliance obligations following the grant of a WIC Act licence.

It is particularly important to note that the granting of a network licence does not allow the licensee to bring any *new* water or sewerage infrastructure into immediate commercial operation. **A licensee must also obtain approval from the Minister before commencing commercial operation of new water or sewerage infrastructure.**

For further information, please refer to the following fact sheets or contact the Water Licensing team at IPART on the details provided above.

Fact sheets:

- ▼ *Summary of Audit Framework*
- ▼ *Commercial operation of new infrastructure*
- ▼ *Register of licences and other publicly available information*
- ▼ *Potable water services - public health requirements*
- ▼ *Water recycling - public health requirement.*

These documents can be downloaded from the IPART website, at <http://www.ipart.nsw.gov.au/water/private-sector-licensing/private-sector-licensing.asp>.

## 2 Contact Information

To be completed by all applicants

### 2.1 Contact Details

You need to nominate a primary contact person for all communication and correspondence between the corporation applying for a licence and IPART. This person must be a senior officer of the applicant corporation and not an external consultant. Ideally, this person's role within the corporation will be related to the project/activity to be licensed, and they must have the authority to speak on behalf of the applicant.

#### PRIMARY CONTACT

Full name

David Radford

Position title

Director

Email address

CONFIDENTIAL

Business telephone number

CONFIDENTIAL

Mobile telephone number

CONFIDENTIAL

Postal address for correspondence

ADDRESS

30 The Bond, 30 Hickson Rd

Millers Point

STATE

NSW

POST CODE

2000

#### SECONDARY CONTACT

☒ Please check if the secondary contact should be copied into all correspondence.

Full name

Laze Kelepurovski

Position title

Infrastructure Manager – Barangaroo South

Email address

CONFIDENTIAL

Business telephone number

CONFIDENTIAL

Mobile telephone number

CONFIDENTIAL

Postal address for correspondence

ADDRESS

30 The Bond, 30 Hickson Rd

Millers Point

STATE

NSW

POST CODE

2000



### 3 General Information

To be completed by all applicants

3.1 Applicant Details	
3.1.1	Please provide the following information for the corporation applying for the licence. Please note an application may only be made by or on behalf of a corporation (s8(1)).
<p><i>Your response to this question is used in ASIC, ITSA and CATSI searches* conducted as part of our assessment of your application. The information will also be used to specify the corporation that holds the licence (Act s.6(1)(a)), if a licence is granted.</i></p> <p><i>* These are searches of databases kept by the Australian Securities and Investments Commission (ASIC), Insolvency and Trustee Service Australia (ITSA), and Office of the Registrar of Indigenous Corporations (for corporations registered under the Corporations (Aboriginal and Torres Strait Islander) Act 2006 (CATSI))</i></p>	
Corporation name	
Lend Lease Recycled Water (Barangaroo South) Pty Ltd herein referred to as LLRWBS	
ABN/ARBN	ACN
30 158 168 686	158 168 686
Corporation's registered office	
ADDRESS	
30 The Bond, 30 Hickson Rd	
Millers Point	
STATE	POST CODE
NSW	2000
Corporation's principal place of business	
ADDRESS	
30 The Bond, 30 Hickson Rd	
Millers Point	
STATE	POST CODE
NSW	2000
3.1.2	
Please provide the following information for the Chief Executive Officer and ALL Directors of the applicant corporation	
<p><i>Your response to this question is used in ASIC, ITSA and CATSI searches to determine that the named individual(s) are not disqualified individual(s) and that the applicant corporation is not a disqualified corporation (Act, s10(3)). The information will also be used to assess, among other things, the applicant corporation's organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
A short version of the Director CVs has been provided in <a href="#">Attachment #1</a> .	
PERSON ONE	
Full name	Radford, David Alexander
Position title	Director
Date of birth	CONFIDENTIAL
Residential address	
ADDRESS	

**PUBLIC VERSION**

CONFIDENTIAL	
STATE	POST CODE
CONFIDENTIAL	CONFIDENTIAL
PERSON TWO	
Full name	Edwards, David Llewellyn
Position title	Director
Date of birth	CONFIDENTIAL
Residential address	
ADDRESS	
CONFIDENTIAL	
STATE	POST CODE
CONFIDENTIAL	CONFIDENTIAL
PERSON THREE	
Full name	Ford, Anthony Keith
Position title	Director
Date of birth	CONFIDENTIAL
Residential address	
ADDRESS	
CONFIDENTIAL	
STATE	POST CODE
CONFIDENTIAL	CONFIDENTIAL
PERSON FOUR	
Full name	Spiropoulos, George
Position title	Director
Date of birth	CONFIDENTIAL
Residential address	
ADDRESS	
CONFIDENTIAL	
STATE	POST CODE
CONFIDENTIAL	CONFIDENTIAL
3.2 Activities for which a licence is sought	
Please check ALL the applicable boxes for which you are seeking a licence	
Your response to this question will be used to specify the activities that the applicant corporation will be authorised to undertake (Act s.6(1) and s.11(1)), if a licence is granted. The response to this question is a requirement for any network operator's licence application (Reg cl.6(1)(a) and 6(2)(a)).	

3.2.1	<b>NETWORK OPERATOR</b> (to construct, maintain and operate water industry infrastructure)	
	<input type="checkbox"/> Water infrastructure - drinking water	
	<input checked="" type="checkbox"/> Water infrastructure – non potable water (including recycled water)	
	<input checked="" type="checkbox"/> Sewerage infrastructure	
3.2.2	<b>RETAIL SUPPLIERS</b> (to supply water or provide sewerage services)	
	<input checked="" type="checkbox"/> Supply of drinking water	
	<input checked="" type="checkbox"/> Supply of non-potable water	
	<input checked="" type="checkbox"/> Provision of sewerage services	
3.2.3	Have you commenced any of the activities for which you are seeking a licence?	
For example, you may have commenced construction, commercial operation and/or supply of services to customers.		
	<input type="checkbox"/> Yes please go to 3.2.4	<input checked="" type="checkbox"/> No please go to 3.2.5
3.2.4	Please briefly describe the activities that you have commenced including the date(s) on which they commenced.	
<i>Your response to the following question will be used to determine whether transitional arrangements apply to the project.</i>		
Not applicable.		
3.2.5	Please outline the approximate date you anticipate commencing the activities for which you are seeking a licence, if they have not yet commenced. For example, construction of the network infrastructure July 2014, construction of the water treatment plant December 2014, operation of the water treatment plant June 2015, supply to small retail customers August 2015.	
<i>Your response to the following question will be used as background information for the project.</i>		
Design period : June 2012 to November 2013		
Construction of the network infrastructure : April 2014 to November 2014		
Construction of the treatment plant infrastructure : April 2014 to November 2014		
Testing and commissioning of infrastructure : December 2014 to June 2015		
Commercial operation of infrastructure : June 2015		
<b>3.3 Insurance Details</b>		
3.3.1	What types of insurance do you have or intend to obtain particularly in relation to the activities for which you are seeking a licence? Provide details of the level (i.e. amount) of insurance you are covered or intend to be covered by for each type. Include a summary of itemised inclusions and exclusions for each type of insurance you hold. <b>Attach copies of all relevant insurance certificates in Appendix 3.3.1.</b>	
Types of insurance may include but are not limited to professional indemnity insurance, public liability insurance, workers' compensation and product liability insurance.		
<i>Your response to this question will be used to ascertain whether the applicant corporation has made appropriate arrangements with respect to insurance (Act s10(4)(c)).</i>		
In consultation with our insurance broker, LLRWBS will secure the following insurances. Insurance cover and type has been confirmed as appropriate by our insurance broker.		
1) Industrial Special Risk		
2) Public and Products Liability		
3) Environmental Liability		

4) Professional Indemnity 5) Motor Vehicle 6) NSW Workers Compensation	
3.3.2	<p>Explain why the level of cover provided or proposed by your insurer is sufficient for the size and nature of your proposed activities</p> <p>For existing (brownfield) schemes, you must provide us with a report from an independent insurance broker which holds an Australian financial services licence under Part 7.6 of the <i>Corporations Act 2001 (Cth)</i> for the provision of insurance broking services (“Insurance Expert”), that:</p> <ul style="list-style-type: none"> <li>(a) identifies the key risks of undertaking the activities to be authorised under the licence (if granted)</li> <li>(b) sets out the types and levels of insurance obtained by you in relation to the activities being undertaken</li> <li>(c) certifies whether, in the Insurance Expert’s opinion, the type and level of insurance obtained by you is appropriate for the size and nature of the activities to be authorised under the licence</li> <li>(d) provides reasons as to why the types and levels of insurance are appropriate for the size and nature of the activities being undertaken, and</li> <li>(e) if any risks arising from undertaking the activities remain uninsured, provides reasons as to why.</li> </ul> <p><i>Your response to this question will be used to ascertain whether the applicant corporation has made appropriate arrangements with respect to insurance (Act s.10(4)(c)).</i></p>
CONFIDENTIAL	
<h3>3.4 Third parties undertaking activities</h3>	
3.4.1	<p>If you intend on using third parties to undertake any significant activities for which you are seeking a licence (eg, construction of the reticulation network, management of the billing system) please provide their details below. If there are multiple third parties please provide the details for each party as well as an explanation of the activities it will be undertaking.</p> <p>Third parties undertaking minor sub-contracting works on behalf of the applicant corporation such as electrical or plumbing contractors do not need to be named in the application. If you are unsure of whether the works are significant or otherwise please include the details or contact IPART.</p> <p><i>Your response to this question will be used to determine whether any other persons should be specified on the licence (Act s.6(1)(a)), if a licence is granted. Where applicable, information from those third parties named may also be used to assess the applicant corporation’s technical, organisational and financial capacity to undertake the activities for which it is seeking a licence.</i></p>
<p><b>Overview statement</b></p> <p>A number of parties will be involved in the project management, design, supply, construction operation and maintenance of the infrastructure and retail activities covered under this license. Schematics of the proposed structures are provided in <a href="#">Attachment #3</a> for each of the following licensed activities:</p> <ul style="list-style-type: none"> <li>▪ Network Operator – Non-potable water and sewerage</li> <li>▪ Retail Supplier – Non-potable water and sewerage</li> <li>▪ Retail Supplier – Potable water</li> </ul> <p>LLRWBS will ensure all Contracts for the above services provide the necessary control, authority and scope to enable licence obligations to be fulfilled. The details for the each of the key parties are as follows.</p>	
Corporation name	
Lend Lease (Millers Point) Pty Limited	
ABN/ARBN	ACN
15 127 727 502	127 726 502

**PUBLIC VERSION**

Corporation's registered office	
ADDRESS	
Level 4, 30 The Bond	
30 Hickson Rd, Millers Point	
STATE	POST CODE
NSW	2000
Please provide a detailed description of the activities that the third party, named above, will undertake on the applicant corporation's behalf.	
Lend Lease (Millers Point) Pty Limited is the Barangaroo South Developer Entity that engages a Design and Construction Contractor to deliver all elements of the Recycled Water Scheme: wastewater collection network, recycled water plant and recycled water distribution network.	
Please provide details of the contractual arrangements the applicant corporation has in place with the third party, named above, to ensure the third party undertakes the activities in accordance with the licence (if granted).	
CONFIDENTIAL	
Corporation name	
Lend Lease Development Pty Limited	
ABN/ARBN	ACN
33 000 311 277	000 311 277
Corporation's registered office	
ADDRESS	
Level 4, 30 The Bond	
30 Hickson Rd, Millers Point	
STATE	POST CODE
NSW	2000
Please provide a detailed description of the activities that the third party, named above, will undertake on the applicant corporation's behalf.	
Lend Lease Development Pty Limited will provide management services to LLRWBS in the areas of Finance, Business Analysis and Operational during design, construction and operation.	
Please provide details of the contractual arrangements the applicant corporation has in place with the third party, named above, to ensure the third party undertakes the activities in accordance with the licence (if granted).	
CONFIDENTIAL	
Corporation name	
Lend Lease Project Management & Construction (Australia) Pty Limited	
ABN/ARBN	ACN
97 000 098 162	000 098 162
Corporation's registered office	
ADDRESS	
Level 4, 30 The Bond	
30 Hickson Rd, Millers Point	
STATE	POST CODE
NSW	2000
Please provide a detailed description of the activities that the third party, named above, will undertake on the applicant corporation's behalf.	
Lend Lease Project Management & Construction (Australia) Pty Limited is the Design and Construction Contractor engaged by Lend Lease Millers Point Pty Limited to deliver all elements of the Recycled Water Scheme: wastewater collection network, recycled water Plant and recycled water	

distribution network.	
Please provide details of the contractual arrangements the applicant corporation has in place with the third party, named above, to ensure the third party undertakes the activities in accordance with the licence (if granted).	
CONFIDENTIAL	
Corporation name	
WJP Solutions Pty Limited	
ABN/ARBN	ACN
21 971 897 886	971 897 886
Corporation's registered office	
ADDRESS	
11/828 High St	
Kew East	
STATE	POST CODE
VIC	3102
Please provide a detailed description of the activities that the third party, named above, will undertake on the applicant corporation's behalf.	
<p>WJP Solutions Pty Ltd is the Design and Construction Sub-Contractor engaged by Lend Lease Project Management &amp; Construction (Australia) Pty Limited to deliver detailed design and construct the Recycled Water Plant. An extract of the design component of this Contract has been provided for information in <b>Attachment #3</b>.</p> <p>WJP Solutions Pty Ltd is also the Operator responsible for maintenance and operation of the Treatment Plant from the Validation / Proving period through to Commercial Operation of the infrastructure. There will be a contractual agreement between the Applicant Corporation and WJP Solutions Pty Ltd for the Treatment Plant infrastructure. This is currently under development. A copy of the Table of Contents of this service agreement is provided in <b>Attachment #3</b>.</p>	
Please provide details of the contractual arrangements the applicant corporation has in place with the third party, named above, to ensure the third party undertakes the activities in accordance with the licence (if granted).	
CONFIDENTIAL	
<b>3.5 Other regulatory approvals</b>	
3.5.1	<p>Please list any other regulatory approvals that have been obtained (or are being sought) for any of the activities for which the applicant corporation is seeking a licence. Include any regulatory approvals also related to the activities or the project. Such approvals may include development consents for a housing development under the <i>Environmental Planning and Assessment Act 1979</i>, section 68 approval under the <i>Local Government Act 1993</i>, an Environment Protection Licence under the <i>Protection of the Environment Operations Act 1997</i>. <b>Provide a copy of any other regulatory approvals and/or licences in Appendix 3.5.1.</b></p> <p><i>Your response to this question will be used to determine whether IPART needs to co-ordinate this approvals process with other regulatory authorities. Information required in other approval processes may also be requested and used by us in determining this licence application.</i></p>
<p><b>Planning approval</b></p> <p>The recycled water plant (referred to as the "Blackwater Treatment Plant" in Clause B32) was included in the a Project approval for the new commercial building C4. A copy of the Project Approval has been included in <b>Attachment #4</b>.</p> <p><b>Sewer mining approval</b></p> <p>LLRWBS is currently negotiating with Sydney Water to access a sewer in Hickson Road for the purpose of sewer mining. Extracted sewage will be used to supplement the sewage sourced from</p>	

Barangaroo South and Barangaroo Central. Detailed studies have been completed on this sewer to confirm the quantity and quality of sewage available. The sewer mining agreement will be largely based on the existing Sydney Water templates and is expected to be finalised by early 2013.

**Tradewaste approval**

Excess sewage, excess recycled water and treatment by-products will be discharged to a Sydney Water sewer under a tradewaste agreement. The trade waste agreement will be largely based on the existing Sydney Water templates and is expected to be finalised by early 2013.

Sydney Water has formally approved the Site Servicing Strategy for Barangaroo development. A copy of the document is available upon IPART request. The strategy details Sydney Water agreement on sewer mining and trade waste.

### 3.6 Monopoly supply

- 3.6.1 In your opinion, will the supply of water and/ or sewage services to customers be a monopoly service? If yes, please specify whether the monopoly service is in relation to:
- ▼ a specified water supply or sewerage service, and
  - ▼ a specified area, and
  - ▼ a specified class of customers.

*Your response to this question will be used to determine whether the Minister should consider declaring the licensee a monopoly supplier in accordance with section 51 of the WIC Act.*

No. Sydney Water Corporation operates in the area of the development and has significant infrastructure assets in support of its operation. Sydney Water is capable of offering services as an alternative provider to LLRWBS.

### 3.7 Licensing principles

- 3.7.1 How does your proposed activity address the following principles (if applicable):
- ▼ The protection of public health, the environment, public safety and consumers
  - ▼ The encouragement of competition in the supply of water and the provision of sewerage services
  - ▼ The ensuring of sustainability of water resources
  - ▼ The promotion of production and use of recycled water?

*Your response to this question will be used in consideration of the licensing principles, in accordance with section 7 of the WIC Act*

The proposed activity addresses the principle of ***“The protection of public health, the environment, public safety and consumers”*** in the following ways:

Public health and safety is protected by:

- Sourcing drinking water from a credible supplier (ie Sydney Water) who complies with the relevant regulation / guidelines during production and distribution.
- Distribution of drinking water in accordance with the relevant plumbing codes, guidelines and industry best practice.
- Collection and transport of sewage in accordance with the relevant plumbing codes, guidelines and industry best practice.
- Production and distribution of recycled water in accordance with the relevant guidelines and industry best practice.
- Using proven technology for the distribution of potable water.
- Using proven technology for the collection and transport of sewage.
- Using proven technology for the production and distribution of recycled water.
- Using multiple barriers and critical control points in the production of recycled water.

- Stakeholder education on the potable water, sewerage and recycled water systems, in particular on the safe use of recycled water.
- Regular system auditing to detect unacceptable end uses or cross connections.
- Operation and maintenance of the infrastructure by competent personnel in accordance with approved management plans.

The environment is protected by:

- Reduction in potable water consumption (site and off-site) of up to 310ML/year.
- Recycling of up to 310ML/year of sewage which would have otherwise been discharged to ocean via Sydney Water's sewer system.
- No discharge to land or water apart from controlled use of recycled water for irrigation.
- Reduced fertiliser consumption on areas irrigated with recycled water.

Consumers are protected by:

- Supply agreements which detail responsibilities and obligations of all stakeholders.
- Stakeholder education through provision of information (website, brochures, newsletters, etc) and signage (local at recycled water plant, labelling, etc).

The proposed activity addresses the principle of ***“The encouragement of competition in the supply of water and the provision of sewerage services”*** in the following ways:

Construction of the proposed infrastructure will provide an alternative to the incumbent supplier (ie Sydney Water) of drinking water, sewerage and recycled water services in the Sydney CBD.

The proposed activity addresses the principle of ***“The ensuring of sustainability of water resources”*** in the following ways:

The proposed infrastructure will provide up to 310ML/year of recycled water for non-potable end uses, thus preserving precious drinking water supplies.

The proposed activity addresses the principle of ***“The promotion of production and use of recycled water”*** in the following ways:

The primary purpose of the proposed infrastructure is to provide a local source of recycled water in order to realise the project objective of “water neutrality”. In short this concept is based on the export of one litre of recycled water from the site for every one litre of potable water used on the site. The scale of the project and the widespread use of recycled water (site and export) will ensure a high profile for recycled water use. Lend Lease is committed to promoting all of the sustainability features of the Barangaroo development. This will be achieved by:

- Lend Lease will “showcase the central plant and sustainability strategies to provide an educational element for visitors”. This will be undertaken as part of the project’s broader sustainability communications program which will be conducted through the design, construction and operational phases of the development.
- During construction, a specific communications program is in place which is designed to highlight the sustainability features of the development, including the water treatment plant and the water recycling plans. This program will include a media relations program designed to coincide with key stages in the development (e.g. planning applications, approvals, commissioning and operation). In addition, Lend Lease will report publicly on the sustainability progress of the development on an annual basis.
- Barangaroo South recycled water scheme inclusive of the treatment plant will be one of the largest of its kind for commercial buildings in Australia. This status alone is likely to attract media and community attention – raising awareness of water recycling in the process. Our communications program will also include participation by members of the project and sustainability teams speaking about water recycling at appropriate industry events.



- In addition on completion of the project, we will put in place a series of initiatives designed to promote the water recycling (and other sustainability initiatives) at Barangaroo on an ongoing basis. These activities could include:
  - A visitor viewing facility, whether this is an opportunity to physically tour the plant room and see the recycling plant operating; viewing the plant working via webcam or model in a visitor centre, or having a visible water meter or counter somewhere in the precinct that provides the latest information on the number of litres treated by the plant.
  - Include water recycling as part of any site tour organised for school/university groups, sustainability experts, public authorities, property executives, potential tenants or other key stakeholder groups
  - Production of appropriate promotional material, such as factsheets, information panels, newsletter articles, models, web pages, videos. These materials would be designed and used to help educate tenants, visitors and the public on how the sustainability initiatives at Barangaroo work (including water recycling) and the benefits they offer for Sydney and the planet. In addition, we would also ensure that any area where recycled water is being used in public spaces at Barangaroo should highlight this fact with signs and display boards etc, to reinforce the practical side of the water recycling process.
  - Where appropriate particular sustainability milestones (including water recycling) will be celebrated with events to highlight and reinforce the milestone being achieved.

## 4 Network Operator

You need to complete the following section of this form if the applicant corporation is seeking a network operator's licence. Please note the sections are divided into the types of infrastructure as follows:

- ▼ 4.1 Water infrastructure - drinking water
- ▼ 4.2 Water infrastructure - non potable water (including recycled water and stormwater reuse)
- ▼ 4.3 Sewerage infrastructure.

Please complete only those sections that relate to your response in question 3.3.1 above.

## 4.1 Water infrastructure – drinking water

Only provide a response to the questions in the following section if the applicant corporation is seeking a licence for the construction, maintenance and operation of water infrastructure for the supply of drinking water.

4.1.1	Describe the proposed drinking water infrastructure from the source of the drinking water through to the end use (i.e. catchment to tap). Please include in your description all of the infrastructure for which the applicant corporation is seeking a licence. This will include any infrastructure that is to be used for the production, treatment, filtration, storage, conveyance or reticulation of the drinking water. Please list all sources and end uses in the description. Identify the infrastructure for which the applicant corporation is seeking a licence. <b>Provide a detailed process flow diagram of the proposed infrastructure from source to end use in Appendix 4.1.1.</b>
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You must attach a process flow diagram in response to this question. The process flow diagram should only include the drinking water infrastructure where the scheme includes more than one type of infrastructure and must cover the process from source to end use. You may also include a piping and instrumentation diagram for additional information.

*The response to this question will be used to draft a proposed licence. The licence will specify the type of water industry infrastructure, if a licence is granted (Act s.6(1)(a)). The response will also be used to ensure you have applied for the correct licence(s) and as a context for our assessment of the applicant corporation's technical, organisational and financial capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Not applicable

4.1.2	Describe whether the infrastructure is existing infrastructure or is to be constructed. If the infrastructure is existing, please describe its current condition and operability. If the infrastructure is a mixture of existing and to be constructed <b>identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.1.1.</b>
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*The response to this question will be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).*

Not applicable

4.1.3	Describe the <u>location</u> of the proposed infrastructure. For example include: <ul style="list-style-type: none"> <li>the identification of specific lot descriptors (e.g. lot and DP numbers) for the production, treatment, filtration and/or storage infrastructure.</li> <li>the location of infrastructure for the conveyance and/or reticulation of drinking water by street name, local government area or other description as appropriate to the size of the scheme.</li> </ul> <b>Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.1.3.</b>
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The map may include all water industry infrastructure (ie, drinking water, non-potable water and/or sewerage) where the scheme includes more than one type of infrastructure.

*The response to this question is a requirement for any network operator's licence (Reg cl.6(1)(a)). The response to this question will be used to specify the authorised area of operations (Act s.11(1)), if a licence is granted. The response will also be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).*

Not applicable

4.1.4	Describe any interconnections between the proposed drinking water infrastructure and other infrastructure not part of this scheme (e.g. interconnections with other licensed network
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	operators or public utilities). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. <b>Identify all interconnections with other infrastructure on the process flow diagram in Appendix 4.1.1 and the map in Appendix 4.1.3.</b>
<i>The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the inter-connected systems and responsibilities for risks.</i>	
Not applicable	
4.1.5	Where applicable, describe the connection point to customers or end users (e.g. the customer connection point may be a water meter). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. <b>Identify all customer and/or end user connections on the process flow diagram in Appendix 4.1.1 and the map in Appendix 4.1.3.</b>
<i>The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme.</i>	
Not applicable	
4.1.6	What volume of water is available from the proposed source? Where applicable, please provide the capacity of the source and the (allowable) average daily extraction rate from the source. If there is more than one source, please provide the requested information for each of the sources. <b>Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 4.1.6.</b>
<i>The response will also be used as a context for the assessment of the technical, organisational and financial capacity of the applicant corporation (Act s.10(4)(a)).</i>	
Not applicable	
4.1.7	What volume of water will be treated by the scheme? Please provide the average and peak daily flow rates <u>treated by</u> the scheme.
<i>This information will be used to determine the fee category for the scheme, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.</i>	
Not applicable	
4.1.8	What volume of drinking water will be produced by the scheme? Please provide the average and peak daily volume supplied to end users or retail suppliers.
<i>This information will be used to assess the retail supplier's obligation not to over commit, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.</i>	
Not applicable	
4.1.9	<b>Provide your preliminary risk assessment for the scheme from source to end use in Appendix 4.1.9.</b> It is important that your preliminary risk assessment accurately identifies any hazards present in the source water or likely to result from the proposed treatment process. The risk assessment will also address the intended, inadvertent and unauthorised end uses (and therefore routes of exposure) to the water. The preliminary risk assessment will identify any reasonably foreseeable risk event with the potential to expose people or the environment to hazards. The preliminary risk assessment will outline the broad mitigation measures where the risk of exposure to a hazard is unacceptable to human health or the environment in order to reduce the risk of exposure.  The risk assessment must also identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is

	sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.
	The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks to health and the environment. We strongly recommend that the applicant corporation utilises an established risk management system, such as outlined in AS/NZS ISO 31000:2009 (Risk management – Principles and guidelines), which is consistent with the approach outlined in the Australian Drinking Water Guidelines (element 2).
	<i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(b) and cl.6(1)(c)(ii)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>
	Not applicable
4.1.10	Describe how the 12 elements of the framework for the management of drinking water quality, as detailed in the Australian Drinking Water Guidelines (ADWG), have been addressed and will be implemented and maintained. <b>Provide evidence of the applicant corporation's capacity to implement the 12 elements of the framework in the ADWG in Appendix 4.1.10.</b>
	The evidence should be in the form of management plans for either the proposed scheme or other similar schemes undertaken by the applicant corporation, or in a comprehensive statement detailing the process by which the management plan will be developed. For existing (brownfield) schemes you should provide the actual water quality plan for the site.
	<i>The response to this question is a requirement for any network operator licence for water infrastructure (Reg cl.6(1)(d)(i)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>
	Not applicable
4.1.11	How will the continuity of supply of the drinking water be ensured? What contingency plans are in place in the case of failure of the infrastructure? What alternative supplies of drinking water will be used when the infrastructure is inoperable?
	<i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(c)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>
	Not applicable
4.1.12	Describe the systems and processes that the applicant corporation will have in place to manage the water infrastructure. <b>Provide evidence of the applicant corporation's capacity to develop and implement an infrastructure operating plan in Appendix 4.1.12.</b>
	The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The processes and/or procedures should demonstrate good operational practice including life cycle planning, system redundancy, contingency planning, condition monitoring, management maintenance processes and processes of supporting skills needs. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual water quality plan for the site.
	<i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(c)). The response will be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>
	Not applicable

4.1.13	<p>Describe the studies that have been completed to investigate any environmental impacts (including but not limited to water quality, quantity, air, noise, sea level rise, biodiversity and Aboriginal cultural heritage) from the construction and operation of the infrastructure? Have the studies identified any significant environmental impacts from the scheme? If so, how are the environmental impacts proposed to be managed? <b>Provide a copy of any environmental study and/or risk assessment in Appendix 4.1.13.</b></p>
<p>As a minimum, an application must be accompanied by a statement of environmental effects (SEE) (unless the development is designated development, Part 5 development or a major project, in which case either an environmental impact statement (EIS) or comprehensive environmental assessment is required). The SEE may be prepared by the applicant corporation or by a consultant acting on behalf of the applicant. The SEE must identify the environmental impacts of the proposed scheme, and the steps which will be taken to protect the environment or reduce the harm. Where the study is in the form of a comprehensive environmental assessment or EIS, please include only the executive summary.</p>	
<p><i>The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7). The response to this question may be used to draft a proposed licence, if a licence is granted.</i></p>	
<p>Not applicable</p>	
4.1.14	<p>If a treatment process forms part of the infrastructure for which the applicant corporation is seeking a licence, what waste streams will be generated by the proposed treatment plant and how will the waste be disposed of or handled?</p>
<p><i>The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7). The response will also be used as a context for our assessment of the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>Not applicable</p>	

## 4.2 Water infrastructure – non-potable water

Only provide a response to the questions in the following section if the applicant corporation is seeking a licence for the construction, maintenance and operation of water infrastructure for the supply of non-potable water.

4.2.1	Describe the proposed non-potable water infrastructure from the source of the water through to the end use (i.e. catchment to tap). Please include in your description all of the infrastructure for which the applicant corporation is seeking a licence. This will include any infrastructure that is to be used for the production, treatment, filtration, storage, conveyance or reticulation of the non-potable water. Please list all sources and end uses in the description. Identify the infrastructure for which the applicant corporation is seeking a licence. <b>Provide a detailed process flow diagram of the proposed infrastructure from source to end use in Appendix 4.2.1.</b>
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You must attach a process flow diagram in response to this question. The process flow diagram should only include the non-potable water infrastructure where the scheme includes more than one type of infrastructure and must cover the process from source to end use. You may also include a piping and instrumentation diagram for additional information.

*The response to this question will be used to draft a proposed licence. The licence will specify the type of water industry infrastructure, if a licence is granted (Act s.6(1)(a)). The response will also be used to ensure you have applied for the correct licence(s) and as a context for our assessment of the applicant corporation's technical, organisational and financial capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

The catchments can be summarised as follows:

**Barangaroo South :** Barangaroo South will consist of ~436,000m<sup>2</sup> of NLA and include commercial, residential, retail and hotel activities. The sewerage network will be operated and managed by LLRWBS and their sub-contractors. LLRWBS will use trade waste agreements and regular inspections of the sewerage system to minimise / eliminate the discharge of any potentially detrimental substances to the sewer system. The sewerage system will be designed to minimise / eliminate any inflow or infiltration. More information on the sewerage system at Barangaroo South is contained in the response to Question 4.3.

**Barangaroo Central :** Barangaroo Central will consist of ~54,000m<sup>2</sup> of NLA and include commercial, residential and retail activities. The sewerage network will be operated and managed by LLRWBS and their sub-contractors. If no commercial arrangement is reached between LLRWBS and the relevant parties then the sewerage network at Barangaroo Central will be operated and managed by Sydney Water or equivalent. LLRWBS will use trade waste agreements and regular inspections of the sewerage system to minimise / eliminate the discharge of any potentially detrimental substances to the sewer system. The sewerage system will be designed to minimise / eliminate any inflow or infiltration. More information on the sewerage system at Barangaroo Central is contained in the response to Question 4.3.

**Sewer Mining :** The sewer mining catchment consists of commercial, residential, retail and hotel activities. The sewerage network is owned, operated and managed by Sydney Water. Sydney Water uses tradewaste agreements and regular inspections of the sewerage system to minimise / eliminate the discharge of any potentially detrimental substances to the sewer system. Based on recent flow monitoring the ADWF at the proposed point of extraction is ~1.6MLD.

The key unit operations in the recycled water plant can be summarised as follows. All infrastructure in the recycled water plant will be owned, operated and managed by LLRWBS and their sub-contractors.

**Diversion system :** A valve based diversion system will be used to control sewerage flows from Barangaroo South and Barangaroo Central. If the recycled water

	plant is unable to accept sewage then the valve will close (fails safe) and all sewage will be directed to the Sydney Water sewer.
<b>Coarse screen :</b>	A coarse screen will be used to remove material greater than ~5mm from the incoming raw sewage stream in order to prevent downstream equipment and prevent foreign material building up in the flow balance tank.
<b>Balance tank :</b>	A flow balance tank will be used to provide a buffer between the incoming raw sewage flow and the treatment capacity of the recycled water plant.
<b>Fine screen :</b>	A fine screen will be used to remove material greater than ~2mm from the incoming raw sewage stream in order to protect downstream equipment, in particular the membranes.
<b>Biological reactor :</b>	The biological reactor will be configured into two equal streams and then split between anoxic and aerobic zones to enable biological nitrogen removal.
<b>Membrane operating system :</b>	Membrane filtration will be used to separate the MLSS from the recycled water. MLSS will be returned to the aerobic zone and recycled water will be directed to further treatment. The membranes will act as the first and primary disinfection barrier.
<b>UV disinfection :</b>	UV disinfection will be used as the 2 <sup>nd</sup> disinfection barrier in the recycled water production process.
<b>Chlorine disinfection :</b>	Chlorination will be used as the 3 <sup>rd</sup> disinfection barrier in the recycled water production process.
<b>Treated water tank (site) :</b>	A treated water tank will provide a buffer between the treatment plant capacity and the recycled water demand on site. It will also act as the feed source for the reverse osmosis system. To ensure continuity of service potable water top-up will be supplied to this tank if recycled water supplies are exhausted. Recycled water distribution pumps will be used to pressurise the site recycled water network.
<b>Reverse osmosis :</b>	A reverse osmosis system will be used to reduce the salt levels in the recycled water in order to provide the optimum water quality for cooling towers.
<b>Stabilisation :</b>	A stabilisation system will be used to stabilise the RO permeate and eliminate the risk of downstream corrosion.
<b>Treated water tank (export) :</b>	A treated water tank will provide a buffer between the treatment plant capacity and the recycled water demand for export. It will also act as the feed source for the reverse osmosis system. Recycled water distribution pumps will be used to pressurise the export recycled water network. Each export customer will need to supply their own local potable water back-up should it be required.
<b>Process waste tank :</b>	A process waste tank will be used to collect screenings, Waste Activated Sludge (WAS), excess raw sewage, excess recycled water and brine and send these to sewer under a tradewaste agreement with Sydney Water.
<b>Odour scrubbing :</b>	Odour scrubbing will be used to treat foul air from the inlet screens, balance tank and trade waste tank prior to discharge.
<b>Chemical dosing :</b>	A number of chemical dosing systems will be used to produce the recycled water and also for membrane cleaning.
<b>Sewer mining :</b>	The sewer mining system will consist of an extraction pump and a macerator. It will only be activated if the site sewage supply is less than the recycled water demand.
The end uses can be summarised as follows:	
<b>Site :</b>	At Barangaroo South and Barangaroo Central recycled water will be used for:



	<ul style="list-style-type: none"> <li>Dual reticulation</li> <li>Toilet flushing</li> <li>Irrigation (uncontrolled access)</li> <li>Washing machines (cold tap)</li> <li>Car washing</li> <li>Process water at the recycled water plant</li> <li>Fire test</li> </ul> <p><b>Export :</b> In order to meet project sustainability objectives the recycled water plant will have the capacity to treat, store and export recycled water equivalent in volume to the potable water used. LLRWBS is still in the early stages of identifying and securing customers for export recycled water. End uses are expected to include:</p> <ul style="list-style-type: none"> <li>Dual reticulation</li> <li>Toilet flushing</li> <li>Irrigation (uncontrolled access)</li> <li>Washing machines (cold tap)</li> <li>Car washing</li> <li>Fire test</li> <li>Cooling towers (may require additional treatment with reverse osmosis)</li> </ul>
<p>See <b>Attachment #5</b> for the Process Flow Diagrams for the proposed Non-Potable infrastructure.</p>	
4.2.2	Describe whether the infrastructure is existing infrastructure or is to be constructed. If the infrastructure is existing, please describe its current condition and operability. If the infrastructure is a mixture of existing and to be constructed <b>identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.2.1.</b>
<p><i>The response to this question will be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).</i></p>	
<p>All infrastructure covered under this licence is yet to be constructed.</p>	
4.2.3	<p>Describe the <u>location</u> of the proposed infrastructure. For example include:</p> <ul style="list-style-type: none"> <li>▼ the identification of specific lot descriptors (e.g. lot and DP numbers) for the production, treatment, filtration and/or storage infrastructure.</li> <li>▼ the location of infrastructure for the conveyance and/or reticulation of non-potable water by street name, local government area or other description as appropriate to the size of the scheme.</li> </ul> <p><b>Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.2.3.</b></p>
<p>The map may include all water industry infrastructure (ie, drinking water, non-potable water and/or sewerage) where the scheme includes more than one type of infrastructure.</p>	
<p><i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(a)). The response to this question will be used to specify the authorised area of operations (Act s.11(1)), if a licence is granted. The response will also be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).</i></p>	
<p><b>Attachment #6</b> contains the following Drawings:</p> <ul style="list-style-type: none"> <li>Drawing BBO_HSK_W_001 – Non-potable Water – Network Diagram – Sewerage Catchment Area – Site</li> <li>Drawing BBO_HSK_W_002 – Non-potable Water – Network Diagram – Recycled Water</li> </ul>	

Supply Area – Site

- Drawing BBO\_HSK\_W\_005 – Non-potable Water – Network Diagram – Recycled Water Block Reticulation
- Drawing BBO\_HSK\_W\_006 – Non-potable Water – Network Diagram – Recycled Water Block Flow Diagram
- Drawing BBO\_HSK\_W\_007 – Non-potable Water – Network Diagram – Recycled Water Supply Area – Export
- Drawing BBO\_HSK\_W\_008 – Site plan – Information on streets DP and lot numbers

More information on the sewerage network (ie source) is contained in response to Question 4.3. The location of the sewer mining extraction point is shown on the Network Diagram for the Treatment Plant.

The Network Diagram (see Drawing BBO\_HSK\_W\_007) for the Export Recycled Water currently shows the recycled water being provided to Darling Harbour. LLRWBS is currently exploring other opportunities for Export Recycled Water in the Sydney CBD.

- 4.2.4 Describe any interconnections between the proposed non-potable water infrastructure and other infrastructure not part of this scheme (e.g. interconnections with other licensed network operators or public utilities such as sewers or water mains). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. **Identify all interconnections with other infrastructure on the process flow diagram in Appendix 4.2.1 and the map in Appendix 4.2.3.**

Examples of interconnections may include potable water top up or trade waste disposal, as well as to other network operators.

*The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the inter-connected systems and responsibilities for risks.*

Interconnections for the Recycled Water infrastructure are shown on Drawing BBO\_HSK\_W\_0005 provided in **Attachment #6**. Responsibility for construction, operation and maintenance upstream and downstream of each connection point is as follows:

Drawing	Connection point to other infrastructure	Area	Upstream	Downstream
BBO_HSK_W_0005 – Network Diagram – Recycled Water Reticulation – Site	C1	Construction	Sydney Water	Lend Lease Project Management & Construction Pty Limited
		Operation	Sydney Water	LLRWBS
		Maintenance	Sydney Water	LLRWBS

- 4.2.5 Where applicable, describe the connection point to customers or end users (e.g. the customer connection point may be a water meter). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. **Identify all customer and/or end user connections on the process flow diagram in Appendix 4.2.1 and the map in Appendix 4.2.3.**

*The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme.*

Customer and end user connection points to the recycled water infrastructure will typically be defined by a water meter. Due to the number of customer connections it is not possible to show these individually on the Process Flow Diagrams or Network Diagrams. The approximate number of

connections is shown for each building / area on Drawing BBO\_HSK\_W\_0005 in [Attachment #6](#).

Service	Area	Upstream	Downstream
Recycled water	Construction	LLRWBS	Lend Lease Project Management & Construction Pty Limited
	Operation	LLRWBS	Lot owner
	Maintenance	LLRWBS	Lot owner

4.2.6 What volume of water is available from the proposed source? Where applicable, please provide the capacity of the source and the (allowable) average daily extraction rate from the source. If there is more than one source, please provide the requested information for each of the sources. **Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 4.2.6.**

*The response will also be used as a context for the assessment of the technical, organisational and financial capacity of the applicant corporation (Act s.10(4)(a)).*

Recycled Water will be produced on site in the proposed Recycled Water Plant. The Recycled Water Plant will be provided with two sources of raw sewage, namely Site Sewage and Sewer Mining. The capacity of each source is as follows:

Raw sewage source	Capacity of the source (kL/day)	Allowable average daily extraction (kL/day)
Site Sewage <sup>1</sup>	Up to 900	Up to 900
Sewer Mining <sup>2</sup>	Up to 1,600	Up to 1,600
NOTES : 1) From Barangaroo South and optionally Barangaroo Central. Sewage source from Barangaroo Central is subject to commercial agreement between LLRWBS and the relevant parties. 2) From Sydney Water sewer on Hickson Rd.		

Access to each source will be secured through:

- **Site Sewage** – Agreements with lot owners to provide a sewerage service (ie collect sewage) to the Barangaroo South and optionally Barangaroo Central precincts. A copy of the typical agreement is provided in [Attachment #7](#).
- **Sewer Mining** – Agreement with Sydney Water to extract raw sewage from the Hickson Rd sewer via a sewer mining agreement is currently in progress. Characterisation of this source (see [Attachment #12](#)) identified that the average flow in the sewer is ~1.6MLD vs the required 0.6MLD.

4.2.7 What volume of water will be treated by the scheme? Please provide the average and peak daily flow rates treated by the scheme.

*This information will be used to determine the fee category for the scheme, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.*

The average and peak daily flow rates through the Recycled Water Plant will be 1050kL/day and 1,250kL/day respectively.

4.2.8 What volume of non-potable water will be produced by the scheme? Please provide the average and peak daily volume supplied to end users or retail suppliers.

*This information will be used to assess the retail supplier's obligation not to over commit, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.*

The average and peak daily flow rates through the Recycled Water Plant will be 860kL/day and 1,030kL/day respectively.

The approximate Recycled Water consumption of each key customer / end user is as follows.

Key customer / end user	Recycled Water use	
	Average (kL/day)	Peak (kL/day)
Site	360	430
Export	500	600

4.2.9 List all the intended end uses for the non-potable water generated by the scheme.

*The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a), Reg cl.8(1)).*

The end uses can be summarised as follows:

**Site :** At Barangaroo South and Barangaroo Central recycled water will be used for:

- Dual reticulation
- Toilet flushing
- Irrigation (uncontrolled access)
- Washing machines (cold tap)
- Car washing
- Process water at the recycled water plant
- Fire test

**Export :** LLRWBS is still in the early stages of identifying and securing customers for export recycled water. In order to maximise the number of potential end uses the recycled water will be treated with reverse osmosis to make it suitable for cooling towers. Therefore end uses are expected to include:

- Dual reticulation
- Toilet flushing
- Irrigation (uncontrolled access)
- Washing machines (cold tap)
- Car washing
- Fire test
- Cooling towers

4.2.10 **Provide your preliminary risk assessment for the scheme from source to end use in Appendix 4.1.10.** It is important that your preliminary risk assessment accurately identifies any hazards present in the source water or likely to result from the proposed treatment process. The risk assessment will also address the intended, inadvertent and unauthorised end uses (and therefore routes of exposure) to the non-potable water. The preliminary risk assessment will identify any reasonably foreseeable risk event with the potential to expose people or the environment to hazards. The preliminary risk assessment will outline the broad mitigation measures where the risk of exposure to a hazard is unacceptable to human health or the environment in order to reduce the risk of exposure.

The risk assessment must also identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.

The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks to health and the environment. We strongly recommend that the applicant corporation utilises an established risk management system, such as outlined in AS/NZS ISO 31000:2009 (Risk management – Principles and guidelines), which is consistent with the approach outlined in the Australian Guidelines for Water Recycling (element 2).

*The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(b) and cl.6(1)(c)(ii)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a), Reg. cl.8(1)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

**Attachment #8** contains a copy of the preliminary risk assessment for the non-potable water infrastructure which was carried out using the principles detailed in Element #2 of the Australian Guidelines for Water Recycling. Further risk identification and mitigation activities are planned during the detailed design phase. The preliminary risk assessment will be a live document and will be updated as the project progresses. At key points (ie prior to construction, prior to commissioning, etc) all risk mitigation strategies will be checked to confirm successful implementation.

4.2.11	Describe how the 12 elements of the framework for the management of recycled water, as detailed in the Australian Guidelines for Water Recycling (AGWR), have been addressed and will be implemented and maintained. <b>Provide evidence of the applicant corporation's capacity to implement the 12 elements of the framework in the AGWR in Appendix 4.2.11.</b>
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The evidence should be in the form of management plans for either the proposed scheme or other similar schemes undertaken by the applicant corporation, or in a comprehensive statement detailing the process by which the management plan will be developed. For existing (brownfield) schemes you should provide the actual water quality plan for the site.

*The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(d)(i)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a), Reg. cl.8(2)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence.*

The following table provides information on how LLRWBS will address, implement and maintain each of the 12 elements of the AGWR.

Element	Comments
1	<p><b>“Commitment to responsible use and management of recycled water”</b></p> <p><i>Address</i></p> <p>Key stakeholders (ie management, construction, operation, end users and regulators) were identified and have been involved in the development of the proposed recycled water scheme at Barangaroo. Commitment has been sought, and received, from these stakeholders in relation to the responsible and management of recycled water at Barangaroo.</p> <p><i>Implement</i></p> <p>Regular communication will be maintained with the stakeholders during the design, construction and operation of the recycled water scheme to ensure it continues to be responsible / sustainable. Specialist consultants will be engaged as required to ensure the project team has the necessary expertise.</p> <p><i>Maintain</i></p> <p>Stakeholder engagement and end user education will be a continuous process during to ensure the responsible use and management of recycled water.</p>
2	<p><b>“Assessment of the recycled water system”</b></p> <p><i>Address</i></p> <p>Representatives from each of the key stakeholders have been engaged to assess the</p>

	<p>recycled water system for compliance with project objectives, integration with the development, regulatory requirements and risks (technical / commercial). The assessment will include:</p> <ul style="list-style-type: none"> <li>▪ Intended uses and sources of recycled water</li> <li>▪ Recycled water system analysis</li> <li>▪ Assessment of water quality data</li> <li>▪ Hazard identification and risk assessment</li> </ul> <p><i>Implement</i></p> <p>Design workshops and commercial / technical / risk registers will be used to capture the assessment of the recycled water system. Specialist consultants will be engaged as required to ensure the project team has the necessary expertise.</p> <p><i>Maintain</i></p> <p>The registers will be updated as required as the project moves through construction, commissioning and operation.</p>
3	<p><b>“Preventative measures for recycled water management”</b></p> <p><i>Address</i></p> <p>For each identified risk preventative measures will developed to eliminate or mitigate the likelihood or consequence of the impact. Where appropriate a multiple barrier approach will be adopted.</p> <p><i>Implement</i></p> <p>During the development of the risk registers the risk will be assessed with and without preventative measures. Greater focus will be placed on events where the residual risk is still High to Very High. Critical Control Points will be developed and implemented to ensure recycled water quality is always safe for the intended end uses.</p> <p><i>Maintain</i></p> <p>The risk register will be live document over the life of the project. In addition to regular audits it will be checked / updated when:</p> <ul style="list-style-type: none"> <li>▪ There is a significant change in the project or stakeholders.</li> <li>▪ There is a change in regulation.</li> <li>▪ There is an incident on this project or a similar project.</li> </ul> <p>The accuracy of critical control points will be confirmed via verification testing.</p>
4	<p><b>“Operational procedures and process control”</b></p> <p><i>Address</i></p> <p>Operational procedures will be developed for all processes and activities associated with the recycled water system from source to end use. A comprehensive SCADA based control and monitoring system will provide continuous feedback / monitoring on system performance and Critical Control Points.</p> <p><i>Implement</i></p> <p>Operational procedures will be developed in the later stages of construction and will be included in the Site Management Plan. The process control system will be based on the agreed functional description for the system including the Critical Control Points.</p> <p><i>Maintain</i></p> <p>The operational procedures will be live documents over the life of the project. In addition to regular audits they will be checked / updated when:</p> <ul style="list-style-type: none"> <li>▪ There is a significant change in the project or stakeholders.</li> <li>▪ There is a change in regulation.</li> <li>▪ There is an incident on this project or a similar project.</li> </ul> <p>Process control systems will be checked regularly for accuracy and to ensure logic around Critical Control Points remains valid.</p>
5	<p><b>“Verification of recycled water quality and environmental performance”</b></p>

	<p><i>Address</i></p> <p>Verification of the recycled water quality will involve monitoring and analysis of key parameters to confirm the Critical Control Points remain valid. Environmental performance will be confirmed by monitoring discharges for compliance and the sustainability of irrigation.</p> <p><i>Implement</i></p> <p>The ongoing sampling and monitoring program detailed in the SMP will include a list of key parameters, the location of the monitoring point and monitoring frequency. The incident and emergency response plan will include protocols for recording and reacting to an any environmental issues.</p> <p><i>Maintain</i></p> <p>The monitoring program will be a live document over the life of the project. In addition to regular audits it will be checked / updated when:</p> <ul style="list-style-type: none"> <li>▪ There is a significant change in the project or stakeholders.</li> <li>▪ There is a change in regulation.</li> <li>▪ There is an incident on this project or a similar project.</li> </ul>
6	<p><b>“Management of incidents and emergencies”</b></p> <p><i>Address</i></p> <p>To ensure efficient / effective communication, protocols will be developed detailing how incidents are recorded, actioned and followed up. These protocols will also include contact details for key operational personnel, stakeholders and regulators.</p> <p><i>Implement</i></p> <p>The incident and emergency response protocols will be included in the SMP. To test the adequacy of these protocols a number of incidents will be simulated during commissioning. The protocols will be integrated with the communication plan.</p> <p><i>Maintain</i></p> <p>The incident and emergency management plan will be live document over the life of the project. In addition to regular audits it will be checked / updated when:</p> <ul style="list-style-type: none"> <li>▪ There is a significant change in the project or stakeholders.</li> <li>▪ There is a change in regulation.</li> <li>▪ There is an incident on this project or a similar project.</li> </ul> <p>Employee training and regular incident simulations will be used to confirm system effectiveness and efficiency.</p>
7	<p><b>“Operator, contractor and end user awareness and training”</b></p> <p><i>Address</i></p> <p>Awareness and training requirements will be developed for operators, managers, contractors and end users. These requirements will be clearly detailed in the SMP. Internal and external training programs will be used to ensure the required skills and knowledge is sufficient and current. Inductions will be used for Contractors, visitors and new employees.</p> <p><i>Implement</i></p> <p>Awareness and training requirements will be included in the SMP together with records of any training or inductions that are carried out. End users will be updated and educated through regular communication via newsletters and the LLRWBS website.</p> <p><i>Maintain</i></p> <p>The awareness and training requirements will be a live document over the life of the project. In addition to regular audits it will be checked / updated when:</p> <ul style="list-style-type: none"> <li>▪ There is a significant change in the project or stakeholders.</li> <li>▪ There is a change in regulation.</li> <li>▪ There is an incident on this project or a similar project.</li> </ul>

	End users will be consulted on a regular basis regarding their knowledge of recycled water and the restrictions on end use. Awareness programs will be updated accordingly.
8	<p><b>“Community involvement”</b></p> <p><i>Address</i></p> <p>A comprehensive community consultation strategy will be developed which takes into account the nature of the project and the specific requirements of end users and the broader community.</p> <p><i>Implement</i></p> <p>The community consultation strategy will be incorporated into the SMP as part of the communications plan. The LLRWBS website will be used as the primary interface for Customer engagement. Records will be maintained of any incoming or outgoing communication with end users and the broader community.</p> <p><i>Maintain</i></p> <p>The community consultation strategy will be a live document over the life of the project. In addition to regular audits it will be checked / updated when:</p> <ul style="list-style-type: none"> <li>▪ There is a significant change in the project or stakeholders.</li> <li>▪ There is a change in regulation.</li> <li>▪ There is an incident on this project or a similar project.</li> </ul>
9	<p><b>“Validation, research and development”</b></p> <p><i>Address</i></p> <p>Key focus areas in relation to the ongoing validation, research and development needs of the project will be captured in the SMP.</p> <p><i>Implement</i></p> <p>All new equipment critical to recycled water quality will be validated in accordance with regulatory requirements and industry best practice. Research and development areas will be identified during the first year of operation and prioritised.</p> <p><i>Maintain</i></p> <p>Project performance will be benchmarked against similar facilities to ensure the project incorporates industry best practice. Technology developments will be monitored for the relevance to and impact on the project.</p>
10	<p><b>“Documentation and reporting”</b></p> <p><i>Address</i></p> <p>Documentation, data and reporting will be managed and secured through the SMP and Control system. Internal and external reports will transmit important information to project stakeholders.</p> <p><i>Implement</i></p> <p>A hard copy of the SMP will be kept on site in the RWP control room adjacent to the SCADA. Electronic copies of the SMP will be available to all key operational personnel. The SCADA will be configured to enable remote access and collection of data. Reports on system performance will be distributed to internal and external stakeholders on an agreed frequency. Incident reports will be distributed to internal and stakeholders in accordance with agreed protocols.</p> <p><i>Maintain</i></p> <p>As noted previously all documentation will be considered “live” and will be reviewed and updated (as required) on a regular basis. Document control procedures will be utilised to ensure the current version is in use. All important data will be securely backed up off site.</p>
11	<p><b>“Evaluation and audit”</b></p> <p><i>Address</i></p> <p>The design of the control system will enable the efficient capture and management of system data which will subsequently be used to evaluate long term performance.</p>



	<p>Internal and external audits will be used to verify the adequacy of the management systems.</p> <p><i>Implement</i></p> <p>Evaluation will commence during the first year of operating following validation and in parallel with verification. Audits will be conducted before and after commissioning and then in accordance with internal / external requirements.</p> <p><i>Maintain</i></p> <p>Regular checks will be made of the data collection system for accuracy and completeness. All system data will be securely backed up off site. Recommendations of internal and external audits will be reviewed and implemented where appropriate.</p>
12	<p><b>“Review and continual improvement”</b></p> <p><i>Address</i></p> <p>Senior management of LLRWBS will be provided with regular reports on system performance and copies of incident reports where required by agreed protocols.</p> <p><i>Implement</i></p> <p>Key areas for improvement will be identified during formal review meetings and progressed as agreed. Industry benchmarking and audits will be used to continuously improve system documentation, operation and control.</p> <p><i>Maintain</i></p> <p>Training will be provided for senior managers to ensure they can actively take part in the review process.</p>
<p>The above elements will be incorporated into a project wide Site Management Plan (SMP) which incorporates:</p> <ul style="list-style-type: none"> <li>▪ Infrastructure operating plan</li> <li>▪ Water quality plan</li> <li>▪ Retail supply plan</li> <li>▪ Communications plan</li> <li>▪ Incident and emergency response plan</li> </ul> <p>The SMP will be submitted as part of the documentation package to support commercial operation.</p>	
4.2.12	<p>How will the continuity of supply of the non-potable water be ensured? What contingency plans are in place in the case of failure of the infrastructure? What alternative supplies of non-potable water will be used when the infrastructure is inoperable?</p> <p><i>The response to this question is a requirement for any network operator’s licence for water infrastructure (Reg cl.6(1)(c)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation’s technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p> <p>Continuity of non-potable water service provision will be ensured by:</p> <ol style="list-style-type: none"> <li>1) Constructing all non-potable water infrastructure in accordance with the relevant guidelines and industry best practice. This will minimise the frequency of failure of the non-potable water infrastructure.</li> <li>2) Providing high levels of redundancy to maximise reliability.</li> <li>3) Providing significant buffer storage (ie 24 hours) at the recycled water plant should there be a problem with the production of non-potable water.</li> <li>4) Providing a potable water top-up to the non-potable water storage tank.</li> </ol>
4.2.13	<p>Describe the systems and processes that the applicant corporation will have in place to manage the non-potable water infrastructure. <b>Provide evidence of the applicant corporation’s capacity to develop and implement an infrastructure operating plan in</b></p>

	<b>Appendix 4.2.13.</b>
	<p>The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The processes and/or procedures should demonstrate good operational practice including life cycle planning, system redundancy, contingency planning, condition monitoring, management maintenance processes and processes of supporting skills needs. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual water quality plan for the site.</p>
	<p><i>The response to this question is a requirement for any network operator's licence for water infrastructure (Reg cl.6(1)(c)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>
	<p>The applicant will draw on the operational experience and systems of its parent company, Lend Lease, to develop an appropriate documentation and management practices to support all aspects of construction and operation. As noted in the background information provided below this operational experience includes water and wastewater infrastructure around Australia.</p> <p>Management processes that are under development include:</p> <ul style="list-style-type: none"> <li>• operational procedures, operational monitoring, operational corrective actions, equipment capability and maintenance, material and chemicals</li> <li>• verification of water quality and environmental performances (recycled water quality monitoring, application site and receiving environmental monitoring, satisfaction of users, corrective actions)</li> <li>• management of incidents and emergencies (communication, incident and emergency response protocol)</li> <li>• operator, contractor and end user awareness and training</li> <li>• community involvement and awareness (communications and education with recycled water users and the community)</li> <li>• documentation and reporting (management of documentation and records, users agreements, reporting compliant with IPART documents)</li> <li>• evaluation of performance and audit of management plans</li> <li>• review by senior management and improvement plan</li> </ul> <p>Management plants that are currently under development include:</p> <ul style="list-style-type: none"> <li>• Water Quality Plan</li> <li>• Infrastructure Operations and Management Plan</li> <li>• Asset Management Plan</li> <li>• Emergencies Management Plan</li> <li>• Sewage infrastructure Management Plan</li> <li>• Retail Management Plan</li> <li>• Training and Competency Plan</li> <li>• Communication Plan</li> </ul> <p><b>BACKGROUND INFORMATION</b></p> <p>For more than a decade, Lend Lease has provided long-term network operations and maintenance (O&amp;M) support to metropolitan water agencies in Australia and New Zealand.</p> <p>Today, the business delivers an average of 118,000 service tasks every year, maintaining networks with a combined population base of over 1.9 million people.</p> <p>The benefits of choosing Lend Lease as a network O&amp;M provider include:</p> <ul style="list-style-type: none"> <li>• A demonstrated track record as an efficient and innovative long-term O&amp;M service provider.</li> <li>• A flexible approach to contracting, including performance-based and partnering agreements.</li> <li>• The ability to integrate seamlessly with client operations, including client branding and information systems.</li> <li>• A proprietary field computing system, providing real-time task status data and enhanced job allocation management.</li> <li>• Internationally proven, world class quality, health and safety and environmental management procedures and systems.</li> </ul>

Examples of recent water industry project and service contracts awarded to Lend Lease include:

- **Yarra Valley Water, Melbourne VIC** - O&M services have been provided to Yarra Valley Water since 2000. The company deploys around 200 personnel to maintain 9,300 km of mains and 7,500 km of sewers, servicing over 1.5 million customers.
- **Desalination Plant, Gold Coast QLD** - Design, installation and commissioning of the control system and low and medium voltage switchgear for the 125 megalitre per day Tugun Desalination Plant.
- **Wastewater Treatment Plant, Altona VIC** - Civil, mechanical and electrical refurbishment and expansion of City West Water's wastewater treatment plant in Western Melbourne.
- **Watercare, Auckland NZ** - O&M services for water and wastewater networks including pumping stations and a treatment plant for the Watercare agency.
- **Yering Gorge Pump Station, Melbourne VIC** - Pumping capacity upgrade and maintenance services for Melbourne Water's Yering Gorge Pump Station.
- **Water Treatment Plant, Somersby NSW** - Electrical engineering design and construction, control system design and implementation, and design, construction and installation of the motor control centre for Gosford City Council's water treatment plant.
- **Gibson Island Recycling Plant, Brisbane QLD** - Electrical and instrumentation services and the design, installation and commissioning of the control system for the 100 megalitre per day advanced water treatment facility in Brisbane.
- **Eastern Treatment Plant, Bangholme VIC** - Civil, mechanical and electrical upgrade and maintenance works for Melbourne Water's Eastern Treatment Plant at Bangholme.
- **Wastewater treatment plant systems, Hervey Bay QLD** - Design, supply and installation of an electrical, instrumentation and control system package at the Nikenbah Waste Water Treatment Plant.
- **Motor control centre, Snowy Hydro, Cabramurra NSW** - Design, manufacture and installation of a motor control centre and ventilation system upgrade for Snowy Hydro.

4.2.14	Describe the studies that have been completed to investigate any environmental impacts (including but not limited to water quality, quantity, air, noise, sea level rise, biodiversity and Aboriginal cultural heritage) from the construction and operation of the infrastructure? Have the studies identified any significant environmental impacts from the scheme? If so, how are the environmental impacts proposed to be managed? <b>Provide a copy of any environmental study and/or risk assessment in Appendix 4.2.14.</b>
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As a minimum an application must be accompanied by a statement of environmental effects (SEE) (unless the development is designated development, Part 5 development or a major project, in which case either an environmental impact statement (EIS) or comprehensive environmental assessment is required). The SEE may be prepared by the applicant corporation or by a consultant acting on behalf of the applicant. The SEE must identify the environmental impacts of the proposed scheme, and the steps which will be taken to protect the environment or reduce the harm. Where the study is in the form of a comprehensive environmental assessment or EIS, please include only the executive summary.

*The response to this question may be used to draft a proposed licence, if a licence is granted. The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7).*

#### **Environmental impacts during construction**

Detailed environmental studies have been conducted for the construction of the Barangaroo development including the infrastructure detailed herein. These include:

- Marine Ecology Water Quality and Contaminated sediments Assessment
- Non Indigenous Archaeological Assessment

- Aboriginal Archaeological Assessment
- Air Quality
- Climate Change and Sea Level Rise
- Noise Vibration during Construction
- Geotechnical

Copies of these documents are available on request. LLRWBS believes all issues associated with the construction of the infrastructure covered under this licence application have been considered and are covered by the above studies.

#### Environmental impacts during operation

The infrastructure detailed herein is expected to have minimal environmental impacts during operation as:

- It is largely constructed in the basement of the development with concrete walls on all sides.
- Aside from irrigation based on demand, no discharge of liquid or solids wastes to the environment is proposed.

The following environmental impacts during operation have been considered. Where appropriate, controls have been identified and will be implemented during construction and operation.

Environmental impact	Control
Solid waste	All solid waste (ie screenings) will be discharged to sewer under a tradewaste agreement with Sydney Water.
Liquid waste	All liquid waste (ie brine) will be discharged to sewer under a tradewaste agreement with Sydney Water.
Odour	All sources of odour will be treated via an odour scrubber prior to discharge to a high point on an adjacent building. The odour scrubber and discharge point will be designed to comply with impact assessment criteria of urban communities.  It is important to note that the system will be designed to minimise the generation of odour wherever possible. This will largely be achieved by processing the raw sewage as quickly as possible to avoid anaerobic conditions.
Noise	All high noise equipment will be provided with acoustic covers and located in a separate room within the RWP facility.

4.2.15	If a treatment process forms part of the infrastructure for which the applicant corporation is seeking a licence, what waste streams will be generated by the proposed treatment plant and how will the waste be disposed of or handled?
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*The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7). The response will also be used as a context for our assessment of the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

There are three main waste streams generated in the production of recycled water, namely:

- Screenings
- Waste Activated Sludge (WAS)
- Brine from the salt removal process

These waste streams will be combined in the tradewaste tank and discharged as a single waste stream to a Sydney Water sewer under a tradewaste agreement. See [Attachment #9](#) for a copy Sydney Water's tradewaste policy documents. LLRWBS is currently exploring options to use this same structure for the disposal of excess recycled water and excess raw sewage.

### 4.3 Sewerage infrastructure

Only provide a response to the questions in the following section if the applicant corporation is seeking a licence for the construction, maintenance and operation of sewerage infrastructure.

4.3.1	Describe the proposed sewerage infrastructure from the collection to disposal or reuse. Include in your description all of the sewerage infrastructure for which the applicant corporation is seeking a licence. This will include any infrastructure that is to be used for the collection, treatment, filtration, storage, conveyance or disposal of the sewerage or treated effluent. <b>Provide a detailed process flow diagram of the proposed infrastructure from collection to disposal or reuse in Appendix 4.3.1.</b>
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You must attach a process flow diagram in response to this question. The process flow diagram should only include the sewerage infrastructure where the scheme includes more than one type of infrastructure and must cover the process from source to end use. You may also include a piping and instrumentation diagram for additional information.

*The response to this question will be used to draft a proposed licence. The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(d)(ii)). The licence will specify the type of water industry infrastructure, if a licence is granted (Act s.6(1)(a)). The response will also be used to ensure you have applied for the correct licence(s) and as a context for our assessment of the applicant corporation's technical, organisational and financial capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

See [Attachment #10](#) for the Process Flow Diagram for the proposed Sewerage infrastructure.

4.3.2	Describe whether the infrastructure is existing infrastructure or is to be constructed. If the infrastructure is existing, please describe its current condition and operability. If the infrastructure is a mixture of existing and to be constructed <b>identify the infrastructure as existing or to be constructed on the process flow diagram in Appendix 4.3.1.</b>
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*The response to this question will be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).*

**All infrastructure covered under this licence is yet to be constructed.**

4.3.3	Describe the <u>location</u> of the proposed infrastructure. For example include: <ul style="list-style-type: none"> <li>▼ the identification of specific lot descriptors (eg, lot and DP numbers) for the collection, treatment, filtration and/or storage infrastructure</li> <li>▼ the location of infrastructure for the conveyance and/or reticulation of sewage by street name, local government area or other description as appropriate to the size of the scheme.</li> </ul> <b>Provide a map showing the location of the proposed infrastructure from source to end use in Appendix 4.3.3.</b>
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The map may include all water industry infrastructure (ie, drinking water, non-potable water and/or sewerage) where the scheme includes more than one type of infrastructure.

*The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(a)). The response to this question will be used to specify the authorised area of operations (Act s.11(1)), if a licence is granted. The response will also be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).*

See Drawing BBO\_HSK\_W-0003 in [Attachment #11](#).

4.3.4	Describe any interconnections between the proposed sewerage infrastructure and other infrastructure not part of this scheme (eg, interconnections with other licensed network operators or public utilities such as sewers). Identify in your description who is responsible for the construction, operation and maintenance of which infrastructure. <b>Identify all</b>
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	<b>interconnections with other infrastructure on the process flow diagram in Appendix 4.3.1 and the map in Appendix 4.3.3.</b>		
<i>The response to this question will be used to ensure the correct area of operation is specified in the licence, if a licence is granted (Act s.11(1)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the inter-connected systems and responsibilities for risks.</i>			
Interconnections for the Sewerage infrastructure are shown on Drawing BB0_HSK_W_0003 in <b>Attachment #11</b> . Responsibility for construction, operation and maintenance upstream and downstream of each connection point is as follows:			
<b>Connection point to other infrastructure</b>	<b>Area</b>	<b>Upstream</b>	<b>Downstream</b>
C2	Construction	Lend Lease Project Management & Construction Pty Limited	Sydney Water
	Operation	LLRWBS	Sydney Water
	Maintenance	LLRWBS	Sydney Water
C3	Construction	Lend Lease Project Management & Construction Pty Limited	Sydney Water
	Operation	LLRWBS	Sydney Water
	Maintenance	LLRWBS	Sydney Water
4.3.5	What volume of sewage will be treated by the scheme? Please provide the average and peak daily (hydraulic and biological, where relevant) flow rates <u>treated by</u> the scheme.		
<i>This information will be used to determine the fee category for the scheme, if a licence is granted. The response to this question may be used to draft a proposed licence, if a licence is granted.</i>			
See answer to Question 4.2.7.			
4.3.6	What volume of treated effluent will be disposed of from the scheme? Please provide the average and peak daily disposal rates <u>disposed from</u> the scheme.		
<i>The response will be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7). The response to this question may be used to draft a proposed licence, if a licence is granted.</i>			
The waste streams is anticipated to be ~20% of the incoming raw sewage flow. The remaining recycled water stream (ie 80% or 860 to 1030kL/day) will be split between:			
1) Site recycled water use.			
2) Export recycled water use.			
3) Excess discharged to sewer via trade waste.			
No recycled water will be discharged directly to the environment.			
4.3.7	How will the treated effluent be disposed of from the scheme?		
<i>The response to this question may be used to draft a proposed licence, if a licence is granted. The response will also be used as a context for the assessment of environmental risks from the proposed scheme (Act s.10(4)(e), Reg cl.7).</i>			
See answer to Question 4.3.6.			

4.3.8	<p>What wastewater and/or catchment characterisation studies have been undertaken? <b>Provide a summary report of any wastewater characterisation or catchment studies including results in Appendix 4.3.8.</b></p>
<p><i>This information will be used as a context to the potential health and environmental risks posed by the scheme.</i></p>	
<p>The following wastewater / catchment characterisation has been undertaken:</p> <ol style="list-style-type: none"> <li>1) Site sewage – based on previous experience of Lend Lease and WJP solutions of similar developments.</li> <li>2) Sewer mining – based on flow and quality monitoring undertaken by MHL. Analysis by Permeate Partners.</li> </ol> <p>A copy of the background information on wastewater / catchment characterisation is provided in <a href="#">Attachment #12</a>.</p>	
4.3.9	<p><b>Provide your preliminary risk assessment for the scheme from collection to disposal in Appendix 4.3.8.</b> It is important that your preliminary risk assessment accurately identifies any hazards present in the sewage or likely to result from the proposed treatment process. The risk assessment should also address the intended method of disposal and any inadvertent releases (and therefore routes of exposure) to the treated effluent. The preliminary risk assessment will identify any reasonably foreseeable risk event with the potential to expose people or the environment to hazards. The preliminary risk assessment will outline the broad mitigation measures where the risk of exposure to a hazard is unacceptable to human health or the environment in order to reduce the risk of exposure.</p> <p>The risk assessment must also identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.</p>
<p>The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks to health and the environment. We strongly recommend that the applicant corporation utilises an established risk management system, such as outlined in AS/NZS ISO 31000:2009 (Risk management – Principles and guidelines). Where relevant, the risk assessment should identify and include any environmental risks and/or management actions identified in the development approval.</p>	
<p><i>The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(b), cl.6(2)(c)(ii), cl.6(2)(d)(i)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response to this question will also be used to draft a proposed licence. The licence will specify the purpose for which the infrastructure can be used, if a licence is granted (Act s.6(1)(a)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p><a href="#">Attachment #13</a> contains a copy of the preliminary risk assessment for the sewerage infrastructure which was carried out using the principles detailed in Element #2 of the Australian Guidelines for Water Recycling. Further risk identification and mitigation activities are planned during the detailed design phase. The preliminary risk assessment will be a live document and will be updated as the project progresses. At key points (ie prior to construction, prior to commissioning, etc) all risk mitigation strategies will be checked to confirm successful implementation.</p>	
4.3.10	<p>Describe the systems and processes that the applicant corporation will have in place to manage the sewerage infrastructure. <b>Provide evidence of the applicant corporation's capacity to develop and implement an infrastructure operating plan in Appendix 4.3.10.</b></p>
<p>The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The processes and/or procedures should demonstrate good operational practice including life cycle planning, system redundancy, contingency planning, condition monitoring, management maintenance processes and processes of supporting skills needs. The examples should demonstrate links to a risk management process. For existing (brownfield)</p>	



schemes you should provide the actual water quality plan for the site.	
<i>The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(c)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i>	
<a href="#">See response to Question 4.2.13.</a>	
4.3.11	How will the continuity of the provision of sewerage services be ensured? What contingency plans are in place in the case of failure of the infrastructure?
<i>The response to this question is a requirement for any network operator's licence for sewerage infrastructure (Reg cl.6(2)(c)). The response will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (act s.10(4)(a)).</i>	
<p>Continuity of sewerage service provision will be ensured by:</p> <ol style="list-style-type: none"> <li>1) Constructing all sewerage infrastructure in accordance with the relevant guidelines and industry best practice. This will minimise the frequency of failure of the sewerage infrastructure.</li> <li>2) Providing high levels of redundancy to maximise reliability.</li> <li>3) Providing local buffer storage (ie ~4 hours) in each of the building pump stations should there be a problem with transfer of sewage.</li> <li>4) Providing significant buffer storage (ie 12 to 16 hours) at the recycled water plant should there be a problem with the treatment of sewage.</li> <li>5) Providing a bypass to Sydney Water's sewer system where excess sewage can be discharged.</li> </ol>	
4.3.12	Describe the studies that have been completed to investigate any environmental impacts (including but not limited to water quality, quantity, air, noise, sea level rise, biodiversity and Aboriginal cultural heritage) from the construction and operation of the infrastructure? Have the studies identified any significant environmental impacts from the scheme? If so, how are the environmental impacts proposed to be managed? <b>Provide a copy of any environmental study and/or risk assessment in Appendix 4.3.12.</b>
As a minimum an application must be accompanied by a statement of environmental effects (SEE) (unless the development is designated development, Part 5 development or a major project, in which case either an environmental impact statement (EIS) or comprehensive environmental assessment is required). The SEE may be prepared by the applicant corporation or by a consultant acting on behalf of the applicant. The SEE must identify the environmental impacts of the proposed scheme, and the steps which will be taken to protect the environment or reduce the harm. Where the study is in the form of a comprehensive environmental assessment or EIS, please include only the executive summary.	
<i>The response to this question may be used to draft a proposed licence, if a licence is granted. The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7).</i>	
<a href="#">See response to Question 4.2.14.</a>	
4.3.13	Where relevant, what land capability assessments have been undertaken on the proposed land disposal area? <b>Provide a copy of any soil capability assessment in Appendix 4.3.13.</b>
<i>The response to this question may be used to draft a proposed licence, if a licence is granted. The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7).</i>	
<a href="#">There is no disposal to land as part of this project.</a>	
4.1.14	If a treatment process forms part of the infrastructure for which the applicant corporation is seeking a licence, what waste streams will be generated by the proposed treatment plant (such as screenings and biosolids but not including the treated effluent) and how will the waste be disposed of or handled?



*The response to this question will be used to determine whether the activities authorised by a licence (if granted) present a significant risk of harm to the environment (Reg cl.7). The response will also be used as a context for our assessment of the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

No waste streams will be generated from the sewerage infrastructure. Waste streams will be generated from the non-potable water infrastructure. See response to Question 4.2.15 regarding these waste streams.

## 5 Retail Supplier

Only to be completed by applicants seeking a retail supplier's licence.

Note a retail supplier's licence may only be granted if sufficient quantities of the water supplied will have been obtained otherwise than from a public water utility (Act s.10(4)(d)).

5.1 Supply of water	
Please provide a response to the questions in the following section if you are seeking a licence for the <u>supply of water</u> by means of any water industry infrastructure.	
5.1.1	Describe the water industry infrastructure that the applicant corporation will access to supply water.
<i>The response to this question is a requirement for any retail supplier's licence for water industry infrastructure (Reg cl.10(1)(a)). The response will also be used to ensure you have applied for the correct licence(s)).</i>	
<p><b>POTABLE WATER</b></p> <p>LLRWBS will utilise the following water industry infrastructure to supply drinking water to the <u>residential</u> communities of Barangaroo South and Central:</p> <ol style="list-style-type: none"> <li>1) Sydney Water infrastructure to provide bulk potable water supply to the property boundary of each building.</li> <li>2) Building body corporate infrastructure to provide potable water from the Sydney Water connection point to the connection to the LLRWBS potable water bulk meter.</li> <li>3) Individual resident potable water meter serving the internal fixtures and fittings.</li> </ol> <p><b>NON-POTABLE WATER</b></p> <p>LLRWBS will utilise the LLRWBS non-potable network to supply non-potable water. See Question 4.2.3 for more information on the proposed non-potable network.</p>	
5.1.2	What volume of water is available from the proposed source? Where applicable, please provide the capacity of the source and the (allowable) average daily extraction rate from the source. If there is more than one source, please provide the requested information for each of the sources. <b>Where relevant, provide a copy of any agreements and/or licences to access the source water in Appendix 5.1.2.</b>
<i>The response to this question will be used to determine whether sufficient quantities of the water supplied will have been obtained otherwise than from a public water utility (Act s.10(4)(d)).</i>	
<p><b>POTABLE WATER</b></p> <p>Confirmation from Sydney Water that sufficient potable water is available to service the residential communities of Barangaroo South and Central is provided in the Site Servicing Strategy (see highlighted text) <b>Attachment #14</b>.</p> <p><b>NON-POTABLE WATER</b></p> <p>The volume of non-potable water is between 680 and 750kL/day (ie plant capacity less the waste streams).</p>	

5.1.3	<p>What customers or classes of customers does the applicant corporation propose to supply with water?</p> <p>Classes of customers may include residential, industrial, commercial or agricultural.</p> <p><i>The response to this question is a requirement for any retail supplier's licence (Act s.6(1)(b)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p> <p><b>POTABLE WATER</b> Potable water will be supplied to residential customers only.</p> <p><b>NON-POTABLE WATER</b> Non-potable water will be supplied to residential, retail, commercial and hotel customers.</p>
5.1.4	<p>Will you be supplying small retail customers with water (i.e. less than 15Ml/year)?</p> <p>A person is a small retail customer in relation to water supply if the maximum rate at which water is supplied, pursuant to one or more water supply contracts, to all premises that the person owns, leases or occupies is less than 15 megalitres per year.</p> <p><i>The response will be used as context to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the supply of water to small retail customers.</i></p> <p><b>POTABLE WATER</b> Yes.</p> <p><b>NON-POTABLE WATER</b> Yes.</p>
5.1.5	<p><b>Provide your preliminary risk assessment for the retail activities related to the scheme in Appendix 5.1.5.</b> The risk assessment must identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.</p> <p>The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks. We strongly recommend that the applicant corporation utilises an established risk management system such as outlined in AS/NZS 4360 (Risk Management).</p> <p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(1)(b)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)).</i></p> <p>A copy of the risks associated with the retailing of potable and non-potable water is provided in <b>Attachment #15</b>.</p> <p><b>BACKGROUND INFORMATION ON APPROACH TO RISK IDENTIFICATION AND MANAGEMENT AT LEND LEASE</b></p> <p>Lend Lease acknowledges that all business activities, products and services carry a measure of risk.</p> <ul style="list-style-type: none"> <li>Lend Lease has a defined way of doing business to eliminate or mitigate risk to a level acceptable to the Company; this is achieved by rigorously applying integrated management systems which follow the AS/NZS 4360 Risk management standard approach to properly conduct our business.</li> <li>A specific plan will be developed relative to the treatment and network infrastructure and its retail components for the Barangaroo South to accord generally with:</li> </ul>

	<ul style="list-style-type: none"> <li>AS/NZS 4801:2001 OHSMS std</li> <li>BS OHSAS 18001:2007</li> <li>AS/NZS ISO 14001:2004 EMS</li> <li>AS/NZS ISO 9001:2008 QMS</li> <li>A Compliance Coordinator will provide assurance to the Board of Directors that the undertaking of the relevant business activities meets legal obligations, complying with the risk plan and IMS mitigating risks accordingly.</li> <li>Compliance provides this assurance through auditing, training, oversight and team support</li> <li>The compliance coordinator will access Lend Lease in-house engineering, legal, OHS professionals and auditors.</li> <li>The management systems policies manuals, procedure and the like to deliver this project thereby eliminating or mitigating risk to an acceptable level to the company our customers, the public, the environment and the authorities. The following is the general approach each of which include detailed Risk Assessment: <ul style="list-style-type: none"> <li>Project Mgt plan</li> <li>Design plan</li> <li>Procurement plan</li> <li>Construction plan</li> <li>OHS Plan</li> <li>Environment Mgt Plan</li> </ul> </li> </ul>
5.1.6	<p>How will the continuity of the supply of water to customers be ensured? What contingency plans are in place in the case of failure of the infrastructure?</p> <p>The continuity of supply may differ between customer classes. If this is the case for your project please define the different levels of service for each customer class and how the continuity of supply of water, relevant to that class of customer, will be maintained.</p> <p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(1)(b)(iii)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p> <p><b>POTABLE WATER</b></p> <p>Continuity of potable water service provision will be ensured by:</p> <ol style="list-style-type: none"> <li>1) Constructing all non-potable water infrastructure in accordance with the relevant guidelines and industry best practice. This will minimise the frequency of failure of the non-potable water infrastructure.</li> <li>2) Engaging with a major public water utility to provide the potable water supply.</li> </ol> <p><b>NON-POTABLE WATER</b></p> <p>See response to Question 4.2.12.</p>
5.1.7	<p>Describe the systems and processes that the applicant corporation will have in place to manage retail activities including billing systems, complaint and debt recovery procedures. <b>Provide evidence of the applicant corporation's capacity to develop and implement a retail supply management plan in Appendix 5.1.7.</b></p> <p>The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual systems and procedures.</p> <p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(2)(b)(iv)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>

Lend Lease Recycled Water (Barangaroo South) Pty Ltd will, as part of its overall reporting and information sharing commitments to the BDA for Barangaroo South develop and implement a holistic and integrated information interface for its customers in all classes. This web-base interface will be designed to ensure ease of use by customers backed up by availability to contact customer service personnel should this prove necessary.

Retail supply agreements with customers will reflect the rights and obligations of the parties and include for dispute resolution and complaints processes. For small connected customers, in particular residential, if a customer is dissatisfied with the outcome of a dispute process ,the supply agreements refer the customer to the Energy and Water Ombudsman of NSW (EWON) for external review. Lend Lease Recycled Water (Barangaroo South) Pty Ltd has instigated discussions with EWON regarding its voluntary participation in this scheme

Lend Lease Recycled Water (Barangaroo South) Pty Ltd will provide group wide Customer contact services and support through a web-based customer interface. Customers will have online access to all relevant information relating to:

- Water usage
- Billing and general Customer account information
- Communications

**Customer Billing** - Customers will receive regular invoices, and lodge enquiries or complaints on-line.

**Meter Reading** –Customer’s meter readings are sent via a BMS system directly (from site installed metering) into the operating and billing system. These readings would then be used to calculate the relevant charge for the billing period.

**Billing** – fixed service fee charges are payable in advance, whilst usage charges are billed in arrears (based on meter readings).

**Customer Enquiries and Complaints** - A Code of Practice for Customer Complaints consistent with the Australian Standard for complaints handling AS ISO 10002—2006 will be developed. Complaints will be dealt with promptly, fairly, equitably, confidentially and professionally and the relevant water industry code of conduct will be implemented once it is finalised.

A Code of Practice for Customer Complaints for small customers (larger customers will have a contracted mechanism), consistent with the prevailing Sydney Water policy, will be applied and will be provided to small Customers prior to commencement of supply.

**Missed Payments and Debt Recovery** - A Code of Practice for Missed Payments and Debt Recovery will be developed relative to small customers (larger customers will have a contracted mechanism) . The Code will specify steps that will be taken in relation to overdue bills, unpaid bills and disputes, consistent with the prevailing Sydney Water policy. The Code of Practice for Missed Payments and Debt Recovery will be made aware of the Code prior to commencement of supply will be provided to small Customers prior to commencement of supply.

## 5.2 Provision of sewerage services

Please provide a response to the questions in the following section if you are seeking a licence for the provision of sewerage services by means of any water industry infrastructure.

5.2.1	Describe the water industry infrastructure that the applicant corporation will access to provide sewerage services.
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<p><i>The response to this question is a requirement for any retail supplier's licence for water industry infrastructure (Reg cl.10(2)(a)). The response will also be used to ensure you have applied for the correct licence(s).</i></p>	
<p>See response to Question 4.3.</p>	
5.2.2	<p>What customers or classes of customers does the applicant corporation propose to provide with sewerage services?</p>
<p>Classes of customers may include residential, industrial, commercial or agricultural. The licence may also specify whether the customers are small retail customers.</p>	
<p><i>The response to this question is a requirement for any retail supplier's licence (Act s.6(1)(b)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
<p>Sewerage services will be supplied to residential, retail, commercial and hotel customers.</p>	
5.2.3	<p>Will you be providing small retail customers with sewerage services (i.e. less than 10.5 ML/year)?</p>
<p>A person is a small retail customer in relation to the provision of sewerage services if the maximum rate at which sewage is discharged, pursuant to one or more sewerage service contracts, from all premises that the person owns, leases or occupies is less than 10.5 megalitres per year, as determined in accordance with guidelines issued by IPART.</p>	
<p><i>The response will be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)). The response will also be used as a context for the assessment of risks from the proposed scheme and to identify possible additional licence conditions relating to the supply of water to small retail customers.</i></p>	
<p>Yes.</p>	
5.2.4	<p><b>Provide your preliminary risk assessment for the retail activities related to the scheme in Appendix 5.2.4.</b> The risk assessment must also identify the events and circumstances that could adversely affect the applicant corporation's ability to carry out the activities for which the licence is sought (including any activities undertaken by a nominated third party), the probability of the occurrence of any such event or circumstance and the measures to be taken by the applicant corporation to prevent or minimise the likelihood of any such event or circumstance.</p>
<p>The preliminary risk assessment should demonstrate the application of a consistent methodology for identifying hazards and assessing potential impacts and risks. We strongly recommend that the applicant corporation utilises an established risk management system such as outlined in AS/NZS 4360 (Risk Management).</p>	
<p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(2)(b)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)).</i></p>	
<p>A copy of the risks associated with the retailing of sewerage services is provided in <a href="#">Attachment #15</a>.</p>	
<p><b>BACKGROUND INFORMATION ON APPROACH TO RISK IDENTIFICATION AND MANAGEMENT AT LEND LEASE</b></p>	
<p>Lend Lease acknowledges that all business activities, products and services carry a measure of risk.</p>	
<ul style="list-style-type: none"> <li>Lend Lease has a defined way of doing business to eliminate or mitigate risk to a level acceptable to the Company; this is achieved by rigorously applying integrated management systems which following the AS/NZS 4360 Risk management standard approach to properly conduct our business.</li> <li>A specific plan will be developed relative to the treatment and network infrastructure and its retail components for the Barangaroo South to accord generally with: <ul style="list-style-type: none"> <li>AS/NZS 4801:2001 OHSMS std</li> <li>BS OHSAS 18001:2007</li> </ul> </li> </ul>	

<ul style="list-style-type: none"> <li>• AS/NZS ISO 14001:2004 EMS</li> <li>• AS/NZS ISO 9001:2008 QMS</li> <li>• A Compliance Coordinator will provide assurance to the Board of Directors that the undertaking of the relevant business activities meets legal obligations, complying with the risk plan and IMS mitigating risks accordingly.</li> <li>• Compliance provides this assurance through auditing, training, oversight and team support</li> <li>• The compliance coordinator will access Lend Lease in-house engineering, legal, OHS professionals and auditors.</li> <li>• The management systems policies manuals, procedure and the like to deliver this project thereby eliminating or mitigating risk to an acceptable level to the company our customers, the public, the environment and the authorities. The following is the general approach each of which include detailed Risk Assessment: <ul style="list-style-type: none"> <li>▪ Project Mgt plan</li> <li>▪ Design plan</li> <li>▪ Procurement plan</li> <li>▪ Construction plan</li> <li>▪ OHS Plan</li> <li>▪ Environment Mgt Plan</li> </ul> </li> </ul>	
5.2.5	How will the continuity of the provision of sewerage services be ensured? What contingency plans are in place in the case of failure of the infrastructure?
<p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(2)(b)(iii)). The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
See response to Question 4.3.11.	
5.2.6	Describe the systems and processes that the applicant corporation will have in place to manage retail activities including billing systems, complaint and debt recovery procedures. <b>Provide evidence of the applicant corporation's capacity to develop and implement a retail supply management plan in Appendix 5.1.4.</b>
<p>The evidence may include examples of processes and procedures for either the proposed scheme or other similar schemes undertaken by the applicant corporation. The examples should demonstrate links to a risk management process. For existing (brownfield) schemes you should provide the actual systems and procedures.</p>	
<p><i>The response to this question is a requirement for any retail supplier's licence (Reg cl.10(2)(b)(iv)). The response will also be used to assess the applicant corporation's technical capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).</i></p>	
See response to Question 5.1.7.	

## 6 Applicant experience and systems

The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).

### 6.1 Network operator

Only provide a response to the questions in the following section if the applicant corporation is seeking a network operator's licence

6.1.1 Describe the structure of the applicant corporation. Include in the description a list of the entities that have an ownership interest in the applicant corporation, whether legal or equitable. **Provide an organisational diagram in an Appendix 6.1.1.** The diagram should clearly show all entities that have an ownership interest in the applicant corporation,

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

The applicant is a Pty Limited Company and is a wholly owned subsidiary of Lend Lease Development Pty Ltd which is a wholly owned subsidiary of Lend Lease Corporation.

See **Attachment #16** for a copy of the organisational diagram.

6.1.2 Describe the applicant corporation's (and, where relevant, the nominated third parties) current experience in the construction, maintenance and operation of water and/or other utility infrastructure such as gas, electricity or telecommunications.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

#### LLRWBS

In the initial stages of the project LLRWBS will largely rely on third parties (including the parent company and subsidiaries) to provide the required services.

#### WJP SOLUTIONS

WJP Solutions evolved from WJ Pratt Environmental Division – which began designing and building small scale water treatment systems in the early 2000's – and is now a stand alone company with a proven track record in the industry.

Research into various treatment forms and methods lead to the development and construction of Australia's first successfully operational decentralised in-house black water treatment plants. This resulted from the extensive experience the company had gained over a number of years with other forms of water treatment processes.

The Company has subsequently developed in-house expertise in providing tailor-made decentralised water treatment solutions to suit a broad range of Client requirements.

WJP Solutions specialises in the design, construction, commissioning and maintenance of state-of-the-art decentralised plants for treating many sources of water and waste water, including:

- Stormwater
- Rainwater
- Grey water
- Black water



- Process water

Plants can be configured in a variety of ways to suit individual project requirements, for example:

- In-building
- Stand alone
- Containerised
- Packaged units

WJP Solutions has the experience and expertise to meet the Client's needs in all forms of water treatment and purification. WJP Solutions has played a pre-eminent role in the development of the technology for the treatment of black water, in particular stand-alone and in-building plants to facilitate the efficient re-use of water for purposes such as toilet flushing, cooling towers and irrigation.

Since its inception, WJP Solutions has maintained a long standing technical association with the leading suppliers of membranes to ensure that they are able to provide high quality water treatment solutions to a wide variety of applications.

WJP Solutions are able to provide engineered solutions that can include inlet works, screening systems, MBR process, UV treatment, reverse osmosis, chlorine dosing as well as other chemical treatments to ensure the water provided meets or exceeds all criteria and standards for its intended use.

#### **LEND LEASE**

Lend Lease has delivered a number of notable water infrastructure projects including turnkey solutions to clients across the entire water sector. Projects include

- The Adelaide Desalination Plant, Bulk Water Alliance
- Northern Network Alliance
- The Hunter Treatment Alliance.

Lend Lease is committed to best practice environmental management in water engineering. It has a successful track record of delivering leading edge solutions across all areas of the water sector, projects including:

- the Eastern Tertiary Alliance
- the Mardi Dam Upgrade
- the Water Resources Alliance
- Tarago Water Treatment and Warragamba Dam.

In addition to the projects delivered in water, our infrastructure services business provides services to major water assets and water network operators in Australia and New Zealand. Work includes network extensions and repairs, process design, mechanical and electrical design and construction, instrumentation and telemetry, and water quality, loss management and leak detection and repairs. Yarra Valley Water is the largest of Melbourne's three water retail companies, servicing the eastern side of the city. The Yarra Valley Water network has over 1.5 million customers, more than 9,300 kilometres of mains and around 7,500 kilometres of sewers. Lend Lease has been maintaining the Yarra Valley Water network since 2000 and currently deploys around 190 people to service the contract, including engineers, supervisors, fitters, electricians, field technicians and administrative personnel.

Lend Lease has a long-standing partnership with Sydney Water and has seen us form two alliances: Networks Alliance and the Water Delivery Alliance. With the Networks Alliance we're delivering 70km of new water pipeline and renewals every year. Over the last 5 years we've successfully completed over 2000 projects. With the Water Delivery Alliance, we've designed and constructed the 18-kilometre desalination pipeline in Sydney, including an 8km crossing of Botany Bay. This presented particularly complex stakeholder management issues, working in a sensitive marine environment.

Boulderstone (a Lend lease business) , along with a number of other contractors, has joined Melbourne Water to deliver the Water Resource Alliance (WRA) program. The A\$600 million program incorporates more than a hundred individual projects delivered over a five year period until 2013. It includes a potable water network stretching from Victoria's rural east to west of Melbourne, and a wastewater network with key facilities west and east of the city. The WRA's purpose is to expand the capacity of the overall network and improve the certainty of delivery in these essential services across Victoria.

Boulderstone is also working alongside a number of other contractors on this major upgrade of Melbourne Water's Eastern Treatment Plant (ETP). The project will transform the plant, which was built in 1975, into one of the world's most sophisticated facilities of its kind. Boulderstone is constructing A\$175 million worth of works, including treatment process infrastructure; covered treated water storage basins; associated tanks, pump stations, chemical dosing and storage facilities; and internal access roads, pipelines and communication cables. Sustainability initiatives include significant improvements to the marine environment at Boags Rocks, Gunnamatta Beach and the use of recycled water for irrigation, fire-fighting and other approved applications. Boulderstone has also forged excellent relationships with the client, project team and all external stakeholders.

Abigroup (a Lend lease business) was a 50 per cent joint venture partner in the consortium responsible for the A\$1.14 billion design and construction of the Adelaide Desalination Plant. When completed in late 2011, the 100 gegalitre desalination plant will supply half of South Australia's water needs. Project works included the construction of seawater intake and brine concentrate outlet tunnels, treatment facilities including two 50 gegalitre reverse osmosis facilities, associated chemical buildings and a tank farm to store, treat and re-mineralise the desalinated water. The project also delivered piping and pumping infrastructure and a community information and display facility.

6.1.3	List the key personnel involved in each of the significant activities (construction, maintenance and operation) and summarise their required skills, qualifications and experience. <b>Provide a position description for each of the key personnel positions in Appendix 6.1.3.</b>
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Clearly identify whether the key personnel are employees of the applicant corporation or, where relevant, the nominated third party. It is not necessary to list all the employees. Ensure that the key personnel include the person or persons responsible for managing the applicant corporation's compliance with their legislative responsibilities.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Key Personnel have been identified for:

- Green Utilities (part of Lend Lease Development Australia) which will provide management services to LLRWBS.
- WJP Solutions

See **Attachment #17** for more information.

6.1.4	Please provide details of any other regulatory approvals or licences the applicant corporation or nominated third party holds in relation to the infrastructure activities for which you are seeking a licence.
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Include relevant approvals for similar projects interstate or overseas to demonstrate the experience of the applicant corporation. We may seek confirmation of your compliance history in relation to other regulatory approvals or licences as part of our assessment.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

Not applicable.

6.1.5	What business systems will the applicant corporation have in place to ensure they can comply with your regulatory requirements? Are any of the systems certified or will they be certified?
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Business systems may include but not be limited to quality assurance, asset management and environmental management systems.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

At Lend Lease, formal risk management processes are embedded within day-to-day management of the business. We aim to ensure a common culture throughout the Lend Lease group of companies (Group) that promotes awareness of potential exposures and opportunities created by risk.

The Group's approach to risk management is guided by the International Standard on Risk Management ISO 31000. In addition to operational and financial risk, the categories of risk given particular focus are Legal and Compliance Risk and Environment, Health and Safety (EH&S) Risk. Our goal in relation to Legal and Compliance Risk is to meet the Australian Standard on Compliance Programs, AS3806. In relation to EH&S Risk, we aim to achieve a workplace free of incidents, injury and fatalities consistent with our Incident & Injury Free philosophy and to be a leading fully integrated property solutions provider delivering environmentally responsible property solutions that generate sustainable social and economic returns.

**Our Policy is to:**

- use an Enterprise Risk Management approach to identify, evaluate, treat, monitor, quantify and report significant risks to the Risk Management and Audit Committee;
- embed the management of risk as a central part of planning and management processes;
- provide the training, facilities and motivation necessary for our people to implement and maintain effective risk management practices;
- balance risks and business objectives when developing risk treatments and risk transfer arrangements; and
- encourage the adoption of Lend Lease risk management practices by our associated entities.

The Lend Lease Group is committed to excellence in corporate governance to help deliver sustainable value to all our stakeholders. Our security holder value proposition is further defined by our returns, growth outlook and risk profile. Risk taking is a necessary activity to deliver security holder returns and risk management is the process and capability to anticipate, understand and manage uncertainty effectively, providing resilience and confidence across the whole organisation. Risk management will deliver value where we achieve excellence in corporate governance and avoid surprises. To achieve our vision 'to create the best places' and our strategic aim, to be the leading international property and infrastructure group, it is crucial that we provide our people with the right capability and leadership to manage risk, while demanding individual accountability and uncompromising leadership.

The Lend Lease Risk Management System is summarised in the diagram below:



## 6.2 Retail supplier

Only provide a response to the questions in the following section if the applicant corporation is seeking a retail supplier's licence

6.2.1	Describe the structure of the applicant corporation. Include in the description a list of the entities that have an ownership interest in the applicant corporation, whether legal or equitable, and a list of the entities that the applicant corporation has an ownership interest in. <b>Provide an organisational diagram in Appendix 6.2.1.</b> The diagram should clearly show all entities that have an ownership interest in the applicant corporation.
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*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

[See response to Question 6.1.1.](#)

6.2.2	Describe the applicant corporation's (and, where relevant, the nominated third parties) current experience in the supply of water or the provision of sewerage services. Please also outline any previous experience in the retailing of other services such as gas, electricity or telecommunications.
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*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

[See response to Question 6.1.2.](#)

6.2.3	List the key personnel involved in the retail activities and summarise their required skills, qualifications and experience. <b>Provide a position description for each of the key personnel positions in Appendix 6.2.3.</b>
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Clearly identify whether the key personnel are employees of the applicant corporation or, where relevant, the nominated third party. Ensure that the key personnel include the person or persons responsible for managing the applicant corporation's compliance with their legislative responsibilities.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

[See response to Question 6.1.3.](#)

6.2.4	Please provide details of any other regulatory approvals or licences the applicant corporation or nominated third party holds in relation to the retail activities for which you are seeking a licence.
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Include relevant approvals for similar projects interstate or overseas to demonstrate the experience of the applicant corporation. We may seek confirmation of your compliance history in relation to other regulatory approvals or licences as part of our assessment.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

[Not applicable.](#)

6.2.5	What business systems will the applicant corporation have in place to ensure they can comply with your regulatory requirements? Are any of the systems certified or will they be certified?
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Business systems may include but not be limited to quality assurance and environmental management systems. Retail systems such as billing and complaint management should be included in the response to this question.

*The response will be used to assess the applicant corporation's technical and organisational capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).*

See response to Question 6.1.5.

## 7 Financial capacity

The response to the following questions will be used to assess the applicant corporation's financial capacity to undertake the activities for which you are seeking a licence (Act s.10(4)(a)).

Provide a response to the financial questions according to the following matrix:

	Question					
	7.1	7.2	7.3	7.4	7.5	7.6
<b>Retail supply licence only</b>	✓	✓	✓			
<b>Network operator licence</b>						
For infrastructure used for self supply	✓	✓				
For infrastructure used to supply large retail customers	✓	✓	✓			
For infrastructure used to supply small retail customers with non-essential services	✓	✓	✓	✓	✓	
For infrastructure used to supply small retail customers with essential services <sup>a</sup>	✓	✓	✓	✓	✓	✓

<sup>a</sup> Applicant corporations who are providing essential services to small retail customers will be required to meet with our financial assessment team following submission of the application to discuss the information requirements for making the financial capacity assessment.

### 7.1 How will the applicant corporation finance the proposed activity?

7.1.1	Describe the mechanisms by which the applicant corporation's activities are financed or to be financed. <b>Provide evidence of any financial guarantees or commitment of financial support in Appendix 7.1.1.</b>
Evidence of financial support may include, but is not limited to; a letter from a financial institution (being a bank, credit union or the government) confirming indicative financing of the applicant corporation's activities, including: <ul style="list-style-type: none"> <li>▼ the nature of finance (eg, bridging, long term, corporate debt, government funding)</li> <li>▼ type and limit of the facility</li> <li>▼ type and limit of any guarantee, and</li> <li>▼ terms and conditions.</li> </ul>	
<b>CONFIDENTIAL</b>	

## 7.2 Are there any events that could affect the applicant corporation's future financial capacity?

7.2.1 Are there any events or circumstances, that you are currently aware of, that could affect the applicant corporation's future financial capacity? If applicable, provide details of all such events relevant to the applicant corporation for the last 3 years from the date of this application.

Events and circumstances may include but are not limited to:

- ▼ Government or other investigation of the applicant corporation or related entities
- ▼ Contract terminated
- ▼ Factors which might impact on the applicant corporation such as significant litigation, business commitments, contingent liabilities, collections by debt collection agencies on behalf of creditors or liquidation proceedings
- ▼ Any outstanding tax liabilities
- ▼ Any other particulars which are likely to adversely affect the applicant corporation's capacity to undertake the services under the licence (if granted).

No known events or circumstances applicable.

## 7.3 What is the projected financial performance of the proposed activities?

7.3.1 Summarise the projected cash flows (net EBITDA), including key financial modelling assumptions, such as capex, for the first 5 years of operation (at minimum). Provide the projected cash flows for a minimum of the next five (5) years of operation (including projected closing balance sheets and profit and loss statements), taking into account the licensing agreements, with details of all key financial modelling assumptions in **Appendix 7.3.1**.

If necessary, a longer period may be provided to demonstrate financial viability of the project.

See [Attachment #18](#) for more information.

7.3.2 Where the applicant corporation is seeking a network operator's licence, who is the owner of the infrastructure for which the applicant corporation is seeking a licence?

The applicant licensee, Lend Lease Recycled Water (Barangaroo South) Pty Ltd, will own and operate the infrastructure.

7.3.3 Where the applicant corporation is applying for a retail supplier's licence to supply water or provide sewerage service to residential households, provide an estimate of the cost per household per year to supply water and/or provide sewerage services (as is relevant). Who will pay the cost? What is the proposed price level and structure for the first five years of operation?

*The response to this question will be used to determine whether there are any issues of public interest arising from the proposed scheme (Act s.10(4)(f)).*

CONFIDENTIAL

## 7.4 What is the applicant corporation's financial history?

7.4.1 Does the applicant corporation have a financial history? If not, explain why.

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7.4.2	Where the applicant is a new corporation, supported by one or more parent entities, provide a copy of guarantee or cross deed of indemnity provided by the parent entity, and financial statements for the parent entity for the last 3 years in <b>Appendix 7.4.2</b> .
Please include any parent entity with more than 20 per cent of equity in the applicant corporation.	
CONFIDENTIAL	
7.4.3	Where the applicant is a new corporation financed through alternative arrangements (eg, debt or equity), provide a letter from a financial institution (eg, bank, credit union or the government) certifying an existing or proposed line of credit or financial support, and a copy of guarantee or cross deed of indemnity provided by an entity such as a holding company or Director (provide financial statements demonstrating the financial viability of the guarantor) in <b>Appendix 7.4.3</b> .
See response to Question 7.4.2.	
7.4.4	<p>Where the applicant is not a new corporation, summarise the performance of the applicant corporation over the past 3 years below. Provide copies of tax returns for the corporation for the last 3 years in <b>Appendix 7.4.4(a)</b>. Provide financial statements for the last 3 years in <b>Appendix 7.4.4(b)</b>. Where the latest annual financial statements are more than 3 months old, provide the latest available management reports showing:</p> <ul style="list-style-type: none"> <li>▼ a trading statement</li> <li>▼ a profit and loss statement, and</li> <li>▼ a trial balance.</li> </ul>
It is preferable that these financial statements are audited. It is recognised that not all corporations are required to have their annual financial statements audited. However, where you are required to lodge audited financial statements with the Australian Securities and Investments Commission (ASIC), provide copies of these statements. (Note: consolidated accounts for the parent organisation or group to which the applicant corporation belongs would not be considered acceptable)	
Not applicable.	
7.4.5	If applicable, what is the applicant corporation's credit rating? Provide the applicant corporation's Credit rating memorandum (eg, Standard & Poor's, Moody's or Fitch), if available in <b>Appendix 7.3.6</b> .
Not applicable.	
7.4.6	Provide details of the applicant corporation's debt/equity finance and any debt covenants on existing borrowings.
Not applicable.	
7.5    Contacts	
7.5.1	Does the applicant corporation have an accountant? If yes, what are the accountant's contact details?
Accounting services will be provided by the parent company, Lend Lease Corporation, as and when required.	
7.5.2	Does the applicant corporation have an external auditor? If yes, what are the external auditor's contact details?
KPMG 10 Shelley St	

Sydney NSW 2000	
7.5.4	If required, may we contact the accountant and/or external auditor registered taxation agent to clarify any information provided?
Lend Lease Corporation as ultimate parent will facilitate contact as appropriate.	
<b>7.6 Internal accounting records</b>	
7.6.1	<p>Provide bank reconciliations, aged accounts receivable reports, and aged accounts payable reports in <b>Appendix 7.6.1</b> at the dates of:</p> <ul style="list-style-type: none"> <li>▼ The latest management accounting reports (if applicable) and annual financial statements</li> <li>▼ 30 September (most recent)</li> <li>▼ 31 December (most recent)</li> <li>▼ 31 March (most recent), and</li> <li>▼ 30 June (most recent)</li> </ul> <p>for the applicant corporation.</p>
Not applicable. New corporation.	
7.6.2	<p>Provide an extract of the superannuation payable ledger in <b>Appendix 7.6.2</b> for:</p> <ul style="list-style-type: none"> <li>▼ The 12 months ending on the date of the latest annual financial statements, and</li> <li>▼ The period commencing on the date of the latest annual financial statements and ending on the date of the latest management accounting reports (if applicable)</li> </ul> <p>for the applicant corporation</p>
Not applicable. New corporation.	
7.6.3	<p>Provide bank statements for the 3 months to the date of the latest management accounting reports (if applicable) or annual financial statements for the applicant corporation, whichever has been submitted with the application in <b>Appendix 7.6.3</b>.</p>
Not applicable. New corporation.	

## 8 Statutory declaration and acknowledgement

To be completed by all applicants

### 8.1 Statutory declaration

Provide a statutory declaration from:

- (a) the Chief Executive Officer and a director of the applicant corporation; or
- (b) the sole director and Chief Executive Officer of the applicant corporation; or
- (c) such other person that IPART agrees may provide the statutory declaration/s;

to the effect that the information provided in the application is true and correct. For the purposes of Part 3 of this application form, the statutory declaration should also state that the applicant corporation is not a disqualified corporation and that no director or person concerned in the management of the applicant corporation is or would be a disqualified individual within the meaning of the WIC Act.

**PUBLIC VERSION**

I, do solemnly and sincerely declare that:

1. I am a director / ~~the Chief Executive Officer / the sole director~~ and Chief Executive Officer [delete as applicable] of the applicant (named in the application form accompanying this declaration);
2. the information provided in this application is true and correct to the best of my knowledge;
3. I am aware of the requirements under the *Water Industry Competition Act 2006* (NSW) (WIC Act) for the licence being applied for;
4. the applicant corporation is not a disqualified corporation within the meaning of the WIC Act;
5. no director or person concerned in the management of the applicant corporation is, or would be, a disqualified individual within the meaning of the WIC Act;
6. I have the authority to make this application on behalf of the applicant (named in the application form accompanying this declaration);

and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1900* (NSW).

Name of person making the declaration: DAVID ALEXANDER RADFORD

Title of person making the application: DIRECTOR

Signature of person making the declaration: 

Declared at [place]: SYDNEY

On [date]: 22/03/13

In the presence of [name of witness]: MERI NASTEVSKA

Signature of witness: 

Title of witness: SOLICITOR

[Justice of the peace, Solicitor, other (specify)]

## **8.2 Acknowledgement**

An acknowledgement should be provided by:

- (a) company secretary and a director, or
- (b) 2 directors, or
- (c) in the case of a sole director, the sole director, or
- (d) such other person that IPART agrees may provide the acknowledgement.



The applicant (named in the application form accompanying this acknowledgement) agrees to IPART furnishing a copy of the applicant's completed application form, including any confidential information contained in that application form, to:

- the Minister administering the *Water Industry Competition Act 2006* (except Part 3)
- the Minister administering the *Public Health Act 1991* (NSW)
- the Minister administering Chapter 2 of the *Water Management Act 2000* (NSW)
- the Minister administering the *Environmental Planning and Assessment Act 1979* (NSW), and
- the Minister administering the *Protection of the Environment Operations Act 1997* (NSW),

in accordance with section 9(1) of the *Water Industry Competition Act 2006* (NSW) and clause 17 of the *Water Industry Competition (General) Regulation 2008* (NSW).

In the interest of expediting the processing of your application, would you please indicate below whether you agree to a copy of your completed application form (including any confidential information contained in that application form) being provided on a confidential basis directly to relevant departmental staff with responsibility to advise the Ministers named above on issues relating to the provision of water and sewerage services.


- ☒ I **agree** that a copy of my completed application form (including any confidential information contained in that application form) may be provided to relevant departmental staff as outlined above.
- ☐ I **do not agree** that a copy of my completed application form (including any confidential information contained in that application form) may be provided to relevant departmental staff as outlined above.

Name of person making the acknowledgement: George Spiropoulos

Title of person making the acknowledgement: Director

[Director / ~~Company Secretary~~]

On [date]: 7/3/13

Signature of person making the acknowledgement: 

David Alexander Radford

Name of person making the acknowledgement: \_\_\_\_\_

Title of person making the acknowledgement: Director

[Director / ~~Company Secretary~~]

On [date]: 7/3/13.